Nautical Tourism
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Edited by

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Preface

In this time of global economic crisis and the accompanying stagnation of ideas and of new visions in economic development and progress, nautical tourism is an industry that is developing at a continuous rate. To my knowledge, there is no widely recognized book in English that aims to demystify the concept of nautical tourism, analyse its industries and explain its development and potentials. Therefore it is natural to conclude that science has not been sufficiently engaged in the issue, that there is little research dealing with nautical tourism, especially at universities, and even fewer experts have been engaged in the phenomenon of nautical tourism. At the same time, all basic and accompanying industries of nautical tourism continue to achieve good economic results. Without relying on any particular expertise in the field, investors have recognized its potentials for development and profit and it is developing in all world markets regardless of the global economic crisis. However, it is clear that due to a lack of specific knowledge of its current state and nature the nautical tourism industry has not yet achieved its full potential. It is entirely reasonable to anticipate that this situation will improve.

The development of nautical tourism is related to the level of general economic development and the best results have so far been achieved in the European and the Pacific markets. However, this is a time of new world markets that, for political reasons, have not yet been opened: these are rapidly opening and expanding. Nautical tourism is a development opportunity for all world markets, although a headline from an American journal should be borne in mind: ‘Do as we say, not as we do’. The important implication is that every market and local economy, while drawing lessons from the European and Pacific experience, should find its own appropriate model for the development of nautical tourism if it hopes to succeed on a global scale.

Since nautical tourism is a large and complex industry with specific features in each mega- and micro-market, I have managed to engage leading experts in nautical tourism with the aim of analysing and publishing the results of our research that have followed from decades of hard work and studies in nautical tourism. Our results, which each of us have achieved individually, are valuable and therefore should be made public so as to become an effective basis for future research. We are aware that the primary function of this book is as a stimulus to future cooperation between all researchers, scientists and specialists with relevant expertise. This book should therefore be seen as a ‘first edition’, since we are planning future editions that will have new co-authors and contain new information and results.
Finally, as the editor of this book, I would like to thank all the co-authors that have placed their trust in this great project and supported me in it. This book is our joint project and we are dedicating it to the development of all world markets that need new information, knowledge and vision. We are also grateful to CABI for recognizing the importance and quality of this book and accepting it for publication.

I am also grateful to numerous known and unknown colleagues who have helped us to gather the necessary information. There are many others who deserve some of the credit for the final publication of this book.

I believe that this book will encourage new studies that are necessary to manage the development of nautical tourism and thus contribute to the entire field’s economic development. I emphasize again that this is only a beginning to research in the field of nautical tourism and is an invitation to all researchers to join us in future editions. I am sure that readers, regardless of their field of interest, will find it a source of new information and thus significantly raise the level of their knowledge.

Tihomir Luković
Dubrovnik
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Europe, the ‘old continent’, is the source of all development processes of the ‘new era’ and of urban culture, including tourism as a phenomenon and a lifestyle.

Tourism, the worldwide phenomenon, developed on the Mediterranean coast, which became the largest unique mega-destination and a meeting point of global tourist demand and supply. For every country, coasts are generally a highly valuable resource, especially in tourism. Nautical tourism, defined in theory as maritime or yachting tourism, has developed as the result of advanced demand and human needs, conditioned by the presence of natural resources. The dynamic of growth of nautical tourism is especially significant in all its sub-types or industries and is constantly increasing. However, the recession and global economic crisis during the end of the first decade of the third millennium have been evident in growth rates that are significantly lower than during earlier years. The development of economic subjects of nautical tourism and the method of their organization have all the characteristics of corporate business.

From macro- and micro-aspects, the need to study the growth and the management of nautical tourism development has become necessary for all countries, not only in the Mediterranean market but also in other global markets. Where to direct such development is the essential question in each market, and management is increasingly orienting the concept towards local and regional levels, a trend that contributes to the sustainable development that has become a sine qua non condition. In order to achieve proper development and its management it is necessary to study the market and its current characteristics. In recent years, there have been a number of studies in nautical tourism: this book will make a further contribution to this research.

The subject of our study is the European nautical tourism market, which will later be contrasted with research into cruising as a well-organized industry at a global level. In particular, it will be compared to the developed world cruise markets in the Pacific. The European nautical tourism market still has a number of insufficiently studied specific aspects in all nautical tourism sub-industries that will be included in this research, thus adding some important new perspectives.

The supply and the demand in the European nautical tourism market and its physical aspect, have, besides the characteristics of emitting and receiving markets, very specific development factors that need to be studied. Due to prominent differences in sub-markets of the European nautical tourism market, the research will be conducted selectively, taking into consideration market peculiarities.
The scientific and research goal set in this study is based on the field research conducted by a larger group of European, Canadian and Australian researchers, studying over 40,000 km of the Mediterranean coast, about 46,600 km of the European west Atlantic coast (excluding Norway), 9300 km of the Baltic Sea coast and several thousand kilometres of the European inland waterways (The World Factbook). Numerous new specific aspects of development have been observed, as well as patterns of development, cyclic changes and differences and similarities among various European markets. In view of the main characteristics of the market, leaving aside considerations of development level, the global European nautical market may be treated as an integral market, though with many internal differences. The integral European nautical tourism market is based on the differences of its sub-markets that make it distinctive. These observed differences are the results of a number of important factors, primarily climatic, natural and cultural factors and of the level of development. The goal set for this research may be defined by the following questions:

1. How to divide the European market in view of the specific aspects of the nautical tourism market and the goal of the research?
2. What are the main factors in the emergence and development of the European nautical tourism market?
3. What are the main characteristics of the European nautical tourism market and how is it organized?
4. What is the demand/supply ratio, how is it formed in each market and in each of the main types of nautical tourism?
5. How to organize the nautical tourism market in Europe so that development continuity is maintained and thus can contribute to an end of the economic crisis?
6. How to apply the concept of sustainable development of nautical tourism in all European markets, taking into account their specific aspects?
7. What is indicated by the development of nautical tourism and cruising in the developed markets of the Pacific, Australia and New Zealand?
8. Can the positive experience of nautical tourism markets of the Pacific be applied in European markets and if so, how?
9. What are the development possibilities of European nautical tourism markets and developed global markets?

Nautical tourism should be considered in terms of its variously manifested forms and sub-types, but a primary consideration should be its market-specific features that create supply and demand. Within the various types of nautical tourism, it is necessary to define and categorize market formation and development factors for each market. The functioning of a market has its regularities that will be studied and defined in this book.

The subject of this research is nautical tourism in the five main European markets, and the aim is to analyse their basic supply and demand characteristics, market verification, specific aspects of its types, the methods of market-oriented management at local and macro-levels and definitions of relations between economic subjects. The purpose of the research is to demystify the development possibilities of nautical tourism as a whole, primarily aimed at practical implementation and development support.

The main European markets have their distinguishing characteristics that should be taken into account when designing a supply in order to ensure effective development. Additional goals of this research are to study the limits of sustainable development of each European market and to analyse how the issue of sustainable development has been resolved in the nautical tourism markets of the Pacific.

Although the developed European countries, in contrast to transition countries, show development that follows the laws of free market, such development still requires some measure of control and regulation. Therefore, expert and scientific studies are necessary and
are supported by each economy. Quality research contributes to better forecasts of nautical tourism strategic development and thus to reducing the business risk of active subjects in the industry.

The book is divided into 11 thematic chapters and consists of four main research sections.

Part 1 gives a theoretic study of nautical tourism, its sources, definitions, and classification of nautical tourism industries. Subjects are explained, European nautical tourism markets are specified and defined and sustainable development is explained and modelled.

Part 2 studies supply markets according to the basic classification of the European nautical tourism markets. For each market studies are conducted separately for each country and for the main industries of nautical tourism. The study of nautical tourism supply is conducted on the basis of available data, though some markets have remained effectively inaccessible for research. The main characteristics of demand are studied in the following market-oriented section.

Part 3 discusses nautical tourism in the Pacific, specifically in the areas of marinas and cruising.

Part 4 discusses and estimates the future development of nautical tourism, taking into account the specific characteristics of the market. In Chapter 10 the authors of this book give their informed opinions on the possibilities for development of nautical tourism, and thereby contribute to the comprehensive breadth of this study.

Web Resources

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Nautical tourism is becoming a significant part of many national economies and it is necessary to study its role in the overall system. Since nautical tourism is present in each tourist market worldwide, it is necessary to provide answers to numerous questions: how and why did it occur? What is its role and significance in the European economy and in the economy of the Pacific, Australia and New Zealand, considered from mega-, macro-, regional and local perspectives? This study seeks to find the answers to these questions.

1.1 Tourism as a Phenomenon

In order to determine the role of nautical tourism in global and national economies, its emergence needs to be explained, including the regularities in the emergence of its selective sub-types. Nautical tourism is a complex concept that is still not sufficiently defined; such a definition is a necessary starting point for a comprehensive study.

In its essence, the concept of tourism refers to the phenomenon of travel and a period of stay away from the place of permanent residence. The subject of such travel is a tourist, who, by changing for a time their place of stay, satisfies their need for a change. The need for ‘a change’ is a part of human nature, which, in addition to a basic need to belong to one locality, has also a general need for the discovery of new places.

In that way, a tourist satisfies one of the important human characteristics: the need for a change and for discovering the new. However, the crucial difference between the phenomenon of tourism and the human desire for exploring new localities relates to organized travel. Hence it can be concluded that the difference between travel for the purposes of entertainment, pleasure and new experiences and distinctively tourist travel, is in the degree of organization involved. We can conclude that tourism is organized travel and change of locality through which a tourist satisfies their need for rest, entertainment and other various needs arising from various motivations. This definition does not include travel related to professional obligations. This definition, however, still does not define sufficiently the phenomenon of tourism.

The entries for ‘tourism’ and ‘tourist’ quoted in the Oxford Dictionary and in Wikipedia show that etymologically they are derived from the root word ‘tour’, which, freely translated, means enjoying travelling with occasional stays at various places. However, the main concepts that relate to tourism were...
defined earlier. The ancient Greek language used the word 'tornos' (axis, lathe), while the Romans used the Latin synonym 'tornum' (tour).

Organized travel, motivated for example by the desire to satisfy religious needs, has existed since antiquity, so it would appear that religious tourism is one of the oldest selective tourism types. However, all authors agree that modern organized tourist travel started in the mid-19th century, relating particularly to the Mediterranean. There are records of organized visits to works of art of great masters found in the archives of developed late-Mediaeval countries such as Italy, Greece, England, Spain and others. English travellers were particularly engaged in such travels aimed at satisfying the wish to see treasures of art and culture, known as the ‘Grand Tour’, so that the expression ‘tour’ remains one of the important etymologic roots of the concept of tourism.

From a methodological aspect, tourism may be studied and defined in various ways, in accordance with the particular research goal. In this study, methods leading to a prescriptive definition of tourism and nautical tourism will be followed, using statistical and legislative definitions and methodology and other prescriptive definitions. A legislative definition of tourism and nautical tourism is particularly characteristic of transition economies. When defining European tourism and tourist markets, it is necessary to clarify important differences between developed countries and transition countries. Developed countries base their economies on the regularities of free markets, while transition countries, being former socialist countries, base their economic development on administrative organization used for managing the market. For example, Germany does not have a special law on tourism but it has a developed self-government at lower levels, through which it regulates, administers and develops all segments important for local and regional development. In order to regulate particular tourist activities, when necessary, additional enactments are adopted as, for instance, regulations relating to tourist agencies. Such legislation is usually applied at lower administrative level, regional or local, for easier implementation. Developed European countries do not have declared national strategies for the development of tourism, or development strategies for selective types of tourism. The reason lies in their distinctive tourism orientation and developed local self-government, which transition countries have not yet achieved.

The only general definition of tourism as such is to be found in a general dictionary of economics, as follows: ‘In general, tourism refers to all activities related to travelling, which are not regular travelling from a customary living locality to another locality and a stay there’ (Gabler Wirtschafts Lexikon, 1994). The definition makes further distinctions in terms of the motive, for private or business purposes, but not business purposes related to permanent employment. The rest is left to the effects of the market and to regional and local regulation of tourism, since it is local government that knows its aspirations best and how to realize them in relation to the environment. On the other hand, the transition countries define tourism and its selective types by ‘lex specialis’, and development is based on governmental strategic development plans adopted by parliament. Thus, for instance, the Croatian national legislation defines tourism through the Act on Provision of Tourism Services, Article 2 (Republic of Croatia, 2008b):

> Services in the tourism sector within the meaning of this Act are: the provision of services of a tourist agency, tourist guide, tourist escort, entertainment organiser, agency representative, tourism services in nautical tourism, tourism services on rural farms or family agricultural farms, tourism services in other forms of the tourism offer and other services provided to tourists in connection with their travel and stay.

Such a definition of tourism may be called a legislative definition.

Besides such legislative defining of tourism, the statistical method, or the approach by which tourism and tourists are taken as subjects, is also very common. Such a definition is prescriptive, primarily directed to statistical specialists. For instance, in 1937, the Committee of Statistical Experts of the League of Nations defined foreign tourism in terms of the tourist as subject, stating that: ‘An international tourist is any person that travels to a country in which he/she
does not have residence and staying there at least twenty-four hours.' The same Committee also defined the concept of a tourist excursionist, who, unlike a tourist, stays abroad less than 24 h. The statistical context for defining tourism further developed the definition, and the International Conference on Travel and Tourism in Rome, 1963 and Statistical Society of Canada, held in Ottawa in 1991, more precisely define a tourist and an excursionist, adding also the concept of a visitor:

A visitor is any person who travels to a country other than his/her permanent residence for a period not greater than one year, whose main purpose is other than the exercise of an activity remunerated within the country visited, study, permanent residence and immigration.

Visitors are further categorized as domestic or international, depending on whether or not they leave their country. This definition somewhat generalizes a tourist, while it defines him/her in terms of the period of stay (not exceeding 1 year) and the purpose of the visit (excluding persons that travel for paid work, diplomats, pupils and students).

A definition of a tourist given by E. Cohen, one of the leading international tourist theoreticians, is worth noting:

A tourist is a voluntary temporary passenger who travels expecting pleasure that may be given by novelties and changes experienced over a relatively long and infrequent cruising travel period. A tourist is primarily a passenger who deliberately decided to leave his place of residence (http://www.100megsfree.com).

Cohen defines a tourist as a passenger who travels infrequently; who remains for several days out of his place of residence and the journey is circular, since each trip ends back at the starting point, i.e. the passenger returns to his place of permanent residence.

It is interesting to compare the legislative definition criteria with those of the statistical definition. Thus, in the category of tourist travel and stay, all European countries implicitly include a stay of up to 3 months, after which special permits will be required. This means that legislation and the legislative method, from a formal and legal aspect, disagree with the concept of tourist travel and stay for a period longer than 3 months. Conversely, according to international statistical methodology, a tourist is any visitor or passenger who spends at least one night in a catering or any other object for accommodation of guests for leisure, recreation, health, study, sports, religion, family matters, public missions and gatherings, without stating a maximum time. This definition refers to an excursionist as well, but his/her stay is shorter than 24 h and there is no overnight stay. Hence, in terms of the length of stay, those two methodologies offer different precise definitions, without diminishing their contribution to a definition of the phenomenon of tourism.

A categorization of passengers that are considered as visitors (tourists or excursionists) according to the international statistical method may be presented as in Fig. 1.1.

![Fig. 1.1. Categorization of passengers according to statistical classification (source: Šamanović, 2002, p. 16).](http://www.100megsfree.com)
Besides travellers that are classified as visitors according to the statistical classification, there is a classification of passengers not considered as visitors (Table 1.1).

While the statistical method concentrates on a subject in tourism, a tourist, the International Association of Scientific Experts in Tourism (AIEST) accepted the prescriptive definition of tourism: ‘Tourism is the sum of phenomena and relationships arising from the travel and stay of non-residents, insofar as they do not lead to permanent residence and are not connected with any earning activity.’ The authors of this definition are W. Kurziker and K. Kraft, the well-known tourism theoreticians and scientists.

This definition includes a tourist as a subject in tourism through the concept of ‘the sum of phenomena and relationships’. Which relationships and phenomena does the phrase relate to? A tourist, being an active subject in tourism, by satisfying his/her needs and motives of travel and stay, produces a large number of relationships and phenomena. In order to organize their stay and satisfy their needs, a number of business activities are engaged, such as: catering business, transport, agencies, food production, handicrafts, communications, arts and others. All business and other activities play a special part in satisfying tourists’ needs since they complete the tourist supply. Tourism involves almost all fields of business, thus adding a strong economic dimension to it. The economic effect that tourism has on the business activities of a country or a region is immense. Their effects cross national borders, since by spending his/her personal income in a foreign market a tourist distributes and redistributes the national income beyond the national, macro-financial system. The economic function of the traffic of passengers and tourists was noted by the English mercantilist Thomas Mun in the mid-17th century (Mun, 1664). He was the first to recognize the need to record services supplied to foreigners in England and services charged to foreigners in England, as also for the expenditures of English tourists abroad. Therefore, Thomas Mun may be considered the creator of the first theory of tourism as an intangible export.

Besides economic relationships, a tourist, an active subject in tourism, also establishes broad social relationships. Such relationships are the result of special, insufficiently studied relations and interactions between a tourist and local inhabitants. So defined social relationships introduce a multidisciplinary aspect to the problem, and may be easily observed in, for instance, the specific context of larger or smaller units and localities that are actively engaged in tourism. Thus, tourism as a phenomenon is highly developed in the Mediterranean area, and regardless of the country we may observe a number of similarities in the living style, opinions and in other aspects, which is common for tourism and tourists along the entire Mediterranean coast.

Therefore, the complex phenomenon of tourism may be explained and studied from various aspects: economy, sociology, psychology, culture, politics, geography, technology, statistics etc.

Table 1.1. Passengers not considered as visitors according to international statistics (source: Šamanović, 2002, p. 16).

<table>
<thead>
<tr>
<th>Domestic travel</th>
<th>International travel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persons travelling to a location for a remunerated business</td>
<td>Persons working in bordering areas</td>
</tr>
<tr>
<td>Persons travelling regularly to a location for work and study</td>
<td>Diplomats and employees in embassies and consular missions</td>
</tr>
<tr>
<td>Persons travelling to a location aiming to obtain permanent residence</td>
<td>Migrants and accompanying persons</td>
</tr>
<tr>
<td>Persons without permanent residence</td>
<td>Persons travelling for emigration</td>
</tr>
<tr>
<td>Armed forces</td>
<td>Refugees and nomads</td>
</tr>
<tr>
<td>Nomads</td>
<td>Transit travellers</td>
</tr>
</tbody>
</table>
A consequence of these considerations is that, when defining tourism, all elements of the economic and social features of tourism need to be included, for which a tourist, being an active subject, is responsible.

Establishing definitions of a human phenomenon, in either an economic, social or any other context, is of course subject to change and development, as is the phenomenon itself.

It can be concluded that, when defining tourism, the purpose and the aim have to be determined. Here, a suitable definition will be selected from the existing options, or a new definition will be given, if it has not yet been analysed theoretically. Our approach to defining tourism is scientific and specialized and a suitable prescriptive AIEST (International Association of Scientific Experts in Tourism) definition is adequate for the purpose. However, the main definition principles need to be taken into account: comprehensiveness, conciseness, meaningfulness and explicitness.

1.2 Nautical Tourism, Resources and Defining Factors

The phenomenon of nautical tourism is a part of the whole tourist phenomenon from which it grew, and of which it is a subtype, so that our definition of nautical tourism must depend on how we define tourism more generally. Clearly nautical tourism is a combination of two expressions, nautical and tourism. The latter has already been explained, while the former derives from the ancient Greek word *naos*, meaning a boat, and forming the root of several other words (including nauseal). In the modern sense nautical science or navigation is a set of practical and theoretical skills that the skipper of a vessel needs in order to sail over the sea, from the departure harbour to the destination. More generally, the concepts of nautical matters refer to all maritime affairs, applied to shipping at sea, but also on fresh waters, rivers, lakes and channels. Therefore, the English expression *yachting tourism* has been increasingly used in international communication, instead of *nautical tourism* or ‘*nautische tourismus*’ in German. However, the expression nautical tourism is acceptable since it is related to navigation generally, but it can be applied both to sea and freshwater activities, where the rules of navigation are similar. Nevertheless, a *yacht* still remains a symbol of luxury tourism and is used with a meaning more closely connected to tourism than to general maritime affairs. Thus the concept of nautical tourism can be better defined from the point of view of economy, since it is essentially more an aspect of tourism than of maritime affairs.

If we recognize the definition of tourism established by W. Hunziker and K. Kraft, the Swiss theoreticians of modern tourism in 1954, accepted by the AIEST, that ‘Tourism is the totality of the relationships and phenomena arising from the travel and stay of visitors, provided the stay does not imply the establishment of permanent residence and is not connected with a remunerated activity’, we easily arrive at the concept of nautical tourism as a new and specific form of tourism. Emphasizing the idea of ‘travel’ is expected, as travelling is central to the main characteristic of nautical tourism; hence, deriving the concept of nautical tourism from the general definition of tourism is justified. Certain attempts to relate nautical tourism to maritime affairs are theoretical errors. Besides the concepts of ‘travel’ and ‘temporary stay at a location’, the definition of tourism also states ‘if the stay is not related to any business activity’. Therefore, travel and stay at a location are not considered as tourism if they are connected to an economic activity. For instance, maritime affairs do not have the characteristic of tourism, since they involve the economic activity of transporting people and goods for which the ship is only a means. The same conclusion may be drawn with the example of fishing, as it relates to travelling by ship and staying at a location (in a port, for unloading and supply or repairs and preparations for work), but it is done for the purpose of an economic activity: the catching of fish.

Perhaps, however, before we are drawn too deeply into the challenge of a precise definition of nautical tourism we should emphasize one essential feature of any such
definition: time brings changes, and any definition in such a dynamically evolving area as tourism, while applicable in the present must also be allowed to adapt to whatever the future may bring.

In order to eliminate similar theoretic errors when analysing the phenomenon of nautical tourism, it is necessary to define and distinguish two groups of factors:

1. Factors in the emergence of nautical tourism.
2. Factors in the development of nautical tourism.

Factors of emergence relate to the particular circumstance that nautical tourism has to occur at a location as a result of particular stimulating or initiating factors. Their effect is connected to the management of the destination and to a series of other subjective and objective sub-factors. The climate, although a relevant factor, has a minor effect on the actual emergence, though its influence is demonstrated during the progress of nautical tourism, its dynamics and the form of development. If nautical tourism is to occur at a locality numerous factors have to coincide, including capital factors and local and administrative circumstances. In general, there has to be a particular interest for nautical tourism to occur in one of its forms in an area, and numerous preconditions have to be fulfilled. For instance, the initial occurrence of a form of nautical tourism at a locality may be stimulated by the fact that it is seen as a highly profitable activity and as an activity that often has the role of a general development driving force, which, in a time of crisis, has particular significance. Three groups of the main initiating factors are of particular importance:

1. Factors arising from a particular level of economic development.
2. Factors arising from a particular level of tourism development.
3. Factors arising from a particular level of general social development.

In view of the fact that the occurrence factors have a basis in the capital interest, i.e. profit, they are preceded by the observed demand, which thus connects the initiation and the development of nautical tourism at a destination. It is, therefore, necessary to connect the initiating factors with developing factors, especially in the field of demand. The demand for nautical tourism is an expression of the market that has to be responded to by an adequate supply in order to satisfy the subject of tourism, the tourist, and to generate a profit. When a demand for nautical tourism is formed in a market the results of motivation researches indicate the characteristic of ‘adventure’ that is evidently present in this type of tourism.

When considering the development factors involved, it is necessary to analyse modern nautical tourism both as a changing process over time and in terms of the actual conditions applying at the present moment.

In our analysis two main groups of market factors are established that turn a complex human being into a tourist or a boater, provoking in them a conscious need for recreation, and offering them options, in terms of time and finances to satisfy their needs. The two groups are:

1. Demand factors.
2. Supply factors.

Demand factors are the basic development factors, since it is the market response to them that creates the supply factors. Thus, demand market research becomes the basis for development, and it is only with knowledge of demand that investment decisions can be made reliably and rationally. Although demand and supply factors can be found in both groups of the basic relations of this study as development factors and initiating factors, the differences between them are evident. In terms of their mutual dependence, the initiating factors precede the development factors. The differences are both in the timing and the form that they take.

Analysing economic development as a factor in tourist development, especially of nautical tourism, it may be concluded that its impact is broad and varied. In general the forms and modes of the effects are variable and still not adequately scientifically studied. When analysing the impact on the European market of demand various forms of influences will be recognized that require a detailed description. The globalization
process in Europe and ongoing changes in the European and global mega-markets change the relationships and forms of interrelated effects, thus creating new development models, especially at local and regional levels. From a micro-perspective, European economic subjects are gradually merging into larger corporations, which means that they are organized as complex associations of capital. The development of strategic associations in various industries varies greatly and the same applies to the nautical tourism industry and its sub-industries. However, they are generally characterized by higher development and market orientation, resulting in increased challenges for management, which usually responds through implementing methods of controlling. The requirements facing the management of nautical tourism sub-industries are closely related to the level of competition in the supply market (Lušković et al., 2011). This indicates crucial changes, observed in the macro- and micro-aspects, occurring in the global economic mega-market, and especially in the European nautical tourism market. Development and change occurring in the global economic system also cause changes in society in general. How such economic development, as a development factor of nautical tourism, is studied in practice will be analysed in further chapters.

The factors of nautical tourism will be discussed in a separate chapter of this book; at this point they are presented as a means of clarification of the concept of nautical tourism. These factors approximately outline the main characteristics of a phenomenon, which means that defining in our case nautical tourism is not possible without an understanding of such factors. As a result of a variety of tourist motivations (Moutinho, 2005), demand occurs in conjunction with a range of factors, such as free time, necessary finances for personal consumption, etc. The road to demand at a particular location is relatively long and hard, reflecting the difficulties of the whole process of entry into the world of developed countries and high individual standards of living. Another important characteristic of nautical tourism also depends on the level and order of development: whether the market is emitting or receiving. However, emphasis should be given to the influence of the destination quality as the primary basis for the development of supply. A quality of supply in nautical tourism cannot be realized without the necessary quality of the destination. The issue of the quality of a destination is an increasingly widespread subject of study. At a particular destination sometimes some ‘hidden quality’ in the development of one of the nautical tourism sub-industries may be a precondition for the possible and achievable development level. Therefore, at quality destinations, accompanied by the vision of an investor, both a sub-industry of nautical tourism and the locality itself may progress extremely rapidly. If that is the case, then the wider positive role of nautical tourism is also developing, as it also accelerates the economic development of the local and broader area. Then an important change may occur, in the sense of a transfer from an emitting to a receiving tourist market; that is, the receptive component increases to a higher level of market development.

Technological development is a crucial part of economic development and it has a positive influence on the development of nautical tourism in terms of the development of shipyards (for small or larger vessels designed for tourism), but also of a range of auxiliary activities. Auxiliary and complementary activities of tourism are an important element in all the sub-industries of nautical tourism and contribute significantly to the development process.

The fact that nautical tourism is a specific and highly valuable aspect of the tourist phenomenon will lead us to observe certain regularities in its development dynamics. Development characteristics can be observed from the point of view of occurrence and of development. The causes of emergence of nautical tourism as a form of tourist activity have to be analysed. Nautical tourism is the result of a certain already established level of tourism development, but also of other social and economic phenomena, in the first place regarding the general level of economic development.

Interdependence of development of tourism and nautical tourism may be analysed in several ways. When analysing the development of tourism generally as a factor
in the emergence and development of nautical tourism in particular, it can be concluded that particular forms of tourism tend to emerge as stages in the overall development process. This effect is illustrated in Fig. 1.2.

With the variable (X) as time and the variable (Y) as the level of development of tourism and economy, it can be seen that at a certain level of development specific or selective types of tourism appear, including nautical tourism in particular.

It is important to determine the key point of such emergence, primarily for practical reasons. It may be known that nautical tourism appeared at a locality some time earlier, but it did not develop into a selective type of tourism. It is only when the broader economic and tourist development in the area, i.e. at macro-level, reaches the necessary level of development that nautical tourism starts to develop. If the emergence of a phenomenon is to become economically significant, then several criteria need to be fulfilled, such as the recognizability, significance and adequacy of the broader aspect of the phenomenon, in order for it to be statistically recognized and recorded. It may be said that nautical tourism appeared a long time ago, but it has not developed into a phenomenon, a selective type of tourism, until relatively recently.

The next determining development factor is the development level of the society in general. This refers to the complexity of cultural, information and motivation factors under the influence of which the demand occurs. Some of the more recent sub-factors in the process are information and communication channels within the market, which support supply through economic advertising and availability of information. In this context, information is a complex and much broader process that should be studied as an aspect of sociological phenomena. A result of the process of more effective communication between the supply and demand markets and global information is the creation of a potential motivation that is manifested in the circumstances of nautical tourism and that, given certain material prerequisites, acquires the character of demand.

An analysis of the range of factors stimulating the development of nautical tourism gives a basis for an analysis of the effects of development factors that are upgraded from initiating factors in a dynamic process. The shift of the effects of factors from the emergence stage to the development stage of nautical tourism may not always be easily understood. The reasons are that such a shift may be minimal in practice, and that the same factors are actually present in both the emergence and development stages, though with certain differences.

The problem is also due to three main characteristics of the effects:

1. Combined effects of the factors.
2. Simultaneous effects in the same area.
3. Effects acting on the same object or phenomenon.

![Fig. 1.2. Development of the basic selective types of tourism (source: T. Luković).](image-url)
The above characteristics of the interdependence of effective factors in nautical tourism may generate a dynamic development process that may have a partly cyclical element.

Seasonality, one of the characteristics of nautical tourism phenomena, applies to some extent to tourism in general, while the cyclical development of nautical tourism is also related to similar trends in economic development. Hence, the interdependence of economic development and nautical tourism has the characteristic of a bivalent link, where economic development is a precondition for the development of nautical tourism, while the development of nautical tourism functions as a stimulus for economic development. The conclusion has been confirmed both in larger economic systems and at the level of local development.

Another question to be analysed is how to define the concept of nautical tourism. The same problem explained in defining the concept of tourism is present when defining nautical tourism in particular. The legislative context for such a definition again differs from its statistical counterpart. Both practical and scientific definitions of nautical tourism must be considered as important for this study.

A legal or legislative regulation of nautical tourism is used in Croatia and can provide one source for its definition. The Act on Provision of Tourism Services (Republic of Croatia, 2008b), Article 44 states the following:

Nautical tourism means the navigation and stay of tourists-sailors on vessels (yachts, recreational small crafts and boats for both personal use and commercial activities, and the like), as well as their stay in ports of nautical tourism for the purpose of rest and recreation.

Such a definition defines nautical tourism as an economic activity. In order to provide further explanation of nautical tourism activities, such services are defined and grouped in Article 45–48 thereof as:

1. Leasing of berths in the ports of nautical tourism for the accommodation of vessels and tourists-sailors staying aboard.
2. Leasing of vessels with or without crew, with or without the provision of accommodation services, for the purposes of rest, recreation and cruising of tourists-sailors (charter, cruising and the like).
3. Services of manoeuvring vessels for tourists-sailors.
4. Accommodation, safeguarding and maintenance of vessels kept afloat in berths or in dry dock.
5. Services of supply to tourists-sailors (of water, fuel, groceries, spare parts, equipment and the like).
6. Equipping and preparing of vessels.
7. Provision of various information to tourists-sailors (forecasts, nautical guides and the like).
8. Other services for the purposes of nautical tourism.

In the context of a legal and administrative specification of business activities this definition fully meets the requirements.

The statistical method, frequently used in theory to define nautical tourism, is a result of the need to regulate the activity and is subject to its main purpose, the classification of activities (Luković and Gržetić, 2007). The classification of activities is based on an official administrative document that precisely defines all economic activities, but does not cover the concept of nautical tourism. It does therefore not offer an overall definition of nautical tourism, but does contribute to specifying and defining the types and forms of nautical tourism as an economic activity. The classification of activities is the basis of the statistical method and records, and in all European countries is in conformity with the EU international classification of activities (NACE) and the UN classification (ISIC). Although in the national classifications of activities, as well as in the above mentioned two classifications, there is the basic classification of nautical tourism (marinas, charter and cruising), the statistical method cannot be used for direct defining of the overall concept of nautical tourism. It contributes, however, to a clarification of nautical tourism and its sub-activities. The statistical system is not adequate alone as a source of information, but can be usefully applied in the classification of nautical tourism, and taken together with legislative and other sources makes an acceptable basis for defining nautical tourism.
Since tourism is a highly important economic activity numerous specialized organizations have been established for the purpose of its development. The goals of such international organizations vary, but they all contribute to the development of tourism, its analyses, to recording all types of the results achieved, in the promotion of tourism etc. Examples of particular significance for tourism are: WTO – World Tourist Organization; AIEST – International Association of Scientific Experts in Tourism; UN Statistical Office, OECD – Organization for Economic Cooperation and Development; EUROSTAT – EU Statistical Office; and many others. They are all engaged in defining statistical standards for tourism, i.e. in determining the methodology of studying and recording results, determining the classification of statistical indicators in tourism and defining the concept of tourism. As can be seen, defining tourism is not the task of any individual organization. Each of them has its views, interests, philosophy of tourism and objectives, which distinguish each organization. Since the task of this study is to define tourism and nautical tourism from a scientific and economic aspect, the process of defining will be subject to all those aspects.

Many theoreticians have attempted to define the nautical tourism phenomenon. They all define it as tourism performed on vessels and in nautical tourism ports and try to give a precise specification that risks some degree of error. The development of nautical tourism can involve rapid changes in particular activities, thus creating confusion in its understanding. As a consequence any definition of nautical tourism is subject to change.

One of the relevant prescriptive definitions of nautical tourism states:

Nautical tourism is a term relating to a special form of tourism in which the predominating parts are navigation and sojourn of tourists on their own or chartered vessel and various maritime activities for tourist purposes and for entertainment (Vukonić and Čavlek, 2001).

This prescriptive definition contains both the elements of descriptive definition, since it describes the phenomenon, and of a conceptual definition, as it determines the content of the concept of nautical tourism.

According to Wikipedia, the popular Internet encyclopaedia, ‘Nautical tourism is a specific form of tourism characterised by the travel of tourists along the sea or rivers including their arrivals to ports and marinas, and includes all infrastructures in ports and marinas necessary for their acceptance.’ This well-conceived definition is acceptable because of its simplicity and breadth, and is fully in accord with the current situation, particularly in terms of the present use and practice of yachts.

A scientific definition of nautical tourism would be:

Nautical tourism is the sum of multifunctional activities caused by the stay of tourists-boaters in nautical tourism ports or out of them, and by the use of vessels and other objects related to the business activity of nautical tourism, aimed at recreation, sports, entertainment and other needs.

This has the elements of a real, conceptual and nominal definition as it clarifies the essence of the matter, determines its contents and explains the meaning of expressions; it is, moreover, fully in accord with the contemporary situation, including patterns of use of small privately owned boats.

Why can this definition be considered acceptable in view of the circumstances in which nautical tourism takes place?

1. In order to apply the criterion of overall comprehensiveness as far as possible, it is necessary to avoid detailed analyses of nautical tourism activities. Various analyses (e.g. TOMAS Nautika, 2007) have shown that navigation on vessels is not the only condition of nautical tourism. Some nautical tourists stay aboard without ever sailing. Moreover, cruising, a significant global business, which is a type of nautical tourism, is also included in this definition, since it does not only relate to nautical tourism ports but also to vessels as a medium. Therefore, the expression navigation is replaced by the term use, which is more comprehensive and thus better applicable to the situation.

2. Boaters do not stay only in nautical tourism ports, but also in bays, inlets etc. or at
Tourism and Nautical Tourism

unregulated berths, and that has to be taken into account. In practice it is one of the attractions of the activity to seek out such opportunities for privacy and distance from the pressures and technologies of the modern world that it can provide. The development of nautical tourism in terms of sustainable development, which assumes some limitation to the coast saturation aimed at the protection of nature as a motivational tourism resource, emphasizes a multidisciplinary study of the coast. Hence the expression ‘or out of it’, referring to the nautical tourism port.

3. Besides the unavoidable term ‘vessel’ the phrase ‘other objects related to nautical tourism’ was added, since nautical tourism activities are extending through its diversification. For instance, overnight stay in nautical tourism supply is increasingly relating to fixed objects that are a constituent part of the supply products in Mediterranean marinas. Other activities and types of vessels (tourist submarines and bathyscaphe) are also present, categorized into a nautical tourism group as they are located in nautical tourism ports.

4. Besides sport, recreation and entertainment that includes most of the recognized needs and interests in nautical tourism demand, the definition also contains the expression ‘and other needs’. The reason for this is the demand is constantly broadening in terms of motives and is a part of stronger, vertically distinguished strategic management of marinas as the highest quality supply.

In fact, this scientific definition contains all the elements of nautical tourism. As it is a new definition it is closer to the objective phenomena observed in the manner of consumption of nautical tourism products and not only the products of nautical tourism ports. However, it has to be noted that tourism and nautical tourism are derived terms that actually refer to a set of activities grouped together, and are open to changes and modifications. As was pointed out earlier, nautical tourism is a multidisciplinary and evolving activity that may lead us in the future to modify our current definitions.

In order to simplify the defining process of nautical tourism and the use of the term in daily use, a short definition is proposed: Nautical tourism is a multifunctional tourist activity with a distinguished maritime component.

This simple and practical definition of nautical tourism emphasizes the main characteristics of nautical tourism that categorize it into a tourist activity and that, besides the normal activities of tourism, require maritime knowledge and skills.

1.3 The Classification of Nautical Tourism

Nautical tourism is a complex industry consisting of three main sub-industries. This conclusion has been reached after several years of research, two studies in particularly being worthy of note.

As already generally recognized, the developed European countries are distinctively market oriented and have highly developed local self-government systems. Therefore, they do not base their development on national and politically imposed strategic development policies, as is the case in transition countries. In such a model of organized and market-oriented tourism, expert groups and elite institutions occasionally conduct market research and suggest potential development directions. Such documents have the character of applied science, and government administrations accordingly develop systems of support for local government and for private capital that directly participates in economic development. Research conducted in the UK (Example 1) and in Germany (Example 2) is relevant for nautical tourism and its categorization (Luković, 2009a).

Example 1: Wales (UK)

The regional government of Wales ordered a research study conducted by the Welsh Enterprise Institute, University of Glamorgan Business School in 2006. The research was based on the resources of the entire coast of Wales, along which activities related to the coast and the sea are dispersed. A study (Brooksbank et al., 2006) was designed by a
group of scientists and project managers. The definition of nautical tourism and its categorization was subject to the goal of the study to distribute activities along the coast implementing a developed system of special national and European standards. The initial premise was that the coast is the most valuable resource and in order to exploit it properly a complex system of a high standard of quality was developed that has become the accepted framework for future research.

The study begins with defining the subject of the research, the coastal part of Wales, and defining the goal, the distribution of activities in view of resource capacities. A sustainable development framework was established, which limits the development by implementing specific standards of quality, safety and ecology.

The coastal activities are grouped and explained in terms of three separately described activities:

- Activities concerned with the protection and enhancement of the environment;
- Activities that make intensive use of one or more elements of environment as a primary resource;
- Activities that are dependent on the quality of the environment.

The study continues with a particular categorization of activities arranged in two groups relating to the development of the marine and the coastal industries, so that further research is subject to these two main groups (Tables 1.2 and 1.3).

Under the heading ‘Marine Sectors’ the classification of activities covers the whole range of marine activities, which may be collectively described as the ‘marine industry’, and includes in particular the development of marinas on the coast of Wales.

The group ‘Coastal Sectors’ consists of three groups of activities: protected, especially valuable and intensive. Thus the activities can be connected through the resource and the locality that is the focus of the study. The resource is of primary importance and activities in it are subordinate and standardized. The entire system of classification and the preparations for a strategic analysis are subject to the needs of the market.

### Table 1.2. Marine interest sectors (source: Brooksbank et al., 2006, p. 9).

<table>
<thead>
<tr>
<th>Marine sectors</th>
<th>Marine sectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil and gas</td>
<td>Ports/minas</td>
</tr>
<tr>
<td>Leisure and recreation</td>
<td>Fisheries</td>
</tr>
<tr>
<td>– holiday tourism</td>
<td>– sea fishing</td>
</tr>
<tr>
<td>– cruising</td>
<td>– fish farming</td>
</tr>
<tr>
<td>– leisure craft services</td>
<td>– fish landings</td>
</tr>
<tr>
<td>Royal Navy</td>
<td>Marine environment research and development</td>
</tr>
<tr>
<td>Marine business services</td>
<td>Aggregates</td>
</tr>
<tr>
<td>Shipping</td>
<td>Safety and salvage</td>
</tr>
<tr>
<td>Shipbuilding/repairs</td>
<td>Marine education/training</td>
</tr>
<tr>
<td>Marine equipment</td>
<td></td>
</tr>
</tbody>
</table>

### Table 1.3. Interest sectors related to the coast (source: Brooksbank et al., 2006, p. 9).

<table>
<thead>
<tr>
<th>Coastal sectors</th>
<th>Intensive users:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protect/enhance:</td>
<td>Protect/enhance:</td>
</tr>
<tr>
<td>– National parks</td>
<td>– National parks</td>
</tr>
<tr>
<td>– coastal defence</td>
<td>– coastal defence</td>
</tr>
<tr>
<td>– water quality</td>
<td>– water quality</td>
</tr>
<tr>
<td>Quality:</td>
<td>Quality:</td>
</tr>
<tr>
<td>– leisure/tourism</td>
<td>– leisure/tourism</td>
</tr>
<tr>
<td>– education/courses</td>
<td>– education/courses</td>
</tr>
<tr>
<td>– maritime heritage</td>
<td>– maritime heritage</td>
</tr>
</tbody>
</table>

To present the matter clearly the authors have defined the concept of marine and coastal areas that relate to activities directly or indirectly connected to the marine area, that is, to nautical tourism, as stated below (Brooksbank et al., 2006):

- Marine – ‘those activities which involve working in or on the sea’, and
- Coastal – ‘those activities involved in the production of goods or services that take place on land but depend on proximity to the sea’.

It can be concluded that the process of defining and classifying is relative to the resources in question. The study was made as a contribution to the strategy of regional development implementing the resource concept.
In this study, all types of nautical tourism are considered, as in the model in which activities and maritime tourism subtypes are the focus of attention. The marine sector relates to activities such as cruising, fishing and fish farming and other marine activities. Charter activity is not included here, but there are holiday tourism, shipping and shipbuilding and ship servicing. It may be concluded that the segments of the study and hence the design of the strategy are similar, but the approach, and hence also the result, is quite different.

**Example 2: Germany**

In support of the development of ‘water tourism’ the German government ordered a study that was conducted in Germany by *dwif* consulting GmbH Berlin in 2002 (*dwif* consulting GmbH, Berlin: http://www.dwif.de). It was planned that the study would analyse the receptive possibilities of water tourism and evaluate its full effects. The term ‘water tourism’ refers, in fact, to nautical tourism, and is adequate in view of the objective of the study. According to this research, nautical tourism activities are grouped and categorized into two main and two auxiliary groups of activities (Fig. 1.3).

The above classification recognizes chartering and cruising, but also other recreational water activities such as fishing, surfing, diving etc. They are classified as the main activities that are the subject of the study. Hence, it relates to the nautical tourism industry within the resource framework, similar to the case of Wales.

The two studies referred to are a good basis for a scientific and practical classification of nautical tourism. It should be based on the principles of the activity, which further requires the document ‘National Classification of Activities’, or the equivalent document with

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**Fig. 1.3.** Classification of ‘water tourism’ according to the German model (source: http://www.dwif.de; http://www.bte-tourismus.de).
a European or international categorization (NACE and ISIC), according to which there are three main activities of nautical tourism (Republic of Croatia, 2007):

- Sector 50 – Water transport (cruising), 50.10 Maritime and coastal transportation of passengers;
- Sector 77 – Renting and leasing, 77.34 Renting and leasing of water transport equipment (charter);
- Sector 93 – Recreational, cultural and sports activities, 93.29. Marina activities.

As already stated, NACE confirms the existence of recognizable activities as selective forms of nautical tourism. The role of NACE ends there, to give way to other sources of classification of nautical tourism. What logically follows from the scientific and practical classification of nautical tourism is an acceptable classification model as presented in Fig. 1.4.

Such a division of nautical tourism that distinguishes the three main sub-categories or sub-industries: (i) nautical tourism ports, (ii) charter and (iii) cruising, is fully justified by their specific aspects and differences. Such a categorization will be used in this study and will be its primary criterion. The second criterion will be European markets, which will have to be clearly defined.

Thus within the domain of this research on the industry there are three basic sub-industries as follows:

1. Marina industry;
2. Charter industry; and
3. Cruise industry.

Bearing in mind the type of activity carried out, each of these three basic sub-industries

<table>
<thead>
<tr>
<th>SECONDARY</th>
<th>MAIN TYPES</th>
<th>SUPPLEMENTARY</th>
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<tbody>
<tr>
<td>Diving</td>
<td>Nautical tourism ports</td>
<td>Ship and boat-building</td>
</tr>
<tr>
<td>Surfing</td>
<td>Charter</td>
<td>Mega-yacht building</td>
</tr>
<tr>
<td>Diving-bells</td>
<td></td>
<td>Manufacture of nautical equipment</td>
</tr>
<tr>
<td>Rowing</td>
<td>Cruising</td>
<td>Skipper service</td>
</tr>
<tr>
<td>‘Robinson’ tourism</td>
<td></td>
<td>IT availability</td>
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<tr>
<td>Lighthouse tourism</td>
<td></td>
<td>Sailing schools</td>
</tr>
<tr>
<td>Etc.</td>
<td></td>
<td>Research institutes and education centres</td>
</tr>
<tr>
<td>Berths</td>
<td></td>
<td>Other services</td>
</tr>
<tr>
<td>Moorings</td>
<td></td>
<td></td>
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<tr>
<td>Dry marinas</td>
<td></td>
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<tr>
<td>Marinas:</td>
<td></td>
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<tr>
<td>1st category</td>
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<td>2nd category</td>
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<td>3rd category</td>
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<tr>
<td>Motor yachts</td>
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<td>• with skipper</td>
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<tr>
<td>• without skipper</td>
<td></td>
<td></td>
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<tr>
<td>Sailing yachts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• with skipper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• without skipper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cruisers:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) large world cruisers</td>
<td>a) Ports for large cruisers:</td>
<td></td>
</tr>
<tr>
<td>b) local cruisers (old timers)</td>
<td>• specialized ports, members of ‘Cruise Europe’</td>
<td></td>
</tr>
<tr>
<td>• daily cruises</td>
<td>• non-specialized ports</td>
<td></td>
</tr>
<tr>
<td>• longer cruises</td>
<td>b) Ports for local old timers:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• shore harbours in small places</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• island ports</td>
<td></td>
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</tbody>
</table>

Fig. 1.4. Classification model of the nautical tourism industry, according to the principle of activity (source: T. Luković).
in nautical tourism can justifiably be researched independently. It should be mentioned here that the marina and cruise industries are particularly significant and world-renowned industries. This has led to them not being linked under the ‘umbrella’ of the overall industry of nautical tourism. Another reason for this is insufficient scientific research into the nautical tourism industry and its sub-industries. This is somewhat incomprehensible, taking into account the fact that these are very profitable activities that have been developing positively for over 40 years.

1.3.1 Marina industry

The range of facilities supplied by the popularly named marina industry, according to the Croatian classification (Republic of Croatia, 1999), that is also applicable to the entire marina industry, can be categorized as:

1. Anchorages.
2. Berths.
3. Dry marinas.
4. Marinas.

According to this classification, nautical tourism ports are very precisely categorized as follows (see Fig. 1.5):

- An anchorage is a part of the water area appropriate for anchoring vessels in a bay that protects against bad weather;
- A berth is a part of the water area and coast allotted for berthing vessels and equipped with a berthing system;

![Fig. 1.5. Types of nautical tourism ports: (a) anchorage, (b) berthing, (c) dry marina and (d) marina (source: T. Luković).](image-url)
• A **dry marina** is a part of the coast or mainland that is sectioned off and equipped for supplying storage services and guarding of vessels and supplying transport services for the vessel in the water or from the water to the dry marina;

• A **marina** is a part of the water area and coast specifically built and equipped for supplying berthing services and for guarding vessels and providing accommodation in marina facilities for tourists/boaters. In marinas there are the other usual services for tourists and boaters and maintenance services for vessels can be supplied.

This classification makes considerable practical sense and therefore is completely justified. In terms of nautical tourism’s level, variety and quality of supply, anchorages are the lowest, while marinas are the highest in quality and facilities. Anchorages in protected bays offer the safety of relatively protected locations, sometimes together with several additional services such as a morning collection of rubbish from vessels, to the most basic of catering services on the mainland. Berths are present mainly in town centres so that the supply is dependent on the destination’s supply. Such berths may also offer electricity and water connection and, in rare cases, Internet services. Dry marinas offer storage services for vessels while they are not in use and repairs and maintenance work can be carried out on vessels. Catering services are included within the scope of dry marina services. The nature of berthing facilities is relevant to the question of vessel insurance that, for the vessel owner, is of great importance in terms of security. The marina offers the widest range of services in the port industry of nautical tourism, which is why this whole sub-industry, where English is spoken, has adopted this name. The marina’s supply is almost limitless and, in the most developed of marinas, represents a place in which boaters can satisfy their every need. We can even have the scenario of a whole town being taken over and turned into a mega-marina.

Our survey of marinas inevitably focuses on those that have been listed and categorized; while this will effectively include all of the higher quality marinas it may mean that a large number of smaller uncategorized facilities will be omitted.

There is no overall system of categorization at the European level. Rather, the categorization of marinas is mainly done at a national level with very diverse classification criteria. The only international form of marina categorization and brand quality is the ‘Blue Flag’, which has been adopted by many national associations of an international character. As has already been explained, ADAC (Allgemeiner Deutscher Automobil-Club) classification is subject to their own specific aims. However, it is nevertheless a unique categorization of marinas at a European level. According to that categorization, marinas are classified according to two basic criteria (ADAC, 2010):

• Level of technical equipment; and
• Catering and leisure services.

Unfortunately, not even within a national context has any classification according to one single criterion been implemented for long enough for it to acquire any real value. For example, categorization in Croatia, which actually has an active current policy on marina development, significantly changes every 10 years or so, most recently in June 2008 (Republic of Croatia, 2008c) when marinas were placed into three categories and awarded stars. Since then they have been placed into four categories awarded from two to five anchors. However, all classification criteria for marinas, however different the classification among countries and organizations that take on marina categorization, is based on two fundamental criteria:

• Level of technical equipment of the marina; and
• Quality of service offered by the marinas.

Marinas can be categorized in terms of the quality of service and technical equipment on offer, leading to the following classification:

• Standard, with basic comfort;
• Luxurious, with a high level of comfort; and
• Recreational, with the possibility of sporting, recreational and leisure facilities.
Alternatively, they can be classified by type of construction, which shows distinctive differences and is related to climatic and other conditions, as follows:

- American style;
- Atlantic style; and
- Mediterranean style.

The American style of marina is characterized by simple or standard quality and relatively inexpensive construction, functionally organized facilities, an effective running organization and is well equipped.

The Atlantic style of marina, as with all European marinas, in an architectural sense does not have a unique construction style, is not so well equipped and on average has a smaller capacity than the American style of marina.

The Mediterranean style of marina is characterized by relatively less land surface with solid infrastructure building. These types of marinas are usually linked to a tourist destination or are often a part of it. There are a limited number of moorings and they are aimed mainly at tourists in the summer for short harbour stays.

Marinas can be classified on the basis of the form of the water area used for the marina in relation to the mainland environment.

There are four basic types of marina (Marine Encyclopaedia, 1976):

- Open;
- Semi-indented;
- Indented; and
- Fully indented.

Each of these types adapts itself to the surrounding terrain and construction conditions. In this way, the marina blends into the environment with optimal use of the environmental conditions as well as upgrading in the case of exposure to the elements, if necessary (see Fig. 1.6).

Marinas can also be classified according to the criterion of ownership, a factor that may be reflected in the quality of equipment,
private marinas being frequently the best equipped. According to the criterion of ownership marinas can be classified as (Marine Encyclopaedia, 1976):

- Private;
- Council; and
- Public.

Private marinas are commercial marinas, the ownership of which dictates the business policy and running of the marina. Here interests of entrepreneurship take priority.

Council marinas are, in principle, public and are run by port authorities or the state via local government. They are aimed at the local population.

Public marinas are owned either by the state or local government. They are specific in their means of administration and financing and are competitors to commercial or private marinas.

The largest number of public marinas is in the USA.

For the purposes of research into marinas in Europe, it is particularly important to classify them according to their location.

There is a deeply rooted tendency to consider only the type of marina that is on the sea, with Mediterranean marinas treated as if they were the only type in Europe. This research seeks to overcome this prejudice and, while recognizing that marinas on the Mediterranean are high in quality and well equipped to the highest world standards, to also recognize the existence of marinas in other and different types of location. Such a broadening of the definition allows a much more general economic analysis.

We thus differentiate among the following types of marinas (Marine Encyclopaedia, 1976):

- Sea;
- Lake;
- River; and
- Canal marinas.

Just like sea marinas, so-called freshwater marinas (lake, river and canal) equally represent valuable segments of the marina industry in Europe, as will be demonstrated in this research.

The capital strength of the marina industry has not yet been evaluated, but its direct and indirect effects are no less than in the organized cruising industry. According to a rough estimate, the assessed capital value of marinas in Europe is in excess of €60bn, which would confirm the great capital strength of this sector. The wider marina industry in Europe, including the many closely linked activities, can almost certainly be assessed at a minimum of double this figure.

### 1.3.2 Charter industry

Chartering, or the charter industry, as a sub-type of nautical tourism, is linked to the existence and activity of the nautical tourism ports on which it is dependent. The charter industry, though essentially involving the hiring out of a vessel, also can involve a number of additional services, for example in offering the services of a professional skipper (see Fig. 1.7). It is estimated that one in five yachts make use of skipper services (http://www.europeancruiseCouncil.com).

<table>
<thead>
<tr>
<th>SUPPORT ACTIVITIES</th>
<th>BASIC CHARTER INDUSTRY ACTIVITIES</th>
<th>COMPLEMENTARY ACTIVITIES</th>
</tr>
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<tbody>
<tr>
<td>a) Boat insurance</td>
<td>Sailing yachts</td>
<td>a) Yachting services</td>
</tr>
<tr>
<td>b) Tourist agencies</td>
<td>Motor yachts</td>
<td>b) School of sailing</td>
</tr>
<tr>
<td>c) Boat production</td>
<td>Yachts (12–24 m)</td>
<td>c) School for gaining qualifications to sail a yacht</td>
</tr>
<tr>
<td>d) Other services and products</td>
<td>Mega-yachts (over 24 m)</td>
<td>d) Independent skipper services</td>
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<td></td>
<td>Hiring yachts without a skipper</td>
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<td></td>
<td>Hiring yachts with skipper services</td>
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Fig. 1.7. Fundamental structure of the charter industry (source: T. Luković).
The charter industry is, in terms of capital, the least actively developed aspect of the marine tourism industry. It is generally considered to be the most difficult to run and the most risky business in nautical tourism. Due to supply and demand there is tough competition among charter companies. For this reason, particularly in the case of smaller charter companies, almost 50% of bookings for yacht rental are made through specialized tourist agencies. On the market there are frequently a number of small local firms that have one or more vessels on offer. In contrast there are companies that may have over a thousand vessels. In the charter business, apart from the legal or so-called ‘white’ charter business, particularly in the Mediterranean, so-called ‘grey’ or ‘black’ charters may also occur. Such grey and black charter yachts are illegal; they exist mainly in the Adriatic and Aegean Seas, but also occur to some extent in all waters. Not only are state inspection and coastguards opposed to this practice, but also professional skipper associations.

There are two basic packages offered by charter firms, as follows:

- Yacht/vessel rental without skipper services;
- Vessel rental with skipper services.

Apart from these two service packages, charter companies may also offer independent skipper services, though such services are increasingly organized independently of the charter industry.

The fleet with which charter firms operate can be divided into: (i) motor vessels; and (ii) sailing vessels. There is a noticeable and interesting tendency for the ratio between these two categories to be around 3 to 1 – but, under the influence of supply and demand, this ratio actually appears to reverse roughly every 5 to 7 years. The sources for the supply of charter yacht fleets can vary. Most frequently these involve the leasing and renting of private yachts, the owners of which contract to the charter companies for their use. In the case of leasing, the business is very risky and very difficult business situations can occur. On the other hand, charter fleets not created by such leasing are more vulnerable to market fluctuations. Changes and difficulties that occur for some reason in the demand market can be fatal for the charter company. It sometimes happens that a whole fleet ends up in the hands of the banks and leasing associations (Luković and Gržetić, 2007).

As distinct from small local charter firms, large charter companies tend to focus on the more attractive destinations, offering a wide range of services and the possibility of more easily offsetting the negative effect of seasonal work. That is, large charter companies, during low season, can direct their yachts to other destinations where the tourist season is still active. In that way, by using the strategy of diversification, they successfully overcome the low season and achieve a longer period of bookings for yacht rental. The fundamental characteristic of chartering tends towards continually larger vessels, since, for both sailing and motor yachts, the demand every season is for larger and larger vessels.

If we consider the already accepted definition of a yacht as a vessel longer than 12 m and a mega-yacht as a vessel longer than 24 m (80 ft), then this means that there is an apparent greater demand for larger yachts and mega-yachts. From analysis of the data on charters, it appears that the charter companies, on average, use the services of tourist agencies in about 50% of cases (Gračan et al., 2011). Marketing in the charter industry and in particular when the charter fleet is acquired by leasing is more difficult. When considering this problem some important statistics should be emphasized. For example, in order for a charter company to have and maintain a team of workers to take care of their boats it is necessary to run a fleet of a minimum of around ten yachts. Similarly, to break even in the running of such a business there must be a minimum of 10 weeks of yacht rental per year. Below this minimum there will be losses.

In 2010, there were about 6000 mega-yachts registered worldwide (http://www.nmsc.gov.au), of which about 4400 were over 30 m (http://www.superyachtintelligence.com). Annually, on the world market directly related to the charter industry, there is a turnover of around a million US dollars (http://www.ezadar.hr). Mega-yachts have become a
status symbol and they are constantly increasing in number. Leading countries where the building of mega-yachts is most developed are America, Italy and the Netherlands, which together provide about 58% of world production of such yachts. Even though there are no precise statistical data available, something over 60% of mega-yachts are owned by charter companies. The cost of yacht rental depends on the length of charter and level of boat equipment. For example, weekly rental of a yacht 17–18 m in length comes to around €20,000, and a mega-yacht of over 30 m around €60,000. In terms of value, it can be noted that the cost for a mega-yacht is determined by the length of the yacht and its make as well as the built-in equipment. There are two types of manufacturer of luxury yachts: (i) manufacturers who produce a series of yachts to a particular design; and (ii) manufacturers that produce to order. Motor yachts of 18 m in length (60 ft), cost on average between €1.2m and €2m, depending on the manufacturer and equipment. Quality yacht construction can be seen in boats manufactured in the USA, Scandinavia and in Great Britain. Such better quality yachts are somewhat more expensive: thus a yacht 21 m long costs between €2m and €3m, while yachts of 35 and 37 m in length can cost anything between €10m and €22m, depending on the manufacturer. The budget analysis for building the yacht shows that the cost of yacht construction is no greater than a third of the final value, which suggests that it is a very profitable business. Yachts from 40 to 60 m in length generally cost around €1m per metre, and for those of greater length there is no clear limit to the price, which will be individually negotiated.

Those who make use of mega-yachts around the world constantly demand bigger and better equipped yachts, which are mainly owned by big charter companies. In terms of size, in the list of the 100 largest yachts in the world in 2009, the length varied from 162 m for the Dubai yacht, to the smallest in this category, the Wedge Too, which was 65 m in length. Of these largest 100, 20 are in the USA, where the biggest is 138 m in length and the smallest 48.8 m. Yachts are dispersed over all continents except Africa. In the Adriatic the largest of the charter mega-yachts are 34 m in length (Benetti Classic 34M) and 29 m (Sunseeker Predator). At 54 m, the Seagull II is an exception for the Adriatic. The Adriatic quality marinas, particularly on the Croatian coast, are increasingly attracting a greater number of mega-yachts. Adriatic marinas over the last few years are being reconstructed in order to make room for mega-yachts to cater for this increase in demand.

The skipper and skipper services are an important segment of basic charter industry supply. From the moment the skipper takes the helm, he or she is the person responsible for the yacht and everyone aboard. A certified skipper must be experienced in all aspects of yacht handling and navigation, and must be well aware of all relevant regulations. The skipper takes full responsibility for the safety of the crew and the vessel. Yacht users’ concerns are the sailing itinerary, destination port, food and so on, though some charter companies offer this also as a service. An RYA Day Skipper qualification or equivalent, together with a VHF radio licence, are likely to be absolutely minimal requirements and it is advisable to check with individual companies for their specific stipulations. Evidence of skipper capability varies from country to country, so much effort is required to bring order to this industry.

The cost of skipper services depends on the one hand on his qualifications, and on the other hand on the size of the yacht he is operating. The daily cost of skipper services for an A category yacht (yacht up to 100 gross register tonnage (GRT)) begins at €130 per day and weekly is around €1000. The skipper in charge of a B category yacht (yacht up to 500 GRT) will negotiate the daily price with the owner or user of the yacht. The maximum price for skipper services in the UK is around £200 per day (http://www.vjesnik.hr). The skipper’s psychological profile is of particular importance to his success. Together with a knowledge of how to handle the yacht, the skipper must also be familiar with the area in which he is sailing and must select the most appropriate anchorage in accord with the wishes of his paying passengers. The professional and personal qualities of a skipper are central to success in this business.

It should be noted that in some countries, such as in England, boaters are not required
to be certified to manage their yacht. It could of course be argued that it is the introduction of certificates for navigation throughout the rest of Europe that has helped improve standards of safety.

1.3.3 Cruise industry

Cruising, or the cruising industry, with all its associated activities, is one of the most actively participated in industry in terms of capital, not only in nautical tourism, but at the level of all other industries. With about 300 large world cruisers which sail in all waters worldwide and with more and more extra-luxury smaller cruisers (up to 200 passengers), together with tens of thousands of traditional local vintage boats for the organization of one or more day trips, and with numerous ports, many of them specialized for cruiser docking, the cruise industry deserves much practical attention and research.

The cruising industry’s fundamental activities consist of the following (see Fig. 1.8): (i) ports for docking cruisers; and (ii) cruising ships. Ports equipped for cruiser docking may be members of specialized associations that support the industry through development of such ports (see Table 1.4).

The most significant associations are:

1. European Cruise Council (ECC), with its headquarters in Brussels (Belgium), is the association of leading European cruise companies with 30 permanent members and 34 associate members. The ECC acts as the counterpart of a similar American association called the Cruise Line Industry Association (CLIA), which can take most of the credit for the high level of development in the cruise industry in the Central and Middle American market (Dowling, 2006). The ECC promotes

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**Fig. 1.8.** Basic structure of the cruise industry (source: T. Luković).
the interests of all operators in the cruising industry, connecting and collaborating with institutions of the European Union, such as the Commission, Parliament, Council of Ministers and their permanent representatives. The ECC also cooperates with European agencies for maritime security (EMSA). The ECC acts to protect its members’ interests through close relations with other European bodies, such as the European Community’s Shipowners Association (ECSA), European Seaports Organisation (ESPO) and European Community’s travel agencies and tour operators (ECTAA). The ECC also encourages development of the European cruising industry and closely collaborates with a range of regional bodies such as Cruise Baltic, Cruise Europe, Cruise Norway and MedCruise.

2. **Cruise Europe**, with its headquarters in Stryn (Norway), is an association of ports for cruiser docking in Northern and Western Europe. Directed at development, this association supports and determines the standard of port quality, linking them in a network, and carries out research into the needs of its members.

3. **MedCruise**, with its headquarters in Barcelona (Spain), was founded in Rome in 1996 and acts as an association of Mediterranean ports specialized for cruiser docking. The association has today 55 members with 78 ports in the Mediterranean, as well as ports in the Black Sea, the Red Sea and in the Atlantic. The association has 20 associate members who represent tourist offices, port agents and other subjects in the cruising industry. In this way MedCruise’s area of interest and work extends to the entire cruising industry. MedCruise works on increasing the effectiveness of the cruise industry, and at developing maintainable relations among subjects in the industry and its development.

4. **Euroyards**, with its headquarters in Brussels (Belgium), is an association that groups together leading builders of sailing boats, off-shore and specialized boats and yachts, ferries, ships for transporting chemical cargoes as well as other specialized cargo ships. Its members employ around 50,000 workers and annually achieve a turnover of around €13bn. All of Euroyards’ shipbuilding members belong to the Community of European Shipyards Association (CESA).

The cruising industry, in terms both of specialized ports for the docking of smaller cruisers as well as the larger cruisers owned by big companies, is very well organized, and has made claim to the title of ‘The Cruise industry, leader in Europe’s economic recovery’ (http://www.cruise-norway.no). On the other hand, the industry of small private cruisers, together with the smaller ports they generally use, lacks any coherent organization and remains largely undeveloped. It represents a field for future research as well as an opportunity for development.

There are over 20 million travelling passengers expected on large cruisers in

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<tr>
<th>Table 1.4. Top-ten of the largest world and Mediterranean ports specialized for docking large cruisers (source: MedCruise, 2011).</th>
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<tr>
<td><strong>World (2008)</strong></td>
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<tr>
<td>1 Consumet</td>
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<td>2 St Thomas (USV)</td>
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<tr>
<td>3 Grand Cayman</td>
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<td>4 Nassau</td>
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<td>5 St Maarten</td>
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<td>6 Naples</td>
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<td>7 Juneau</td>
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<td>8 Ketchikan</td>
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<tr>
<td>9 Livorno</td>
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<tr>
<td>10 Dubrovnik</td>
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</table>
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2011 (Passenger Shipping Association, 2006), around double this number in local traditional old vintage boats around the world (Luković, 2009b) with around 150,000 employed directly in the cruise industry and double this amount in related activities. Additionally, with a 10-year increase in the number of passengers on cruisers (1995–2006) of 2.5 times (Dowling, 2006) and with a €34.1bn turnover in related activities, the cruise industry has a significant role in many national economies, as well as in the global world economy. In terms of global market participation in 2010, according to all indicators, the European market’s allocation was around 20–30% (European Cruise Council, 2011). Developmental continuity over the last 30 years has been steadily on the increase, with an average rate of development of 11% annually, indicating an industry that has exceeded national economic frameworks in terms of importance. It is significant both as a global and European economic industry. The estimated capital strength of the narrower cruising industry can be measured in several tens of billions of Euros. For example, the price of one large cruiser is over €1bn and, for example, tens of large cruisers contribute to the annual value of the Croatian budget.

The cruise industry generally is oriented towards ships that are effectively a combination of hotel and boat. Regarding the services that passengers are offered on board, the supply is large, of good quality and relatively expensive. In developing what is offered on large cruisers, apart from cafés, bars and restaurants, there are usually pools and tennis courts, theatres and night clubs available as well as shopping centres and other services. All of this contributes around 50% of tourist spending on the cruiser, and about 10% of passengers do not even leave the ship when they reach a destination (Luković and Božić, 2011b).

The development of the building of large cruisers is taking place along with the development of specialized shipbuilding yards for both large and small cruisers. According to the statistics of a leading promotion company ‘Berlitz’ (Ward, 2010) that advertises large cruisers, there are around 300 large cruisers sailing in all parts of world (Ward, 2006). Their common characteristic is a form of mass tourism, a concept considered to apply when there is a capacity of at least 200 passengers. Smaller ships frequently offer a more exclusive (and costly) service.

In terms of size of vessel, four categories of cruiser can be differentiated (Ward, 2006):

- **Boutique ship** (50–200 passengers);
- **Small ship** (200–500 passengers);
- **Mid-size ship** (500–1200 passengers);
- **Large resort ship** (1200–4000 passengers).

However, it must be emphasized that quality service does not only depend on the size of the cruiser but directly on the particular offer and price of the service. Classification of the quality of services in relation to price can be separated into four categories (Ward, 2006):

- **Standard**: acceptable cost of food and other services on the ship;
- **Premium**: somewhat more expensive and higher quality services than in ships in the previous category;
- **Luxury**: more expensive and higher quality services than in the previous two, plus offering personal comfort, better food and the crew better trained with the passenger at the centre of attention;
- **Exclusive**: the best service where the service adapts to the passengers’ needs personally and the price corresponds to this high-quality service.

What is offered on large cruisers is developing as an aspect of mass tourism, without following the general rule that links mass tourism to a lower quality service. The building of large luxury cruisers has become highly competitive and is tending towards the construction of larger and larger cruisers, which can carry up to 5000 passengers.

In parallel with the development of larger cruisers on which the passengers may feel they lose their personal identity and become only a number, there is also an increase in the construction of small super-luxury cruisers for up to 200 passengers. Such small luxury cruisers meet a demand for more selective tourism, where passenger needs on the cruiser are satisfied on a more individual basis. The price corresponds to
such an offer and can be ten times greater than that on a large cruiser.

With the growth of the cruise sub-industry large cruisers have generated a new and growing tourist supply of cruisers on which most of the cabins are privately owned, while the crew remain available to meet all passenger needs. This situation creates a special form of business and style of service on the cruiser, and the owners of such cruiser apartments frequently plan their cruise-routes for each coming year.

Italian shipyards in particular excel at the building of such small luxury cruisers, with an emphasis on attention to every small detail. Extremely competitive market conditions regulate the production of both large and small cruisers for major cruise companies and corporations.

The fact that this business operates in the global market under such fiercely competitive conditions has led to the emergence of strategic alliances with a clear market orientation. Such alliances that have developed in the cruise industry are very similar to those occurring in the wider trade industry. The Miami-based Carnival Corporation & PLC, an American-British cruise ship operator, is possibly the best example of a successful and complex form of strategic alliance. Two large corporations, Carnival Corporation (USA) and Carnival UK (UK), merged into the single mega-corporation Carnival Corporation & PLC in 1972 (see Fig. 1.9). This strategic alliance started with a horizontal organization and has grown into a complex strategic alliance comprising a range of core and supporting companies, which in 2009 generated a profit of about US$1790bn (Carnival Corporation, 2010).

As we can see from the capital structure of the strategic alliance in Carnival Corporation & PLC cruising, this alliance comprises 11 companies in the core business and further companies in complementary and supporting areas. Although the attempt to enter the air charter market was not successful, this corporation is growing both as a horizontally and vertically complex strategic alliance.

The main goal of the alliance of Carnival Corporation & PLC, as of any alliance, is market domination. This strategic alliance with 96 large cruisers controls 51.6% (2009) of the nautical cruise market. The development strategy of this leading world alliance in nautical cruising is of acquisition combined with a strategy of diversification, an approach that is well known in corporate management.

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**Fig. 1.9.** Complex strategic alliance Carnival Corporation & PLC (status 2009) (source: T. Luković).
In spite of the world crisis, share prices of this alliance have been satisfactorily maintained on the stock market, which in turn maintains the value of each alliance member company. The main task of the members’ management and alliance is to maintain the companies’ market value.

The American nautical cruise market shows a new direction in the form of collaboration and organization into strategic alliances. In particular, NACL (North American Cruise Line) and the port of Canaveral, Florida, exemplify the development of a vertical strategic alliance in nautical cruising (Dowling, 2006). The cooperation and strategic connection of cruise ports has resulted in new forms of vertical connection, and through the acquisition of ports and tourist destinations that have approached the edge of bankruptcy have created successful joint ventures. This form of growth of strategic alliances has gradually been accepted in the European market, particularly the Mediterranean. A good example is the Port of Venice, and soon the Port of Dubrovnik. The ports of Venice and Dubrovnik, positioned high on the world cruise market, are developing a strategic partnership, which is an alliance directed towards a successful joint venture in conjunction with the major cruise companies (http://www.portdubrovnik.hr). The growth of such strategic alliances is demonstrated almost daily in new connecting forms that provide successful business results for the members, and a stable and favourable position for the alliance on the supply market.

The Green Star Award is a widely accepted international certificate for the company offering the highest quality service on large cruisers, awarded in the world famous cruise fair in Miami, USA.

While the nautical tourism industry is growing under the control of a few large companies, the supply of private small-ship cruisers is developing, almost imperceptibly, as a form of entrepreneurship. Fleets of small, private local and regional cruisers of traditional types have developed on all seas and fresh waters of Europe. They are often replicas of small old wooden and metal vessels that have traditionally evolved to suit the particular conditions and climate of the local area. They provide the following services in the cruise business:

- One-day trips and cruising;
- Multi-day tours.

Small ships, used in the so-called ‘small cruising’, are generally of low capacity, up to 30 cabins. Yet in their total capacity they exceed the capacity and engaged capital of large cruisers. According to one assessment, more than 10,000 traditional small cruisers operate on the seas and fresh waters of Europe (Luković, 2009b). Small cruising is important for the local and regional economies of a country. Traditional Mediterranean vessels, from Greece, Italy, Croatia, France and Spain, and those from North European countries differ significantly; they are called traditional or vintage vessels in the language of nautical cruising. The difference stems from the tradition, climate, nautical culture and the sea of each area. These vessels and their growth rescue from oblivion the old crafts and traditional local shipbuilding, culture and identity of each area. The construction of such old vessels and their replicas is different in different parts of the Mediterranean, and also essentially different when compared to equivalent groups of vintage vessels from the Baltic and the European Atlantic (Luković, 2009b). However, the purpose is the same: to satisfy the tourist market demand for cruising in a very attractive environment plus a special supply of services. One-day or multi-day cruising on traditional vessels differs significantly compared to cruising on large or small luxurious cruisers.

The tourism supply provided by small traditional cruisers depends on the appeal of the destination, and satisfies the demand of tourists who choose to travel in small groups. Small cruising growth is generally poorly organized, in the sense that there is no overall development strategy and no organization such as is present with the large cruising companies. Their associations are few, of a regional character, rather like guilds of small ship owners. This is why this small but important sub-industry of cruising is so little known. The developmental potential of small cruisers as a kind of entrepreneurship is high, which is a reason to research it.
Apart from using old vessels and their replicas (see Fig. 1.10) small and medium family businesses supplement their fleets by building small cruisers, thus creating a competitive advantage over the large cruising companies. This fleet offers strong competition to the small, expensive and luxurious cruisers. Some research (Luković, 2009b) proves that these fleets and capacities are significant, but not yet researched enough. Generally, the market of vessels used in cruising is becoming more and more dynamic, and competition is increasing.

An assessment of the capital value of small cruising shows that, in Europe alone, it is worth about €2bn, and in complementary businesses about €5bn. Assessed at the world level, small cruising capital exceeds the capital value of the large cruiser industry.

The concept of supporting and complementary businesses covers the businesses of the nautical tourism industry in the widest sense. For example, Match Racing, which is important for the growth of nautical tourism, has generated specialized TV programmes, which popularize nautical tourism.

### 1.4 The Subjects of Nautical Tourism

Subjects of nautical tourism are an essential factor as there would be no nautical tourism without them. They can be classified by various criteria, including the practical criteria of: (i) passive; and (ii) active subjects (see Table 1.5). Passive subjects are all subjects, tourists and visitors, who are on board the vessel or are in a way connected with the vessel, but have no certificate to operate a yacht, that is, to sail. Unlike passive subjects, active subjects have both a certificate and the knowledge to operate a vessel. Such certificates will specify a level of capacity, and where, for example, the holder of a certificate to operate a small vessel takes the helm of a larger yacht they should be considered as a passive subject since they are not qualified in this context. (The situation is less clear in the UK where no certificate of competence is required to operate a vessel.)

Such a classification of nautical tourism subjects includes those from all three sub-industries of nautical tourism. Active subjects include professionals and non-professionals. Professional skippers can be of either Category A or Category B. Category A skippers can operate yachts of up to 100 GRT, and Category B skippers up to 500 GRT. To handle yachts and cruisers of above 500 GRT requires an ocean-going masters certificate. According to this criterion the crews on a cruiser are treated as passive subjects, because even though they carry out their work professionally, they cannot operate the ship, which is the main criterion for an active subject classification. The term ‘professional operation of a vessel’ does not imply operating the vessel to make money; in fact it is often the case that yacht owners are qualified to operate their yacht but sail only for pleasure rather than for money. Thus all subjects who have a certificate to operate the vessel they are on are called skippers.
All European countries have more or less standardized criteria for obtaining nautical certificates.

Active subjects, but non-professionals, are called boaters, because they operate the yacht and are responsible for the yacht and people on the yacht. They operate a vessel of smaller dimensions and engine power, and are classified accordingly. Not all European countries have a single certification of boaters. Some countries, e.g. Croatia and Slovenia, classify boaters into three categories (Republic of Croatia, 2005):

- Boat skipper category A;
- Boat skipper category B;
- Boat skipper category C.

Boat skippers of categories A and B can be under age, but must pass an exam to operate a vessel of minor dimensions. Boat skipper of category C must be of age, of good health as required to operate a vessel, and must have a secondary education qualification. A category C certificate is a necessary precondition for any application for a category A.

The boater, as a subject of nautical tourism, can be considered in two contexts: (i) as a consumer; and (ii) as a boat operator. Their role as a boater is reflected in their education and experience in handling a yacht, and as a result in terms of their responsibility for the yacht and its passengers. Furthermore the tourist/crew ratio on a cruiser is about 3:1 and in charters 4 or 5:1, which confirms the importance of professionals in terms of expenditure. A comparison between a boater and a skipper suggests certain differences: the professional skipper is highly qualified in terms of operating a vessel and of knowledge and experience of the sea, offering a high level of security and pleasure for the passengers. A professional skipper carries absolute responsibility for ship and passengers and his decisions override any wishes or opinions of the passengers. A professional skipper has a relationship with the yacht owner or charterer unlike that of the boater, and generally all his expenses are carried by the charterer. His wages are likely to vary according to the size and category of the yacht.

Apart from the aforementioned concepts of active and passive persons on the vessel, it is necessary to differentiate, and explain briefly, the notions of traveller/passenger and crew, or a member of crew on the vessel. Every person aboard the vessel has the status of a passenger, but a passenger on board the yacht should be distinguished from the crew members. According to the prescriptive and legislative definition, a crew member is a person who is subject to the legal regulations which stipulate a minimum of trained crew on the vessel. Larger vessels require a number of qualified seamen, apart from the shipmaster/skipper on the vessel or yacht, who make up a yacht crew.

The notion of a passenger on the yacht signifies tourists and excursionists, that is, persons who are unqualified to operate a vessel, and are on the yacht holidaying and for pleasure. This passive group may include the yacht owner in the case where they are not qualified to operate yachts.

Depending on the way the yacht is used or by the criterion of ownership, boaters can be grouped into three main groups:

- Boaters who sail on their own vessels;
- Boaters who sail on vessels belonging to their clubs, friends, companies and the like; and
- Boaters who sail on rented vessels (charterers).

### Table 1.5. Subjects of nautical tourism (source: T. Luković).

<table>
<thead>
<tr>
<th>Subjects of nautical tourism</th>
<th>Active</th>
<th>Passive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional skippers (Yacht master)</td>
<td>Non-professionals (boaters)</td>
<td>Visitors (passengers on board ship)</td>
</tr>
<tr>
<td>Skipper Cat. A</td>
<td>Boat Skippers Cat. A</td>
<td>Tourists</td>
</tr>
<tr>
<td>Skipper Cat. B</td>
<td>Boat Skippers Cat. B</td>
<td>Excursionists</td>
</tr>
<tr>
<td>Boat Skippers Cat. C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tourism and Nautical Tourism 31
Charterers can also be subdivided according to whether they sail: (i) individually; or (ii) in a flotilla. Flotilla sailing is planned and organized, often practised by sailing schools.

This classification is important for a few practical reasons as it determines a number of questions of role, relationship and responsibility. Interestingly, a number of tourists on boats, perhaps more than a few, spend all the time on the boat in a marina, never to sail out of it. Such tourists are hardly to be considered as boaters, being there just to enjoy the marine environment and perhaps to acquire a few photos to take home. This is one of the reasons why detailed research on nautical tourism subjects and their role on the vessel and their attitude to the destination is necessary, and is one of the goals of this book.

Notes

1 The concept of ‘industry’ needs to be recognized, in terms of strategic vocabulary, as ‘supply industry’, which relates to an economic subject offering a range of products or services with important common characteristics, mainly with generically identical technologies or technological processes (Bahtijarević-Šiber and Sikavica, 2001, p. 167). In case of ‘coastal industry’ common characteristics are subject to the resource, market and local and regional culture.

2 The RYA was founded in November 1875 as the Yacht Racing Association (YRA). Its main aim was to standardize rules that regulate the measurements of regatta sailboats so that boats of different classes could compete against one another. Membership then cost 2 guineas and it was open to former and current regatta sailboats of 10 tons or more.

3 The Italian Fincantieri is the largest shipbuilder and the world leader in the construction of small cruisers; it is followed by the Finnish Aker Finnyards and Kvaerner Masa, the German Meyer Werft and the French Chantiers de l’Atlantique. They produce mega-yachts too, and have built around 90% of existing mega-yachts.

Web Resources

- http://www.100megsfree.com
- http://www.cruise-norway.no
- http://www.dwit.de
- http://www.europeancruisecouncil.com
- http://www.ezadar.hr
- http://www.nmsc.gov.au
- http://www.portdubrovnik.hr
- http://www.superyachtintelligence.com
- http://www.vjesnik.hr
The level of development of nautical tourism in various economies differs significantly so that its role and contribution to the economy will vary. In the European economies there are two main ways in which nautical tourism makes a contribution:

1. As the growth of nautical tourism exceeds the rate of general economic development it has an increasing impact on the general economic growth rate of a country and in such cases nautical tourism effectively stimulates economic development.

2. As the indirect effects of the development of nautical tourism are more significant than the direct effects it contributes to the increased growth of related businesses in an area or region. Nautical tourism stimulates the development of new businesses connected with it horizontally (excursion tourism, underwater photo-safaris, services, etc.) and vertically (small businesses, shipbuilding, etc.). These provide employment for many people in various businesses whose direct or indirect goal is to satisfy the needs of boaters. Very often the number of people employed in these businesses is greater than the number of those directly employed in nautical tourism. This influence and role of nautical tourism is particularly important for undeveloped destinations, or destinations that are slowly dying and their inhabitants leaving their home towns. An example of this is the economy of the islands of some regions, such as Croatia, where nautical tourism can mean the sustainability of local life.

To what degree nautical tourism will influence economic development depends on a large number of factors, such as, for example, climatic conditions, general economic development of the country, orientation towards the emissive or receptive role in European tourist migration, type of sub-industry preferred at a destination, economic and political environments and others. In that respect, it is necessary to examine the positioning of nautical tourism in the economies of Europe, as well as other development characteristics contributing to general economic development.

Tourism, as an industry, is these days more or less important for every economy and particularly so for the economies of European countries. In the economies or markets where tourism has a dominantly receptive role, tourism generally accounts for over 4% of GDP, while in markets where its role is emissive it may account for something less than 4% of GDP. Nevertheless, it should be...
noted that tourism, more than other industries, has, besides direct effects, additional very pronounced indirect effects. It is estimated that indirect effects are substantially stronger than the direct ones and they manifest as a driving force behind the development of other complementary and supplementary activities. Hence its development is also supported by markedly emitting markets and economies in the form of demand.

Observed from the market aspect, particularly of emitting and receiving tourism markets, both similarities and differences between them are observable. While the countries with the characteristics of receptive nautical tourism market have similar legislative systems, the countries with emitting market characteristics deal somewhat differently with that problem. There is no doubt that one of the strongest emitting tourism markets in Europe is Germany, but in terms of absolute size and potential, it appears to be receptive. To explain the specific qualities and differences in legislative regulation and definition of nautical tourism, we will explain, for the sake of comparison, the example of Germany. In the North Sea (die Nordsee) Germany has a substantial number of marinas with a very developed tourist supply. However, because of the attractiveness of the Mediterranean and the relatively cold climate of the North Sea the area is not highly conducive to the development of intensive tourism and consequently Germany has become a large emitting tourism market for nautical tourism in Europe. Although nautical tourism is not regulated by a special law it is continually being developed on rivers, lakes, canals and in the conditions of the cold climate of the North Sea and within the established German legal system. It is important to note that each canton has by-laws for its water area, which regulate procedures in the region, including nautical tourism.

Any issues relating to the categorization of marinas and other nautical tourism subjects are left to the various specialist associations and institutes specifically qualified and equipped for the procedure of categorization, and for other activities that support development and maintain quality.

Such regulation of nautical tourism is present in most developed European countries, while for countries in transition and their economies everything is regulated by the central administration. As was shown in the two examples in Chapter 1 of Wales and Germany, there is clearly the potential to devise, analyse and implement different approaches to the development strategy of nautical tourism based on the concept of resource. This means that the resource represents a fundamental factor in all development activities, particularly nautical tourism. Observed from the aspect of two

1. The basic law governing all economic activity (BGB – Bürgerliches Gesetzbuch). The BGB Act regulates all business and capital relations and ownership issues. Tourism and tourist activity is referred to in Article 651 a–m and, since cruising in the North Sea is particularly developed, it is specifically referred to.

2. International legal practice in developed countries and international conventions, which are intensively applied in the executive legislation. The United Nations Ecology Programme (UNEP), a special international convention with legal force, regulates tourism from the aspect of ecology, procedures affecting nature and ecological conditions in marinas. This international convention, with the force of executive law in Germany, regulates issues relating to marinas and nautical tourism ports.

3. The Maritime Code (Seeaufgaben gesetz – SeeAufG adopted in 2002), which is the law that regulates safety of navigation, procedures in ports and the maritime aspect of nautical tourism both on the sea and on fresh water.
models or development concepts, i.e. *models based on resources and models based on activity*, it can be concluded that there are substantial differences. However, these differences give us no reason for assessing on a ‘better-worse’ principle, but simply represent two different concepts that may be found in the future to show the level of their efficiency. Likewise, these two models or development concepts are interlinked and complementary. Hence, when evaluating the development strategy of an economy, or some selected aspect of it, some care is needed, because if some countries (Italy, France and some others) lack an official document entitled ‘Strategy of economic development of nautical tourism’, it does not mean that they do not have a well-defined development strategy. Development strategies of market-oriented economies differ in the approach of their formation and implementation from the strategies of economies in transition. In that connection the basic resources on which development is based are treated integrally, which is at the same time a fundamental prerequisite of any successful strategy.

### 2.1 The Classification of the Nautical Tourism Market

There are various classifications of the tourism market generally and the nautical tourism market specifically. All classifications have their particular valid goal and purpose. It is necessary here to offer a classification of the markets of nautical tourism for the purpose of market-oriented research. The research into world cruising that Prof. Ross Dowling PhD has been conducting for many years now, classifies the world cruise market into three main categories (Dowling, 2006):

1. **North/Central America**
   - The Caribbean/the Bahamas
   - The Mexican Riviera/Panama
   - Alaska
   - North-East Atlantic

2. **Europe**
   - The Mediterranean
   - North-west Europe/Transatlantic

3. **Rest of World**
   - South-east Asia and Far East
   - South Pacific and Hawaii
   - Other sub-markets

This cruise market classification seems appropriate for the nautical tourism research in this work. In his research, Dowling analyses the European cruise market and classifies it into two major sub-markets, Mediterranean and North-West Europe/Transatlantic. Dowling’s research deals with large cruisers, and while this classification may be less applicable to wider nautical tourism research it may nevertheless serve as a reference. For the purposes of research into the European nautical tourism market it is necessary to classify the nautical tourism market in a comprehensive way, which can be done as follows:

1. The Mediterranean (European part).
2. West Europe/Atlantic (below the Arctic Circle).
3. The Baltic and the countries around the Arctic Circle.
5. The Black Sea.

This division of the European market has a very strong market basis and justification, on which the classification of European nautical tourism market may rest. In this way the main features of European nautical tourism markets are emphasized in a way that will be confirmed by the results of the research.

At the outset of the research we should mention that the European Union (EU), as a union of European countries and economies, has no specific system of classification of nautical tourism, such as is offered here. Moreover, nautical tourism is growing relatively independently, which means that statistics on nautical tourism have not been compiled at the level of the EU. In addition, Europe ranges from the developed West to the transitional economies of its East. The developed West European countries have at least one set of statistics on nautical tourism, available to users. Transitional countries, with few exceptions, have very little available. This is why,
unfortunately, data are lacking on the fifth European market of the East European and Black Sea markets. This remains open as a challenge for future research.

2.2 Sustainable Development and the Legislative Framework

National systems of economic development are based on small- and medium-scale entrepreneurship, at least in terms of employment and their main bases of their existence.1 Such a concept supports the development of local and regional self-government in all economies worldwide. This does not mean a ‘withering away of the state’, as some theoreticians have assumed (Henfner, 1831), but a reassessment of the role of subjects in the context of the market development concept. The main idea is expressed in the premise: ‘who knows better than the inhabitants of a locality what are their locality’s needs?’ The development of local self-government, the basic political and economic unit of macroeconomics, is a special issue that is well known in the developed European countries, while the transition countries are in the process of developing and adopting it, along with the growing concept of sustainable development and development management.

The main postulate of sustainable development is to harmonize all interests and combine them in a unit that will become a model of the sustainable development of a locality. It is certain that the model needs to be constantly upgraded and adapted to changes in the surroundings. Three main aspects of sustainable development need to be satisfied:

- Ecological;
- Economic;
- Social.

Recent research has developed a model of three levels of sustainability (see Fig. 2.1) based on the relations between its elements (Cavagnaro and Curiel, 2012).

The central insight of the Three Levels of Sustainability framework developed by

![Figure 2.1. Three levels of sustainability (TLS) framework (source: Cavagnaro and Curiel, 2012, p. 2).](image)
Cavagnaro and Curiel is that sustainability plays at three interrelated levels: the level of society, the level of organizations and the level of individuals. The individual level, harbouring the ability to think and act from a ‘care for all’ perspective, constitutes the starting point of sustainability. Sustainability is reached when at all levels value is created on the economic, environmental and social dimension alike.

Our discussion of sustainable development is indebted to Professor Tim Jackson of the University of Surrey, director of Research Group on Lifestyles, Values and Environment (RESOLVE) and author of the book *Prosperity Without Growth: Economics for a Finite Planet*. He raises many of the issues we currently face in modelling the sustainable development of nautical tourism destinations.

There are a number of definitions of sustainable development, but all are based on respecting the ecological and ethical aspects, or briefly: ‘Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs’ (Brundtland Commission, 1987).

The question to be answered is: What is the role of nautical tourism in the context of sustainable development?

Nautical tourism, on the seas, rivers and lakes of Europe and the rest of the world, has an impact on development through two main models. In the first model, the marina and cruising businesses do not have a dominant role, but are nevertheless potential subjects of sustainable development. In the second, the marina and cruising businesses are seen as having a dominant role as the leaders of the locality’s development. Since the supply in the destination is a crucial motivating factor attracting tourists and boaters to come and spend money, both marinas and cruising need to be considered in the context of the ecological aspect of sustainable development.

The ethical aspect of sustainable development, in its social and economic segment, aims to meet the interests of all subjects and to maintain a healthy atmosphere of life in a locality. Many subjects and the inhabitants of the destination are involved in and affected by tourism. To achieve a degree of effective self-government it is necessary to consider the nature of local government structure and mode of destination management.

It is necessary for the needs of local inhabitants to be articulated through some system of citizens’ representation in local authority. Other industries included in the local or regional economy must also be involved, though if a marina or cruising are dominant factors in the locality then they should have a leading role. Such a case frequently occurs in many tourist locations and needs to be analysed.

As can be seen in the model (Fig. 2.2), the focus of attention is a marina that stimulates the development of the entire local economy, but is also becoming a competent subject and a leader of local development. Thus nautical tourism emerges as a local leader and competent subject of a sustainable development model at the local and regional level. In practice this role may be taken by either a marina or the cruising industry.

The question, then, is whether this model can be applied in all national economies in which marinas or cruising have a leading role and on what will it depend?

When analysing the problem of sustainable development and the role of nautical tourism within it, it can be seen that the suggested model is in outline the same in transition economies and in their developed counterparts, but their precise functioning is not. The answer to the question of how the difference is manifested is principally in the legislative framework between transition and developed economies.

*Legislative framework in transition economies*

The legislative framework in transition economies is in this context an explicitly functioning system. The development of each industry is based on documents entitled ‘National development strategy’ adopted for the period of 10 years. The national development system is modelled in conformity with these documents, while the government has the authority to manage the system. However, in practice this does not usually function. Such a model of macro-economic development
managed ‘from above’ often lacks a genuinely competent executive authority, and is frequently open to potential for corruption.

Nautical tourism in transition countries functions on the basis of a complex legislative framework. It is based on two main national acts:

- Act on Provision of Tourism Services (Republic of Croatia, 2008b);

In addition, there are other laws that relate to particular issues relevant to nautical tourism subjects, for instance, the Act on Concession (Republic of Croatia, 2008a).

As in other countries, laws in transition countries are adopted by parliament.

Further, nautical tourism is, at the operating level, supported by numerous bylaws (directives, orders, provisions and regulations) adopted by the competent ministries. Three important regulations should be mentioned:

- Regulations on the classification and categorization of nautical tourism ports, which specify requirements for categorization and minimum technical requirements (Republic of Croatia, 2008d);
- Regulations on types and categories of nautical tourism vessels, which regulate nautical tourism vessels, specifying requirements for the categorization of vessels used for commercial purposes;
- Regulations on boats and yachts (Republic of Croatia, 2008d) that define and regulate nautical tourism subjects, stipulating requirements for navigation qualifications.

Besides these three most important regulations, the government has adopted several dozen bylaws relating to nautical tourism. As will be apparent, everything is required to function under government control and local self-government participates very little, or not at all. Marinas and ports may only have

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**Fig. 2.2.** Global model of sustainable development in which the marina has the role of a local leader. SME, small-and medium-size entrepreneurship (source: T. Luković).
their own regulations on procedures under their immediate control.

**Legislative framework in developed economies**

The legislative frameworks of developed economies greatly differ from those of transition economies. This can be well illustrated by the case study of Germany, as outlined above.

In view of the distinctive differences between strategic development models of transition countries and developed economies, a regional and local concept of development remains as the focus of interest and of further research. To conclude, these are two different strategies, one of which is based on the market and resources and the other on government regulation of activities, which can be referred to as the strategy of resources and the strategy of activities.

### 2.2.1 Resource development strategy

The market-oriented developed countries of Europe essentially leave development strategy to the market, particularly in terms of the approach and organization of development and its regulation. Development is based on the market, and thereby on the potential of the destination in the first place, where the role of the authorities is to support rather than control planned development. Thus the investor and the authorities cooperate and develop a model of sustainable partnership based on some resolution of occasional conflicting interests. In the interests of better market adjustment, local and regional authorities have more competence and authority than the central authorities of transition countries and economies that have emerged from the former socialist countries of Europe. Therefore it is no overstatement to say that, in terms of their economic development process, subjects in the developed economies of Europe are culturally more mature and developed. Models of sustainable development and destination management are a part of their culture, while the subjects in transition economies are only now beginning to recognize the same model and face the difficulties of its implementation. In this connection destination management in the transition economies, together with the local authorities, emerges as a highly relevant development requirement in view of the needs of the population and the conditions without which sustainable development is not possible. Under the conditions of progressive development of tourism in Europe, especially nautical tourism, the destination as a resource becomes a basic factor of development. In that connection, demand determines their requirements, and the relevant research clearly indicates the characteristics of the demand to which the supply must adjust. Hence research into the sub-industries of nautical tourism should be supported, though in Europe such research is still relatively rare and without sufficient support. Understanding the specific demand requirements, it is possible to work on development of the supply, with a consequent emphasis on the development of destination management. Destination management, in terms of organization, especially in the transition countries, is of particular importance as it:

- Reduces the negative influence of state authority that is still reluctant to surrender a significant portion of its power;
- With increased authority, it can become an associated subject of the local authorities, thus contributing to their effectiveness;
- Becomes an essential factor in building a successful model of sustainable development at local and regional levels;
- Substantially impacts on the education of responsible subjects and raises the level of their awareness and competence;
- Contributes to a greater rationality of strategic decisions related to the destination.

The context of the development of nautical tourism and its sub-industries’ destination management, particularly of exceptionally attractive destinations such as Dubrovnik, Venice, Athens and others, points to the need for new models of effective partnership management. As a consequence of the good results achieved in the marina or cruise industries the more attractive destinations have reached a saturation point. As a result the tourist, in spite of being the
basic subject of the market and the primary focus of the whole supply process, actually appears to decline in importance. Research has shown that tourists tend to become increasingly dissatisfied in their experience of the destination and their sense of getting ‘value for money’ (Luković and Božić, 2011a, b). After a saturation point is reached any further development becomes an issue, as excessive numbers of increasingly dissatisfied tourists make some effective response imperative. Professional and scientific research may give an answer to this problem, but without it there is unlikely to be any effective solution.

To effectively manage a destination it is necessary to identify and evaluate its capacity. In this connection the question of a ‘new market’ concept may be raised, and is of special importance for the development of the nautical tourism industry. Whether there are still new markets and how they are to be understood and appropriately and efficiently managed are questions that require some clear and far-sighted answers.

From a market perspective, the nautical tourism market can be considered in terms of the degree of its familiarity or novelty for the destination, and it can be divided as follows:

1. A market that is new to economic subjects and boaters; currently this is a somewhat theoretical possibility, although there are some parts of Europe where tourism is still underdeveloped and which may have potential as a new market.

2. A market that is new for boaters, though being known to boating and nautical corporations but lacking conditions for entry into the supply market. These would be conditionally new markets (e.g. national parks, military areas in Italy and Croatia, which could be converted to marinas, though until recently were forbidden to enter, especially political destinations such as Brijuni in Croatia).

3. A market that is known to boaters, but where there are no conditions for nautical corporations to enter and develop. Also to be considered as conditionally a new market (e.g. bays with no infrastructure, such as a greater part of the Greek coast where marine industries have not yet been developed).

4. A market that is developing and expanding its properties, and becoming part of the market supply of the nautical tourism industry – what might be termed an ‘old-new’ market (convenient lakes of Italy, Austria and Germany, as well as some tourism markets in the Mediterranean, for example, Kaštela and Skradin in Croatia).

Consequently, in terms of destination novelty, there are conditionally new markets for boaters and tourists that have potential for future development and operation.

With regard to the market or destination that they are specifically oriented towards, some nautical tourism industries make their particular impact on the development of a site or region. This fact is present in all European markets, but with noticeable differences in the form and intensity of their impact.

A destination is undoubtedly a basic resource that requires rational and sustainable management.

### 2.2.2 Development strategy in terms of activities

A nautical tourism development strategy, of the type being developed and applied in Croatia, is also being followed by many of the transitional economies. The developed countries of Europe, on the other hand, do not use explicit strategic development programmes at a national level and such policy documents generally do not exist except at a regional level in some developed countries of Western Europe, for example the Spanish and English coastal regions.

In the transitional countries where the focus is on such established systems of strategic economic development for a larger or smaller locality, there are some signs of activity. Nautical tourism development strategies, in terms of locality, come ‘from above’ (i.e. from the state), and consequently shine a selective spotlight on nautical tourism. The same thing also happens with other activities or particular types of tourism. Each strategy
processes and promotes only its own activity. The question of their mutual coordination thus tends to fail at that level. Issues of coordination move down to the local and regional level and thus require the formation of functional models of sustainable development either at that local level, or through the intervention of some system of orchestrated competent subjects; it is just this link that is generally missing in practice. It is here that a global model of strategic management of sustainable development could be implemented at a local level, something that in effect would be similar to that illustrated in Fig. 2.2.

**Note**

1 The SME sector generally employs around 60–65% of the population in most European national economies.
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Part 2

The Markets of Nautical Tourism in Europe

A market-oriented economy, and consequently market-oriented research, has only one basic approach. The market must be managed and researched in such a way as to meet the demand, to forecast future demand and to develop new demand. In the details, however, there are as many ways to manage a market-oriented economy as there are economies and industries, and the same applies equally to tourist destinations. In that respect a destination represents a basic element, the potential of which is used and capitalized on in anticipation of an extended period of development, and it is necessary to respect environmental and ethical aspects of sustainable economic development and to integrate them into a coherent system.

Thus any investigation must respect basic market characteristics and differences in order to identify individual sub-markets that become the object of research. Thinking in this way it is necessary, in the research of nautical tourism in Europe, to identify and investigate five basic European markets of nautical tourism. It is necessary at the start to emphasize that such research faces a number of very significant problems. Apart from the large cruising industry, which has an international business character, all other industries lack any systematized statistics either at a European or national level. This research will therefore have occasion to resort to many other alternative data sources and to the results of previous research.

For example, it should be noted that, at the European level, there is as yet no unique classification or categorization of marinas. Thanks to the active work of the German ADAC some data on marina research are available. The investigation was conducted solely for the benefit of its members and marinas in Europe were categorized only according to its own criteria. These criteria are subject to the interests of members and ADAC, that is to the particular needs of German tourists and their vehicles. Researching according to this criterion, ADAC made public the results for more than 1600 marinas and offered them to its members with contents and service quality description (Marinaführer, Deutschland, Europa; see ADAC, 2010). Considering that for ADAC’s research, a German tourist with a car was taken as the basic user for the purpose of categorizing marinas, the results are somewhat specific but may nevertheless serve a useful purpose. The methodological consistency of ADAC’s data on most of the quality marinas in Europe ensures recognition of ADAC’s results and their inclusion in this research. ADAC’s results will be further supplemented with other available sources and with additional explanations. It should be noted that according to the source http://www.portbooker.com, Europe has 4,389 saltwater marinas located in 22 countries (see figure following). It is necessary to emphasize once again that for some countries, particularly the countries of
the fifth European market, i.e. Eastern Europe and the Black Sea basin countries, there are no data on nautical tourism available.

The list of marinas in the table below includes all sea marinas, both commercial and sports marinas, with a note that no data are available for some countries. Such grouping together of all marinas makes some sense, but only partially. In particular in some countries, Croatia for example, sports marinas provide berths only to vessels owned by club members while other vessels are not welcome. The possibility of commercial berthing of vessels in transit is very small and the skipper should not count on it. At the same time, Spanish marinas and many marinas in other countries pursue a policy of commercial berths being available to yachts in transit. For the purposes of this research, it is thus better to focus on the commercial marina so that the results should have relevant market value.

While for the requirements of the marina industry this research can be met by the results of ADAC’s data, any investigation both of the small cruiser (so-called ‘small cruising’) and the charter industries may be forced to fall back on somewhat approximate data. Considering the importance of the sub-industries of the nautical tourism industry in the economies of the European countries, it remains to be hoped that this problem will be solved in the near future at the level of the European Community, and will thus contribute to the process of building a unique European Union market.

Although research focused on the nautical tourism industry is relatively rare, many publications and associations involved in the development of the nautical tourism industry are of a commendably high standard. For example, the International Marine Certification Institute (IMCI), in Brussels, has developed a system of categorization for sports marinas, rating them with stars, from one to five (http://www.imcl.org). This project involves two umbrella organizations that support marine industry development: the ‘International Council of Marine Industry Associations’ (ICOMIA) and the ‘National Marine Manufacturers Association’ (NMMA). One of the conditional criteria for classifying marinas is non-profitability, which indicates that only one segment of the market is in question. Notwithstanding this fact, every source of support for marine industry development is to be welcomed.

The cruise industry or large cruising, which includes approximately 300 large cruise ships, is continuously and comprehensively being developed on the European market, in conjunction with large cruising that operates on the world’s market throughout the year. In this way, the large cruising business has successfully eliminated the adverse seasonal impact. The operation of large cruising business activities on the seas and rivers is of an international type, and any attempt at consideration within purely national borders is almost impossible.

### Marinas in European states (2009 statistics) (source: http://www.portbooker.com)

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of marinas</th>
<th>Country</th>
<th>Number of marinas</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Lithuania</td>
<td>5</td>
<td>12 Sweden</td>
<td>141</td>
</tr>
<tr>
<td>2 Malta</td>
<td>10</td>
<td>13 Finland</td>
<td>155</td>
</tr>
<tr>
<td>3 Latvia</td>
<td>29</td>
<td>14 Croatia</td>
<td>161</td>
</tr>
<tr>
<td>4 Belgium</td>
<td>31</td>
<td>15 Germany</td>
<td>259</td>
</tr>
<tr>
<td>5 Poland</td>
<td>35</td>
<td>16 UK</td>
<td>301</td>
</tr>
<tr>
<td>6 Ireland</td>
<td>55</td>
<td>17 Italy</td>
<td>395</td>
</tr>
<tr>
<td>7 Portugal</td>
<td>61</td>
<td>18 France</td>
<td>406</td>
</tr>
<tr>
<td>8 The Netherland</td>
<td>85</td>
<td>19 Greece</td>
<td>428</td>
</tr>
<tr>
<td>9 Estonia</td>
<td>91</td>
<td>20 Spain</td>
<td>556</td>
</tr>
<tr>
<td>10 Turkey</td>
<td>111</td>
<td>21 Norway</td>
<td>963</td>
</tr>
<tr>
<td>11 Denmark</td>
<td>114</td>
<td>TOTAL</td>
<td>4389</td>
</tr>
</tbody>
</table>
Unlike large cruising, small cruising in the European market is being developed as a form of small business, i.e. as local and regional excursion cruising. Operationally it is divided into one-day or multi-days cruising. Its development is occurring not only at sea but also in the freshwaters of all European countries.

The fact that the European market is large and varied and that cruising ports may be quite differently constructed and organized require that this segment of cruising should be given careful attention in this research.

The use of the term ‘industry’ is in the context of its interpretation from the point of view of strategic management, and in this research we differentiate, in narrower terms, three basic sub-industries (marina, charter and cruising) and, in wider terms, the companies that are more or less associated with the whole range of nautical tourism and its basic industries.
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The nautical tourism market of the European Mediterranean is very significant both in the context of Europe and of the world. Extending along 45,000 km of the Mediterranean coast, all the nautical tourism sub-industries are highly developed and are an important factor in European tourism.

The Mediterranean area includes countries that are very different in their development level and economic and political heritage, but nevertheless similar in cultural aspect and living style. The Mediterranean is unique, and its historical heritage and climate created a similar lifestyle in all its localities. The differences, which should be respected, relate to the level of economic development and economic and political history, in terms of differences between transition economies and the developed European and Mediterranean economies.

### 3.1 Geo-hydrographic Features of the Mediterranean

The Mediterranean Sea is a semi-enclosed oligotrophic sea linked to the Atlantic Ocean, and known as a blue, oxygen-rich area but poor in nutrients. Oligotrophy increases from west to east. It is connected with the Atlantic through the narrow (13 km) and shallow Gibraltar Strait (320 m maximum depth). The Mediterranean is an intercontinental sea that stretches from the Atlantic Ocean on the west to Asia on the east and separates Europe from Africa. It has often been called the cradle of Western civilization. This ancient ‘sea between the lands’ occupies a deep, elongated and almost landlocked irregular depression lying between latitudes 30° and 46°N and longitudes 5°50’W and 36°E. Its west-east extent, from the Strait of Gibraltar between Spain and Morocco to the shores of the Gulf of Iskenderun on the south-western coast of Turkey, is approximately 4000 km, and its average north-south extent, between Croatia’s southernmost shores and Libya, is about 800 km. The Mediterranean Sea, including the Sea of Marmara, occupies an area of approximately 2,510,000 km².

To the north-east the Mediterranean is connected with the Black Sea through the Dardanelles with a sill depth of 70 m, the Sea of Marmara and the strait of the Bosphorus (sill depth of about 90 m). To the south-east it is connected with the Red Sea by the Suez Canal.
A submarine ridge between the Italian peninsula and the African coast, which has a sill depth below 400 m, divides the Mediterranean into its western and eastern parts. The western part consists of the Alboran Sea, the Algerian Basin and the Tyrrhenian Basin, which lies between Italy and the islands of Sardinia and Corsica.

The eastern Mediterranean is subdivided into two major basins, the Ionian Basin, in the area known as the Ionian Sea, and the Levantine Basin to the south of Turkey. This part includes the Aegean Sea with the numerous islands of the Greek archipelago. The Adriatic Sea, north-west of the main body of the eastern Mediterranean, is interesting because of the cold water that influences the whole Mediterranean Sea, especially the eastern part.

### 3.1.1 Ecological characteristics

The Mediterranean fauna and flora have evolved over millions of years into a unique mixture of temperate and subtropical elements, with a large proportion (28%) of endemic species. The present-day variety of climatic and hydrological situations and Mediterranean-specific biotopes accounts for the great species variety, with few equals in the world, a result partly of the geological history of the area. A total of 10,000 to 12,000 marine species have been recorded (with 8500 species of macroscopic fauna and more than 1300 plant species). This rich biodiversity represents 8–9% of the total number of species in the world’s seas and new species are still being recorded, especially in unexplored water layers or areas.

Nutrient concentrations decrease from west to east resulting in variations in the structure of the pelagic food. The main exception to the overall oligotrophic nature of the eastern Mediterranean is the highly eutrophic system of the north Adriatic Sea caused by municipal sewage and discharges of nutrients by the northern rivers.

Eutrophication and pollution in the Mediterranean arises from agriculture, industrial activity, tourism and population growth. Being generally an intensively populated area the human factor is the most significant influence on the natural environment. Some of the exotic species but especially sea-bottom plants (like the *Taxifolia* species) arrived only during the last decades through the ballast water of ships, causing an invasion on local species. On the other hand fisheries and exploitation of living resources also influence local conditions, so it seems that areas of the heaviest commercial fishing are poorer in resources than decades ago. The intentions of the European Union (EU) are the protection of endangered species and habitats, and the more efficient use of natural resources; local economies can be helped by fostering innovation and enterprise. The centre piece of this endeavour is Natura 2000, a network of 26,000 protected natural areas covering almost 20% of the region’s land mass. These are not nature reserves, but rather sites where sustainable human activities can take place without threatening rare and vulnerable species and habitats. The idea is to solve the crisis through the better use of limited natural resources, for which fundamental changes are needed to the EU economy. The EU helps by providing public education, research and public funding. The Marine Directive was adopted on 17 June 2008 after several years of preparation and extensive consultation with all the relevant parties and the public. The Commission also produced in 2010 a set of detailed criteria and indicators to help Member States implement the Marine Directive. The Marine Directive mainly establishes a monitoring programme for the ongoing assessment and the regular update of targets by each state, the initial assessment of the current environmental status of national marine waters and the environmental impact and socio-economic analysis of human activities, the determination of what is required for a good environmental status for national marine waters, and the development of a programme of measures designed to achieve or maintain good environmental status. It is important to keep in mind that complete exchange of water in the Mediterranean takes about 70 years.
3.1.2 Critical habitats

Critical habitats in the Mediterranean Sea include *Posidonia* (neptune grass) beds and estuaries, open sea and tidal areas, coastal lagoons, large shallow inlets, bays and reefs, sandbanks that are slightly covered by sea water all the time and mudflats and sandflats not covered by sea water at low tide.

For example, a comparison of the structure of a *Posidonia* bed in a non-trawled area with that of a heavily fished one shows profound changes in the latter, where the surface area occupied by dead shoots was much higher than in the undisturbed sea-grass. The mechanical impact of trawling gear on *Posidonia* fields was higher in the most degraded areas, causing a continuous furrow on the bed because of the loss of complexity and consistency of the bottom. The state of conservation of the sea-grass therefore in turn depends on the relative effect of the trawl gear.

Many of the studies of sea-grass beds found a direct relationship between the health of the sea-grass ecosystem and the level of effective protection. Most of them also point to its important ecological function and its vulnerability to physical damage and the fish stock decrease associated with human exploitation. Sea-grasses must therefore be protected from bottom trawling and other destructive practices, and fishing pressure should be reduced as much as possible. Current regulations banning trawling on *Posidonia* beds in most Mediterranean coastal areas need to be enforced and greater areas of sea-grasses included in marine protected areas that are totally closed to fishing. Campaigns to build awareness together with effective monitoring and surveillance are other useful tools. Additional technical measures such as the deployment of artificial reefs (if justified) could offer further protection. The majority of Mediterranean commercial fish stocks are over-exploited (Farrugio et al., 1993; FAO General Fisheries Commission for the Mediterranean, 2006). Overexploitation causes a change in the structure of the populations, with small size dominance and loss of biomass. Atlantic blue-fin tuna, *Thunnus thynnus*, has been exploited in the Mediterranean for thousands of years during its spawning migration into this enclosed sea, though only in more recent decades have these stocks become heavily overfished. Several species of shrimp, mullet and sardine have been declared fully exploited locally (FAO General Fisheries Commission for the Mediterranean, 2006). Illegal and destructive harvesting has caused serious declines in characteristic Mediterranean species such as the red coral and some mussels. Furthermore, the negative effects of fishing are not limited to targeted species, but affect the whole food chain. Different kind of drift-nets can destroy whole population of sharks, turtles etc.

3.1.3 Biodiversity

The Mediterranean is characterized by a high level of biodiversity that is concentrated mainly between 0 and 50 m depth. Only 9% of the total number of species live below 1000 m depth. The continental shelf, which is the area where most of the fisheries are carried out, is less than 1,000,000 km² in surface. Depth is up to 200 m with an average width of about 9 nautical miles.

More than 500 species entered the Mediterranean between the opening of the Suez Canal in 1876 and 1978 (Por, 1978). In addition to the species that have entered from the south through the Suez Canal (known as Lessepsian migrants), others have been passively transported by ships (fouling on ship hulls or in ballast tanks). Yet others have been imported for aquaculture and some have become successfully established for unknown reasons.

The International Commission for the Scientific Exploration of the Mediterranean (CIESM) has recognized the need to compile all available information and has assigned a group of specialists to prepare the publication of an updated digital atlas for exotic species belonging to the groups of fish and shellfish (crustaceans and molluscs). According to updated information, the number of alien fish species has increased from 35 to 84, and that of molluscs from 60 to 125.
Some imported species have established dense natural populations of commercial interest. However, the impact of such intruders on the natural environment is usually negative, affecting activities such as fishing, aquaculture, shipping, public health and tourism as well as the equilibrium of the ecosystem. Some intruders have even had catastrophic effects.

### 3.1.4 Bio-geographic importance

The Tyrrenian Basin of the western Mediterranean has two exits into the eastern Mediterranean: the Strait of Sicily and the Strait of Messina. They have been important seaways throughout the history of the Mediterranean. The submarine relief of the Sicilian channel is complicated with groups of islands such as Malta, Gozo and Comino, all of which are formed of limestone and stand on a submarine shelf that extends southward from Sicily.

The widest continental shelf is off Spain at the Ebro River delta, where it extends about 95 km, and west of Marseille, France, where it widens at the Rhône River delta to 65 km. The shelf is narrow along the French Riviera. The narrow shelves continue off the Italian peninsula, generally with lower, more-gradual slopes. Along the coast at the base of the Atlas Mountains of North Africa, a narrow shelf stretches from the Strait of Gibraltar to the Gulf of Tunis.

The coastlines of the western Mediterranean, just as those of the eastern basin, have been subjected in recent geological times to the uneven action of deposition and erosion. This action, together with the movements of the sea and the emergence and submergence of the land, has resulted in a rich variety coastal types.

The Italian Adriatic coast is typical of an emerged coast. The granite coast of northeastern Sardinia and the Dalmatian karstic coast, where the eroded land surface has sunk, consist of elongated islands parallel to the coast. The deltas of the Rhône, Po, Ebro and Nile rivers are good examples of coasts resulting from silt deposition.

The Sicilian straits scarcely exceed 460 m in depth, so that there is essentially a shelf from Tunisia to Sicily separating the Mediterranean into two parts. Narrow shelves continue along most of the northern shore of the Mediterranean. An exception is the broad shelf extending for 485 km along the northern part of the Adriatic Sea. Relatively deep water is found along much of the coasts of Croatia, Bosnia and Herzegovina and Montenegro and along the southern Italian coast, in contrast to the gentle slopes of the Po River.

The northern shores of the eastern Mediterranean are highly complex with many islands. They have variable fold mountains that offered favourable sites for the development of Mediterranean civilizations. The north coast of Africa bordering the eastern Mediterranean is low-lying and of monotonous uniformity except for the Cyrenaica highlands in Libya, which lie to the east of the Gulf of Sidra. The largest islands of the eastern Mediterranean are Crete and Cyprus, both of which are mountainous.

### 3.1.5 Social and economic value, scientific and cultural significance

The Mediterranean Sea and region has undergone many environmental and cultural changes as a result of extensive human activity sustained over thousands of years, including human development, settlement, commerce and resource exploitation. There are 601 cities with a population of more than 10,000 inhabitants along the Mediterranean coasts (European Environment Agency, 2006). The resident population of the coastal regions is 143 million, with this figure doubling during the summer months. As a consequence, the associated human impact has altered the original Mediterranean landscapes and local cultural traditions. Pollution is one of the greatest problems in this semi-enclosed sea.

### 3.1.6 Fishing

Information on catches is usually provided by the fishery authorities and statistics of
the different countries, mainly by the registration of the landings, from fish auctions or from other trading sources. However, because much fish is sold directly for local consumption and there are inadequate statistical sources, the landings for most fisheries are largely underestimated. Consequently the totals are definitely substantially more than statistics on landings would suggest. On the basis of official statistics concerning most of the commercial transactions regarding fish products from fisheries in the various countries, the annual overall landings for the Mediterranean would be estimated at around 1.1 Mt. It would also appear that 59.5% of this catch is produced by EU countries (Spain, France and Italy) and more than 70% from countries of the Western and Central Basins of the Mediterranean Sea. With more than 100 species, demersal (bottom-feeding) fish represent 40–45% of the whole catch; pelagic fishes make up about 45% of the total but with a much smaller number of species (European pilchard, anchovy, blue-fin tuna, albacore, swordfish). A general focus of fishing on the high value species has been observed. Some species have sustained constant increases so far (for instance, landings of hake, swordfish, deep-water shrimp, tuna); a few others have already shown a significant decline, such as most of the elasmobranchs, red coral, sponges and crawfish.

The most targeted species already show very obvious signs of over-intensive exploitation. The trends in capture rates per unit of effort from measurements and biological indicators lead to the conclusion that most commercial fish stocks would have to be considered as fully or over-exploited.

3.1.7 Aquaculture

An increasing source of protein for many countries is aquaculture. Mediterranean aquaculture represents about 3% of total world production, of which more than 60% is concerned with mollusc farming. Although there are some indications of aquaculture in ancient Greek and Rome, modern aquaculture started only about 25 years ago. Applied technology has grown rapidly as the result of new farming concepts. A wide range of farmed species has resulted from the development of a variety of production technologies – from extensive mollusc or fish production to highly intensive net-cage fish farming. In the Mediterranean aquaculture production is dominated by six countries: Egypt, Spain, France, Italy, Greece and Turkey, which jointly supply 96% of the total production in the region. In Egypt production is based on the semi-intensive production of freshwater (mainly tilapia and carp) and marine finfish species (mullet). In Spain, France and Italy production is mainly based on molluscs (mussels, oysters and clams). Greece and Turkey concentrate mainly on the intensive production of selected finfish (sea-bream, sea-bass and trout). The average growth rate in these countries over the last decade has been more than 20%. The principal growth is connected with EU countries, the contribution of others being lower. Mussel production relies mostly on two autochthonous species, oyster and clam culture. Fish production is mainly represented by about ten species (tilapia, carp, trout, sea-bream, sea-bass and mullet, eel, turbot, blue-fin tuna).

The importance of aquaculture has been recognized by the European Commission, who have recently (European Commission, 2002) produced a strategy document for the sustainable development of European aquaculture. The strategy is intended to strengthen the role of aquaculture in a way that does not harm the environment. In the meantime, competition has increased, and prices and margins have significantly diminished, demanding additional efficiency, productivity and economies of scale. This is driving industry policy in further pursuit of size, and in the development of more efficient production systems and new technologies, such as offshore aquaculture and recirculation aquaculture systems.

3.1.8 Geology

Until the 1960s the Mediterranean was thought to be the main existing remnant of the Tethys Sea, which formerly girdled the
Eastern hemisphere. Studies employing the theory of seafloor spreading that have been undertaken since the late 20th century, however, have suggested that the present Mediterranean seafloor is not part of the older (200 million years) Tethys floor. The structure and present form of this tectonically active basin and its bordering mountain system have been determined by the convergence and recession of the relatively stable continental plates of Eurasia and Africa during the past 44 million years. The interpretation of geologic data suggests that there are at present multiple main areas of collision between Africa and Eurasia, resulting in volcanism, mountain building and land submergence.

Some samples drilled in the 1970s reinforce the theory that a million years ago the Mediterranean was dry nearly 3000 m below the present sea level. High ridges at Gibraltar were assumed to have blocked the entry of Atlantic waters until about 5.5 million years ago, when these waters broke through to flood the Mediterranean. More-recent seismic and microfossil studies have suggested that the seafloor never was completely dry. It seems likely that 5 million years ago the sea-floor consisted of several basins of variable size and topography, with depths ranging from 200 to 1500 m. Highly saline waters of greatly varying depth probably covered the bottom and deposited salts. Uncertainty has remained regarding the chronology and character of the sea-bottom and debate still continues.

3.1.9 Temperature and climate

The parallel of 40°N latitude runs through the middle of the western basin, whereas the corresponding latitude of the eastern basin is 34°N; this explains the higher surface temperature of the latter. The highest temperature of the Mediterranean is in the Gulf of Sidra, off the coast of Libya, where the mean temperature in August is about 31°C. This is followed by the Gulf of Iskenderun, with a mean temperature of about 30°C. The lowest surface temperatures are found in the extreme north of the Adriatic, where the mean temperature in February falls to 5°C in the Gulf of Trieste. Ice occasionally forms there in the depth of winter. In the deep zone the temperature range is small – approximately 12.9°C at 900 m and 13.1°C at 2500 m – and temperatures remain constant throughout the year.

The salinity of the Mediterranean is uniformly high throughout the basin. Surface waters average about 38 parts per thousand except in the extreme western parts, and the salinity can approach 40 parts per thousand in the eastern Mediterranean during the summer. Deep-water salinity is 38.4 parts per thousand or slightly less. As in all other seas and oceans, chlorides constitute more than half of the total ions present in Mediterranean water, and the proportions of all the principal salts in the water are constant.

Levels of dissolved oxygen vary with the origin of the different water masses. The surface layer down to 210 m shows a high oxygen level throughout the Mediterranean. The intermediate layer formed by the sinking of the surface layer in the eastern basin has a high oxygen level where it is freshly formed in this basin, but, as it moves westward, it loses some of its oxygen content, the lowest values occurring in the Algerian Basin. The transition layer between the intermediate and the deep water has the lowest level of dissolved oxygen.

Airflow into the Mediterranean is through the surrounding mountain chains. Strong winds lead to the high evaporation rates of summer and the seasonal water deficit of the sea. The mistral – a cold, dry north-westerly wind – passes through the Alps–Pyrenees gap and the lower Rhône valley; the strong north-easterly bora passes through the Trieste gap; and the cold easterly levanter and the westerly vendaval pass through the Strait of Gibraltar. Hot, dry south-easterly winds – known locally as the sirocco, ghibli (gibleh), or khamsin – frequently blow into the Mediterranean basin. These winds reduce heat and moisture in the surface waters. Atmospheric conditions over the Mediterranean also increase the salinity of incoming Atlantic water because of the evaporation of surface waters.

Mediterranean climate is confined to coastal zones and is characterized by windy, mild, wet winters and relatively calm, hot,
dry summers. Spring, however, is a transitional season and is changeable. Autumn is relatively short.

3.1.10 Transportation and tourism

Trading and communication have been important characteristics of the Mediterranean civilizations. Throughout history the role of trade between the Orient and north-western Europe was always important. The opening of the Suez Canal in 1869, together with the advent of the steamship, led to a new wave of trading. Much of the traffic, however, passed by the sea route between Asia and north-western Europe. The growth of the Mediterranean oil and gas industries has been paralleled by an increase in trade and transportation of the various consumer and industrial goods needed by expanding cities on both the northern and southern Mediterranean coasts. Coastal zones have some of the world’s fastest-growing urban areas. The increased economic consolidation of Europe, however, has stimulated new trading patterns.

The population of the Mediterranean countries is about 450 million. The population pressure is constantly increasing because of tourism. The mild climate and the natural and cultural heritage attract huge numbers – about one-third of world international tourism – seasonally concentrated in the coastal zones, particularly on the shores of the north-western basin.

Tourism is now a major source of income for those coastal countries, where a significant portion of world income from tourism is generated annually. Tens of millions of people descend each year to enjoy the Mediterranean’s beaches and culture-rich shores.

3.1.11 Impact of human activity

Growing industrialization, shoreline populations, and tourism since the mid-20th century have resulted in severely polluted waters in many Mediterranean coastal areas. Pollution in the Mediterranean tends to remain near its source of discharge because of relatively weak tidal and current movements. Despite the absence of significant trans-border effects, the countries of the region have agreed to cooperate to control the threat of marine pollution. Assisted by the United Nations Environment Programme (UNEP), 16 countries adopted the Mediterranean Action Plan (Med Plan) in 1975. The Med Plan comprises four elements: legal measures, institutional and financial support, integrated planning to prevent environmental degradation and coordinated pollution monitoring and research. The two most important legal measures are the Barcelona Convention (1976), which calls for protective action against all forms of pollution, and the Athens Protocol (1980), which requires state parties to adopt programmes to prevent and control pollution from land-based sources. The Med Plan has been widely regarded for successfully raising awareness of pollution in the Mediterranean; however, improvements in environmental quality under the plan have been limited.

Oceanographers sponsored by the EU have discovered that major dam projects on rivers emptying into the Mediterranean (notably the Aswan High Dam on the Nile River in Egypt and the heavily impounded Ebro River in Spain) have been changing the Mediterranean’s hydrological characteristics. The reduced flow of fresh water from those rivers has been replaced by increased flows of saltier water from the Atlantic and the Red Sea. The saltier (and thus denser) sea water has modified circulation patterns, as evidenced by observed elevated flows from the Aegean Sea into the deeper parts of the Mediterranean. The impact of such changes, including the potential effects on Atlantic currents influenced by high-salinity Mediterranean waters exiting the Strait of Gibraltar, has been the focus of much research.

Further Reading

Supply and demand are the main factors of a market. In a market-oriented research of nautical tourism, understanding the supply is equally as important as understanding the demand. The supply of Mediterranean nautical tourism is varied, developed and specific. It differs greatly between the different Mediterranean countries and therefore needs to be studied accordingly.

The supply of Mediterranean nautical tourism comes under the three main sub-industries: (i) marina industry; (ii) charter industry; and (iii) cruise industry.

- **Mediterranean marinas** are generally rated as the best quality marinas in the world. Their supply ranges from the simple provision of a berth in a safe marina with basic catering and limited parking lot for cars to the best-equipped marinas where boaters may find everything to satisfy their needs.

- **Charter industry supply** is closely related to marina supply, and although it belongs to a separate sub-industry of nautical tourism, charter supply complements that of marinas, and in research they will to some extent be presented jointly.

- **Cruising industry supply** is sophisticated, especially within the large cruiser sector. It is one of the best organized industries in the global market. Besides the industry of large cruisers, there is also a small cruiser industry present in all localities, developing as an aspect of small-scale entrepreneurship. It is characterized by relatively poor organization within the industry and high fragmentation. Despite that, the supply of this sub-industry is well developed, partly as a consequence of the large number of smaller but high quality destinations within the Mediterranean area. The large cruiser industry on the other hand is more connected to the better known historical attractions (see Fig. 3.1). The average price in large cruiser supply of about €100.00/day is similar to that in small national cruisers. The price of cruising on small luxury cruisers in the Mediterranean is relatively high but corresponds to the quality of the service provided.

Supply in the cruising industry has to be considered as an integral combination of three sub-supplies: (i) cruiser supply; (ii) port supply; and (iii) destination supply. This division into three sub-supplies of the cruising industry will be taken as the guideline for further study.

In terms of the development of nautical tourism in Europe, especially in the Mediterranean, three groups of countries should be distinguished:

1. **Three leading countries** (Italy, Spain and France) (Luković and Gržetić, 2007).
2. **Intensively developing countries** (Croatia and Greece).
3. **Undeveloped and developing countries** (Turkey, Albania and countries with low marine potential).

Italy, Spain and France have all effectively developed their nautical tourism and are now the leading countries in that field in the Mediterranean. Croatia is an intensively developing macro-destination of nautical tourism, oriented towards the development of marinas, chartering, small cruising and ports that can accommodate large cruisers. Greece, on the other hand, in terms of its coastal potential, is a Mediterranean superpower, but nevertheless lags significantly behind in development. Turkey has massive investments in the development of nautical tourism, but due to its heritage and insufficient tourism culture and inadequate management has only a low level of development. Other macro-destinations and
countries have little opportunity to develop their nautical tourism due to their limited coastal potential, though may find some measure of solution in connecting with larger neighbouring countries and destinations (Slovenia, Bosnia and Herzegovina, Montenegro and others).

Note: The marina and charter industries are closely related and they will be jointly studied in this research, although their business operations are different. In addition, data relating to the charter industry are scarce.

### 3.2.1 Albania

Albania, with its 362 km-long coast, still does not participate in the European nautical tourism supply. It is a transitional country and is still consolidating its economy. There are therefore no data relating to its nautical tourism. Albania is certainly investing in the development of its tourism and nautical tourism sectors, and in the near future is likely to be an example of a new European nautical tourism market. However, new events relating to the development of Albanian nautical tourism are worth noting, as the results of current significant investment will soon be apparent.

### 3.2.2 Croatia

The nautical tourism industry in Croatia is well developed along the 5835 km of its Adriatic coast. Although it is still a transitional economy, the development rate of its nautical tourism industry compares highly favourably with that of all other countries.

Croatian nautical tourism development has taken several directions.

**Marina Industry.** The development of the marina industry was in the past based on the ACY (Adriatic Club Yugoslavia), the largest global system of marinas. It was transformed into the ACI (Adriatic Club International) and now has 22 marinas along the entire Adriatic coast. Since Croatia is a transitional country, situated between a full market economy and a state-planned economy, the ACI has not yet been privatized. However, after the National Liberation War the number of private commercial marinas grew and reached 47.
All of them are included in the ADAC list of quality marinas, confirming the quality of Croatian marinas (Table 3.1).

In the marina industry segment, Croatia boasts some of the best marinas in the world;1 Marina Frapa, located in Rogožnica, is becoming a meeting point of the world jet-set. Its supply can satisfy the most extravagant requirements of boaters. Croatian marinas are expanding their capacities, especially for the mega-yachts that are increasingly visiting the Croatian Adriatic coast. According to some estimates the demand for a berth in Croatia is now double the provision, so that it is anticipated that 45,000 berths could be built by 2020 (http://www.mint.hr). The only problem at present is that the Croatian economy is in transition, which means that the development of nautical tourism is still based on government regulations and not on the market and local self-government.

CHARTER INDUSTRY. The charter industry is developing principally through small charter companies and a few larger foreign companies. Croatia has about 1200 small and large charter companies with about 3000 employees and an annual turnover of €50m. The once common ‘black charter’ has been eliminated, and although there are still some cases of ‘grey charter’ they are also gradually disappearing. The skipper business is increasingly successful and fully legalized, and there is an association of skippers that supports the development of this profession.

CRUISE INDUSTRY. The cruise industry is focused on the development of small cruising and ports for accommodating large cruisers. Small cruising is mostly organized as a family business, and two associations have been established, in the North and South Adriatic, that ensure support and development to the members. The small cruising fleet consists of 300 (Luković, 2008b) vessels providing services of single-day or longer excursions. Several-day cruising supply is popular and the relatively small numbers, up to about 50 passengers, encourages a more home-like atmosphere. The fleet of small cruisers is increasing every year and expanding to other business activities.


<table>
<thead>
<tr>
<th>Basic data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Area (in 000 km²)</strong></td>
</tr>
<tr>
<td><strong>Population</strong></td>
</tr>
<tr>
<td><strong>Coast in total (in km)</strong></td>
</tr>
</tbody>
</table>

| High quality marinas | 47 |
| Sea marinas in total | 161 |

<table>
<thead>
<tr>
<th>Marinas according to the number of berths in quality marinas (47)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–100</td>
</tr>
<tr>
<td>101–500</td>
</tr>
<tr>
<td>501–1,000</td>
</tr>
<tr>
<td>1,001–2,000</td>
</tr>
<tr>
<td>2,001–5,000</td>
</tr>
<tr>
<td>&gt;5,000</td>
</tr>
<tr>
<td><strong>Total berths</strong></td>
</tr>
</tbody>
</table>

Coefficient of saturation of coast with marinas:
- **Km coast per marina:**
  - Total = 36.24
  - Quality marina = 124.15
- **Number of quality marina berths per km of coast = 2.30**
- **Average number of berths per marina = 285.44**

---

1 according to ADAC (2010) classification
2 according to http://www.portbooker.com
Large cruising in the Croatian Adriatic is developing fast in the segment of ports for accommodating large cruisers. The Port of Dubrovnik is the third most important port in the Mediterranean and the tenth in the world, this ranking being supported by the attractive destination of Dubrovnik. Other Croatian ports follow (Split, Zadar, Šibenik, Poreč etc.), which means that they are expanding their port capacities, though at the same time tending to drive out local traffic. The many attractive destinations of the Croatian coast are ready to meet the great expectations of future development.

SUPPORTING ACTIVITIES. Croatia is developing nautical fairs, a well-known one being the Split Boat Show. One of the solutions for restructuring Croatian shipbuilding is to engage in building cruisers, a project that is still in its experimental stage. Small shipyards still build replicas of vintage vessels, thus increasing the fleet of traditional small cruising vessels.

One of the supporting activities of nautical tourism is the production of pontoons and mooring equipment, the leading producer being the company Marinetek NCP in Šibenik.

3.2.3 France (Mediterranean)

France is a European and world superpower in tourism. Its tourist supply is based on high quality destinations, but even more on high-level amenities in the supply. Tourism, and nautical tourism in particular, is most highly developed on the Côte d’Azur, the main French tourist destination. It boasts well-developed marina, charter and cruise industries. However, in relation to the rest of the vast French tourist supply, nautical tourism does not have a particularly prominent role. The part it plays is complementary and supporting for all other sub-industries, except at certain locations with elite marinas of exceptional capacities and tourist quality supply.

However, in terms of investments, the marina industry has slowed down in recent years, partly due to concessions that are due to expire for many marinas. In fact, pursuant to the French concession law, concession contracts for marinas are awarded for a period of 35 years, and the owners are now waiting for the renewal of concession grants to restore their investment activities. The marina industry in France is based on 406 sea marinas of all types. On the Mediterranean there are 99 marinas of which four are high quality commercial marinas with 41,856 berths (see Table 3.2).

The main characteristic of French Mediterranean marinas is their close connection with a vast tourist supply on the coast, primarily hotel and catering supply. With only a few exceptions, such marinas are equipped only with basic berthing and yacht-servicing facilities, while all other services rely on the supply out of the marina. France has three distinguishing types of marina:

1. Marinas located within a greater tourist supply and that have a supporting role (for example, marinas in Nice, Cannes and other prominent tourist centres).
2. Marinas located in big cities (for example in Marseille).
3. Marinas located in small tourist centres on the coast where they have the role of local tourist leader (for example in Port Carmargue).

This classification corresponds to the general classification of Mediterranean marinas, though is especially distinctive in the example of France.

Marinas located within the prominent tourist centres on the Côte d’Azur have a supporting role. They have only berthing facilities and basic yacht servicing, while their supply is based on that of the locality. In general, they have smaller berthing capacities.

Marinas located in big cities provide a basic berthing service and all other services are connected to the city’s supply (Fig. 3.2). These are, in general, larger marinas with a specific management system. Such marinas, for example the Marina Vieux in Marseille with 3200 berths, generally have a very flexible and adaptable management and berthing organization. The Marina Vieux is organized...
as five or six sub-marinas for yachts of various size. In recent years, sub-marinas have been connected so that the number of berths is reduced as they are combined into larger berths, due to the arrival of mega-yachts.

As in some other Mediterranean destinations, French investors are building exclusive marinas with higher level of supply in smaller destinations. For instance, France has the largest marina in Europe, Port Carmargue in the town of Le Grau-du-Roi, with 5010 berths, which has been awarded a 5-star rating. Similar marinas are also at Port du Cap d’Agde in the town of Le Cap d’Agde and Port St-Cyprien in the town of St-Cyprien-Plage, each with about 3000 berths.


<table>
<thead>
<tr>
<th>Basic data</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (in 000 km²)</td>
<td>674,843</td>
</tr>
<tr>
<td>Population</td>
<td>65,447,374</td>
</tr>
<tr>
<td>Coast in total (in km)</td>
<td>(Metropolitan 3,427) 4,668</td>
</tr>
<tr>
<td>Coast in the Mediterranean (in km)</td>
<td>550</td>
</tr>
</tbody>
</table>

| High quality marinas | 46 |
| Sea marinas in total  | 406 |

Marinas according to the number of berths in quality marinas (46)

<table>
<thead>
<tr>
<th>Berths range</th>
<th>Number of marinas</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–100</td>
<td>1</td>
</tr>
<tr>
<td>101–500</td>
<td>18</td>
</tr>
<tr>
<td>501–1,000</td>
<td>17</td>
</tr>
<tr>
<td>1,001–2,000</td>
<td>6</td>
</tr>
<tr>
<td>2,001–5,000</td>
<td>3</td>
</tr>
<tr>
<td>&gt;5,000</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total berths</strong></td>
<td><strong>41,845</strong></td>
</tr>
</tbody>
</table>

Coefficient of saturation of coast with marinas:

<table>
<thead>
<tr>
<th>Km coast per marina:</th>
</tr>
</thead>
<tbody>
<tr>
<td>– Total = 1.35</td>
</tr>
<tr>
<td>– Quality marina = 11.96</td>
</tr>
</tbody>
</table>

Number of quality marina berths per km of coast = 76.08

Average number of berths per marina = 909.67

*a according to ADAC (2010) classification

*b according to http://www.portbooker.com

### Fig. 3.2. (a) La Rochelle Marina and (b) Baie des Ange Marina, Nice (source: the author).
anywhere else in the Mediterranean and Europe. Consequently the average engagement of yachts there is over 20 weeks per year.

Cruise Industry. The French cruise industry has developed through the ports for cruiser accommodation and small ports and destinations for 1-day excursions along the coast. France does not have a company that could be a part of large cruise industry, but it has several attractive destinations and cruise ports.

3.2.4 Greece (Ionian and Aegean)

Along the 13,676 km of Greek coast, there are 428 marinas of all types. According to the ADAC classification, there are only 40 quality sea marinas with 6642 berths. Greece has three main problems relating to the development of marinas and the charter industry:

1. Scarce supply of water in marinas.
2. Access to marinas by road is often difficult.
3. National laws are unfavourable to development.

Running water is a major, indispensable requirement of boaters accustomed to comfortable marinas; the development of marinas without freshwater is almost inconceivable.

A car and a yacht are often closely connected, due to the fact that about 80% of boaters drive to the marina where their yacht is permanently berthed. Recreational boaters, mostly from developed European countries, cannot easily drive to one of the Greek marinas. The shortest and the easiest route is to drive to south Italy and take a ferry to Greece. Another route, harder and less secure, is overland via Hungary, Serbia and Bulgaria. This is relatively unsuitable for boaters and not normally used. However, the fact that Greece has an attractive indented coast and islands, and also that it is the cradle of European culture and civilization, makes it very attractive for recreational boaters.

Charter Industry. Due to the particular attractions of Greece, the charter industry is well developed. Almost all big charter companies established in Greece are successful in their business operations. Greek law therefore especially regulates skippers, which is acceptable from the point of view of their earnings, but is more debatable from the point of view of the development of the charter industry and the arrival of yachts in Greece. Recently, the situation is being gradually liberalized, which provides some additional incentive to the development of nautical tourism in Greece.


<table>
<thead>
<tr>
<th>Basic data</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (in 000 km²)</td>
<td>131,957</td>
</tr>
<tr>
<td>Population</td>
<td>11,260,402</td>
</tr>
<tr>
<td>Coast in total (in km)</td>
<td>13,676</td>
</tr>
</tbody>
</table>

| High quality marinas | 40 |
| Sea marinas in total (on both seas) | 428 |
| Marinas according to the number of berths in quality marinas (40) |  |
| 0–100 | 22 |
| 101–500 | 15 |
| 501–1,000 | 2 |
| 1,001–2,000 | 1 |
| 2,001–5,000 | 0 |
| >5,000 | 0 |
| Total berths | 6,642 |

Coefficient of saturation of coast with marinas:

<table>
<thead>
<tr>
<th>Km coast per marina:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>31.95</td>
</tr>
<tr>
<td>Quality marina</td>
<td>341.9</td>
</tr>
</tbody>
</table>

Number of quality marina berths per km of coast = 0.49

Average number of berths per marina = 166.05

а according to ADAC (2010) classification

b according to http://www.portbooker.com
Cruise Industry. The cruise industry in Greece is well developed as a direct consequence of the long and successful Greek maritime tradition and Greece itself being a top European and world destination. Greek ports are attractive for large cruising and well-organized for accommodating large cruisers. The most visited ports are Athens, Rhodes, Mykonos and Heraklion. Greece has several important companies that operate with large cruisers, but there is also well-developed local and regional cruising in traditional Greek vessels.

3.2.5 Italy (the Adriatic and the Mediterranean)

The leading of the three most significant countries in Mediterranean and European nautical tourism is Italy, which is also one of the most important in world nautical tourism. It has a vast development of all three nautical tourism sub-industries. The development of Italian nautical tourism is similar to the economic development of the country generally, which means a highly developed north and less developed south. Nautical tourism development has therefore reached saturation level on the northern Italian coasts (of both the Mediterranean and the Adriatic), while the southern coast, including the largest Mediterranean islands of Sardinia and Sicily, still has relatively low development and consequent potential.

Marina Industry. There are 395 sea marinas of all types along the 7600 km Italian coast (8200 km including islands). According to some sources, there are 478 categorized marinas, with 167,875 berths. Italy has 158 high-quality marinas, of which ten are situated on the lake Lago di Garda, with 54,811 berths, while sea marinas have 53,835 berths. Quality island marinas make up 20.9% of all quality marinas, including ten lake marinas. The ratio is similar for berths on islands; they comprise 21.6% of all berths in Italian quality marinas (Table 3.4).

The Italian islands of Sardinia and Sicily have great potential for marina construction and nautical tourism development.

| Marinas according to the number of berths in quality marinas (33) |
|-----------------|-----|
| 0–100           | 4   |
| 101–500         | 23  |
| 501–1,000       | 5   |
| 1,001–2,000     | 1   |
| 2,001–5,000     | –   |
| >5,000          | –   |
| Total berths    | 11,635 |
| Average number of berths per marina | 352.58 |

*a* according to ADAC (2010) classification

The presence of 33 marinas along the 600 km coast of the islands is just an indicator of possible development. The fact that Sardinia hosts an elite marina supported by the Aga Khan and is attracting the world’s jet-set indicates the importance of the islands for the development of nautical tourism (see Table 3.4).

Italian sea marinas are located on both the Mediterranean and the Adriatic (Table 3.5). The latter has the leading role and is well connected with the surrounding and high quality destinations that complement the supply. The vicinity of Venice in the north contributes to the entire development of nautical tourism and to the development of marinas in particular. The Italian road network on both coasts fulfils a main precondition for the development of marinas, but the fact is that there are fewer marinas further to the south, which indicates the saturation with marinas in the north and the possibility of their further development in the south.

Italy has the largest number of marinas in the Mediterranean and the highest number of quality marinas according to ADAC, but those marinas are smaller, with up to 500 berths (see Table 3.4). All marinas are linked to attractive destinations that provide a quality tourist supply and sightseeing activities. The development of the marina industry is supported by the government and its liberal market orientation so that some of its large military ports are being transformed into ports.

<table>
<thead>
<tr>
<th>Basic data</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (in 000 km²)</td>
<td>301,338</td>
</tr>
<tr>
<td>Population</td>
<td>60,340,328</td>
</tr>
<tr>
<td>Coast in total (in km)</td>
<td>7,600 (with islands 8,200)</td>
</tr>
</tbody>
</table>

| High quality marinas<sup>a</sup> | 148 |
| Sea marinas in total<sup>b</sup> | 395 |

Marinas according to the number of berths in quality marinas (148)

<table>
<thead>
<tr>
<th>Mediterranean Riviera</th>
<th>Adriatic Sea</th>
<th>Islands</th>
<th>Total Mediterranean</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–100</td>
<td>7</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>101–500</td>
<td>24</td>
<td>53</td>
<td>23</td>
</tr>
<tr>
<td>501–1,000</td>
<td>10</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>1,001–2,000</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>2,001–5,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>&gt;5,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total berths&lt;sup&gt;a&lt;/sup&gt;</td>
<td>17,752</td>
<td>24,448</td>
<td>11,635</td>
</tr>
</tbody>
</table>

Coefficient of saturation of coast with marinas:

- Km coast per marina:
  - Total = 20.76
  - Quality marina = 55.41

Number of quality marina berths per km of coast = 6.57

Average number of berths per marina = 363.75

<sup>a</sup>according to ADAC (2010) classification
<sup>b</sup>according to http://www.portbooker.com

for mega-yachts (e.g. Brindisi). Many investors are involved in the development of new marinas and the reconstruction of existing ones. Both commercial private marinas and sports marinas have facilities for vessels. There are significant differences relating to the number and the quality of marinas in the north and in the south and on the islands. The main difference is that there are more and higher quality marinas in the north and fewer marinas with a lower quality of service in the south.

**Charter Industry.** The charter industry has been developed through national, local and international charter companies. Italian yacht owners generally prefer to conduct their own vessels and skipper services are less widely used.

**Cruising Industry.** The cruising industry is highly developed in all its segments. One of the largest cruising companies in the world is the Italian company Costa (Fig. 3.3), a member of the largest world corporation Carnival UK, with 35% of all large cruisers in the world. Italy has several leading ports for accommodating large cruisers (Venice, Naples, Livorno etc.) and their main characteristic is their proximity to highly valuable destinations that are a principal attraction for the cruiser passengers.

Small cruising or cruising along the coast in traditional vintage vessels is well organized at the local level and is usually used for single-day cruising along the coast.

**Supporting Activities.** One of the most significant industries is the world-famous shipbuilding of both large and smaller cruisers, and of yachts and mega-yachts. Italy is a world-famous producer in the shipbuilding industry, and together with the USA and the Netherlands builds 58% of the global production of mega-yachts. Another supporting activity is fairs of vessels and nautical tourism, the most significant being the Genoa Boat Show.
3.2.6 Spain (Mediterranean)

Spain is one of the three leading nautical tourism countries and the industry has an important role in its economy. The development of nautical tourism and of tourism in general is not left to chance, despite the complete market orientation. At the national level, Spain supports the development of nautical tourism through quality market research, while operational development and management is left to regional and local self-government. Global development decisions are taken by regional government, while local government manages the destination and the development of nautical tourism and other industries located at the destination. Such a type of management has an historical character, and the result is that Spain has developed the best model in Europe of sustainable development of coastal and tourist destinations. What many countries have not yet achieved in nautical tourism has been realized in Spain, linking through marinas the interests of local inhabitants with the interests of the private commercial sector and of professional fishermen, all of whom use marinas for their own purposes. In such marinas, a type of joint management has been created, similar to shareholder management, and the wider cultural heritage significantly contributes to the successful functioning of a sustainable model of joint development of marinas. Besides the model of sustainable development of marinas, other industries and subjects in Spain seem to be able to function jointly, which is not the case in any other Mediterranean region. For instance, the cement industry and the tourism industry cannot generally be developed at the same location, but that does occur in Spain. There is the good example of the marina in Port Boa, on the Spanish-French border, with the existing local marina and a new private commercial marina under construction, while several hundred metres away there is a large cement industry facility (Fig. 3.4). Such an example of sustainable development, in circumstances that usually are not logical in terms of vicinity and connections between incompatible industries, shows how Spain has successfully solved the problem. This is one of its greatest successes not only in nautical tourism but also in general economic development.

The Balearic Archipelago, with its islands Ibiza, Majorca, Formentera, Minorca and Cabrera, is important for the development of general and nautical tourism in the Mediterranean. The supply of the Balearics is market oriented: 90% of the tourists in Majorca are German, while other islands host other nationalities. The highest quality marinas and their supply are in Ibiza and in Majorca.

**MARINA INDUSTRY.** The Spanish marina industry extends along 5200 km of the Mediterranean coast and has 195 categorized marinas with 68,738 berths, 59 quality marinas on the mainland Mediterranean coast and 25 marinas in Ibiza and Majorca. The high quality
coastal marinas have 33,535 berths, and there are 9806 berths in Ibiza and Majorca. Spain also has the largest marina in Europe, Empuriabrava, located on the Costa Brava (Fig. 3.4). The marina is the result of the project of an investment group and the company Immo-Center Group. The impact effects of the marina on the town are great and the destination is highly dependent on the marina, thus becoming a symbol of high living culture and business in that part of Europe.

Much of Empuriabrava marina comprises mooring linked to apartments on shore (Fig. 3.4). For that reason, and also because of other special ADAC criteria, the marina has only a 2-star rating, since ADAC considers it as a marina with 700 berths, instead of its 5000 berths and the title of the largest marina in Europe. However, due to the number of all types of marinas on both its coasts, Spain, with 556 marinas, is at the top of Mediterranean countries, together with Italy (Table 3.6).

The fact that Spain is located at the entrance from the Atlantic into the Mediterranean is important for mega-yachts, as their natural first stop after crossing the Atlantic is in Spain. Thus the number of annual berths in Spanish marinas varies, partly because frequently two or three standard berths are joined into one berth suitable for the mega-yachts that are increasingly visiting the Mediterranean.

**Charter Industry.** Similar to France, the Spanish charter industry is an accompanying industry that is linked to the supply of marinas. However, the position of Spain at the connection between the Mediterranean and the Atlantic makes it the most attractive country for the initial accommodation of mega-yachts in the Mediterranean. Both the marina and charter industries (in particular companies engaged in mega-yacht charter) are adapting to it.

**Cruise Industry.** The cruise industry in Spain, similar to its counterparts in France and Croatia, has developed through the ports for accommodating large cruisers and through small cruisers of traditional types used for day trips. Harbours that accommodate large cruisers are connected to attractive destinations such as Toledo, Seville, Saragossa and others, at which tourists and cruiser passengers are offered various services and attractions. The most attractive of such harbours are Barcelona, Palma and Savona.

The development of the main industries of nautical tourism on the Spanish Mediterranean coast is supported by numerous activities and attractions: for example, the largest Mediterranean aquarium is in Barcelona, with a replica of the world’s first submarine, originally built in 1862.

Although the development of Spanish nautical tourism is realized through local and regional plans and self-government, the government also supports the development of nautical tourism through several institutes for tourism, the most prominent of which is the Institute for Tourism in Madrid.

*Fig. 3.4.* (a) Empuriabrava, marina-town and (b) the nearby marina and industrial Port Boa (source: Oficina de Turisme d’Empuriabrava and the author).
3.2.7 Turkey (Aegean)

Although Turkey is, in terms of capital, a powerful country, its economy is still in transition. Market orientation and approaches to Europe are of a relatively recent date. Their efforts are oriented towards the development of tourism and the industry of nautical tourism. The plan of Turkey is to reach the level of the three leading countries in terms of tourism development, which seems possible on a long-term basis, if 7200 km of coast and the available capital are taken into account.

However, from a cultural aspect, the economy and the people have only recently turned towards the development of tourism and a market orientation so that such an ambitious plan is likely to be a long time in realization.

The charter industry development runs in parallel to the development of marinas. Turkey has not yet become a macro-destination and there is not a great demand for permanent berths there, which supports the demand for the charter of vessels.

The cruise industry is developing in a similar way as in other Mediterranean countries, through the development

---


<table>
<thead>
<tr>
<th>Basic data</th>
<th>Mediterranean</th>
<th>Majorca and Ibiza</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (in 000 km²)</td>
<td>504,645</td>
<td>4,992</td>
</tr>
<tr>
<td>Population</td>
<td>47,021,031</td>
<td>1,095,426</td>
</tr>
<tr>
<td>Coast in total (in km)</td>
<td>4,964</td>
<td>–</td>
</tr>
<tr>
<td>High quality marinas</td>
<td>–</td>
<td>84</td>
</tr>
<tr>
<td>Sea marinas in total (in both areas)</td>
<td>556</td>
<td></td>
</tr>
<tr>
<td>Marinas according to the number of berths in quality marinas (84)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total marinas:</td>
<td>Mediterranean</td>
<td>Majorca and Ibiza</td>
</tr>
<tr>
<td>0–100</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>101–500</td>
<td>33</td>
<td>13</td>
</tr>
<tr>
<td>501–1,000</td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td>1,001–2,000</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>2,001–5,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>&gt;5,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total berthsa</td>
<td>33,535</td>
<td>9,806</td>
</tr>
</tbody>
</table>

Coefficient of saturation of coast with marinas:

- Total = 8.93
- Quality marina = 59.10

Number of quality marina berths per km of coast = 8.73
Average number of berths per marina = 515.96

---

*a*according to ADAC (2010) classification

*b*according to http://www.portbooker.com
of small, national cruising in traditional vessels, mostly as single-day excursions, and also through harbours that can accommodate large cruisers. Relying on the attractive destinations within which they are located, such ports are constantly developing. The port of Istanbul is the 32nd largest port in the world.

### 3.2.8 Others

The group ‘Others’ consists of the countries that meet two of the criteria important for this research. The first is that their marinas are located on the Mediterranean and that they are developing nautical tourism, and that they have at least one marina or harbour for accommodating cruisers.

**Marina industry.** The marina industry in Malta, Montenegro and Slovenia is developing in different directions (Table 3.8). Malta is a small and attractive island destination that has reached a certain level of development. Further development is anticipated through an increase in the quality level of marinas. Slovenia has only 46 km of coastal area and it is hardly to expect further development in the marina industry. Its development is therefore oriented towards destination management, turning to connections with larger destinations such as Austria and Italy. After gaining independence Montenegro started significant investments in nautical tourism, relying on the indentedness of its coast and tradition in coastal tourism. The world-known destination of the Gulf of Kotor is developing marinas as small, private marinas of small capacity.

**Charter industry.** The charter industry in Slovenia and Malta is relatively well developed, while it is still underdeveloped in Montenegro.

**Cruise industry.** The cruise industry is developed in Malta and Montenegro in terms of harbours that can accommodate large cruisers. The port of La Valetta in Malta is famous as is the port of Kotor in Montenegro. Both are specialized for accommodating large cruisers and, because of the associated attractive destinations, are frequently visited. On the other hand, due to its limited coast, Slovenia has no port capable of accommodating large cruisers. All three countries have well-developed national cruising for single-day excursions along the coast.

### 3.3 The Main Features of the Mediterranean Ports of the Cruising Industry

#### 3.3.1 Port management and ownership

EU countries do not have a universal policy for managing ports and Member Countries implement various models of management in which different possible roles are taken by the Port Authority, of which these are the three main examples:

- The Port Authority owns and manages the port infrastructure in the capacity of
a public body and private firms provide all other services and own the port superstructure;
- The Port Authority owns both infrastructure and superstructure in the capacity of a public body and private firms provide services by renting port assets, through concessions or licences;
- The Port Authority is responsible for the port as a whole, owning the infrastructure and superstructure and hiring employees to provide services.

In many countries where there is no regulatory institution for seaport management, particular port authorities tend to perform many other tasks, such as investment planning and financing, or regulation of tariffs that private operators charge to port users. In France, Italy and Croatia financing basic infrastructure is considered a public task because this part of the infrastructure belongs to the public domain and is thus regulated by law.

The ports of Savona, Barcelona, Civitavecchia and Naples have terminals directly operated by cruise companies, while there is some degree of operational involvement by cruise companies at another three ports: Genoa, Kusadasi and Tunis. Another half-dozen ports (including Marseille) have plans to go along the same cruise-company operational route. The port owner passes on some or all of the capital cost involved in developing the cruise infrastructure while cruise companies have greater control over both the standard and operation of the facility as well as guaranteed berthing slots even at peak times.

The association Union des Ports Autonomes et des Chambres de Commerce et d’Industrie Maritimes (UPACCIM) is an association of autonomous ports, Chambers of Maritime Commerce and industry. Its objective is to establish a standardized policy in relation to all issues common to all French ports and to the responsibilities of all parties engaged in marine port management at local, regional and national levels. In 2007, the ownership of the Port of Nice was transferred from government administration to the Regional Council and


<table>
<thead>
<tr>
<th>Basic data</th>
<th>Malta</th>
<th>Montenegro</th>
<th>Slovenia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (in 000 km²)</td>
<td>316</td>
<td>13,812</td>
<td>20,273</td>
</tr>
<tr>
<td>Population</td>
<td>412,970</td>
<td>625,266</td>
<td>2,019,614</td>
</tr>
<tr>
<td>Coast in total (in km)</td>
<td>19,680</td>
<td>29,350</td>
<td>4,660</td>
</tr>
<tr>
<td>High quality marinas</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Sea marinas in total</td>
<td>10</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Marinas according to the number of berths in quality marinas</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>0–100</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>101–500</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>501–1,000</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1,001–2,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2,001–5,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>&gt;5,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total berths</td>
<td>1,108</td>
<td>837</td>
<td>1,475</td>
</tr>
</tbody>
</table>

Coefficient of saturation of coast with marinas:
| Km coast per marina | 49.20 | 98.50 | 15.53 |
| Number of quality marina berths per km of coast | 5.63 | 2.85 | 31.65 |
| Average number of berths per marina | 277 | 279 | 491.67 |

*according to ADAC (2010) classification

*according to http://www.portbooker.com
the port is now managed by the Riviera Chamber of Commerce.

All major ports in Croatia are managed by Port Authorities established by the specific Croatian government department responsible for the management, construction and exploitation of ports.

At the Port of Naples (Italy), the company Terminal Crociere s.p.a manages the maritime terminal and comprises the three most important cruise companies: Costa Crociere, MSC and Royal Caribbean. The Port Authority holds a 5% share in this company. Venice has yet to have direct cruise-company involvement in its terminal development or operations. These are currently the responsibility of Venezia Terminal Passeggeri, which was set up by the Venice Port Authority 12 years ago and has the Venice Municipality and Chamber of Commerce among its six shareholders, which also includes Marco Polo Airport.

The Port of Palma de Mallorca is managed by the Port Authority of the Balearic Islands, which, since 1992, has been assigned to manage the ports of Palma de Mallorca, Alcudia, Mahon, Ibiza and La Savina. Barcelona’s cruise port expansion has clearly been accelerated by cruise-company involvement augmenting the investments of the port itself and the local terminal operator concessionaire – Creuers del Port de Barcelona.

The Turkey Maritime Enterprise became the TDI Turkish Maritime Organization Inc. under the Privatization Administration Presidency, and now manages the Port of Istanbul. The Port of Kusadasi was the port for the ancient Roman city of Ephesus. After privatization in 2003 it was modernized with the aim of attracting luxury cruise liners.

In Malta a new cruise and passenger terminal was completed in 2005. Valletta Cruise Port plc, formerly VISET Malta plc, is a limited liability company that took over the cruise and ferry terminal operations following an international tender issued by the Government of Malta in 1996 and was contracted to construct and operate the new cruise liner and ferry passenger terminal in the Port of Valletta.

### 3.3.2 Port infrastructure and superstructure

All ports depend on the development of the port infrastructure, which includes berths, fenders, piers, docks and the port basin. It is obviously essential for the port to have sufficient depth for visiting ships at all states of the tide. In situations where there are no available berths in the port, when the depths are not sufficient or the size of the port does not allow the necessary manoeuvring, cruise ships may anchor or moor at buoys that will vary in size according to the size of the ship. Berthing services include pilotage, towing and mooring. The type and availability of port facilities will vary according to the size of the port, the level of its modernization and the system of management. Ancillary services may include suppliers, repair facilities, security and cleaning.

Port superstructure can be classified into fixed assets built on the infrastructure, such as terminals and sheds, fuel tanks, office buildings, and fixed and mobile equipment such as cranes and van carriers. Terminals and sheds are required for passengers to pass through security, customs and embarkation procedures and as a place where consignees can carry out their administrative paperwork for the ship and the passengers (or cargo), permits (sanitary, customs etc.), service hiring and dockworkers. Also, for home ports, superstructure is important for cargo handling and storage. Good infrastructure for land access is important and includes roads, railways and parking areas.

Services in ports are provided by different operators, which may be either the port authority or private firms.

The Port of Durres, the largest Albanian port, has 11 quays with depths of 7.5–11.5 m and can accommodate large ships. It is recognized as a port of transit to Europe.

The Port of Marseille is divided into two parts: the Eastern Harbour can accommodate cruise ships, while the Western Harbour is used by cargo ships. The cruise ships terminal is located close to the city and can use seven quays. Marseille is connected by a canal to the river Rhône and thus to a whole European inland waterway system. Marseille is very much oriented towards river cruise activity.
Alternative docks include the Quai des Antilles, 600 m long, and the Quai de la Réunion, 550 m.

The port of Nice is categorized as a smaller port offering four cruise quays. It is currently implementing measures for improving operations and is certified by ISO 9001, ISO 14001:2004 and by ISO 9001/2000 for the reception of vessels. Large cruise ships can moor in nearby Villefranche, which has an infrastructure with extensive mooring capacity in the harbour. The bay is protected from the prevailing easterly winds and provides a sheltered mooring for ships of all sizes.

The Port of Cannes has three mooring buoys in the Bay of Cannes close to the port and one quay that can take ships of up to 150 m. The ports of Golfe-Juan and Antibes both have nearby anchorages. Although categorized as smaller ports, they have efficient port service management and passenger service.

Greek ports are generally linked to historical sites such as Athens (Piraeus), Corfu, Crete, Mykonos, Nafplion, Rhodes, Santorini and Thessaloniki. The Port of Piraeus is an important destination for cruise ships and has 11 places for the berthing of vessels and can accommodate even the largest cruise ships. Since it is a disembarkation port for visiting Athens it has well-developed port services. Passenger terminals are used for servicing cruise passengers, hosting duty-free shops, tourist police, customs office and other essential passenger services.

The Port of Rhodes is a major Greek port with links to Athens, Crete and the islands of the Aegean and to Cyprus, Turkey and Israel. The island of Rhodes is located in the southeastern Aegean and is one of the Dodecanese islands. At Port Rhodes cruise ships dock at the pier right outside the walled Old Town.

Mykonos is one of the 220 Cycladic islands, which include 85 km² of islands, 80 km of shoreline and harbours. Cruise ships dock at the new cruise Port at Tourlos, which is within walking distance of the town. Passenger services include shuttle buses and taxis.

Crete’s largest city and administrative capital Heraklion has a well-equipped port for accommodating cruise ships. It is situated a 15 min walk along the seafront from the old town. The port is in the middle of the northern coast of Crete, the largest Greek island and has three port basins. Cruise passengers frequently come to Heraklion specifically to visit the archaeological site of the Palace of Knossos.

Of all the Greek islands Santorini has perhaps the most distinctively shaped harbour with the cruise port located at the bottom of the Caldera Cliffs in the town of Fira. Visiting ships anchor some 2 miles off the town and passengers are transported ashore by small boats.

Croatian cruise ship ports are Dubrovnik, Split, Šibenik, Zadar, Rijeka and Pula. In Dubrovnik cruise ships generally dock at the Port of Gruž, approximately 2.5 km northwest of the Old Town (about a 10-min taxi ride from the port). The Dubrovnik Port Authority recently initiated a comprehensive project to design a modern passenger port with multipurpose facilities by reconstructing the quays and constructing a modern infrastructure. The inner part of the port has been redesigned to accommodate cruise ships. Ships can also anchor outside the harbour of Gruž when necessary or off the Old Town of Dubrovnik, when passengers are taken ashore by the ship’s own shuttle boats. The total quay length is 1040 m, to be extended by a further 400 m by the end of 2014.

The international passenger port of Split is constantly increasing the number of cruise ships it handles. Due to its favourable climate the cruise season is being gradually extended right through to November. The passenger port is separated from the cargo port and it handles an annual traffic of around 3.5 million passengers. The old town centre, located within the walls of the ancient UNESCO protected Diocletian’s palace, is within walking distance of the port. There are also possible anchorages about 0.5 nautical miles (NM) from the shore. The construction of additional infrastructure for ships arriving during high season (‘summer berths’) is currently being planned.

The major Italian cruise ports are Ancona, Bari, Civitavecchia (the disembarkation port for Rome), Genoa, Livorno, Messina, Naples, Palermo, Portovenere, Trieste and Venice. The Port of Venice (http://www.port.venice.it) is
Market Suppliers in the Mediterranean

one of the leading home cruise ports on the Adriatic. It has four large terminals for accommodating cruise ships of any size, even those exceeding 300 m. Cruise terminals 107, 108, 103 and 117 in the Port of Venice’s passenger port offer a wide range of amenities and services for cruisers sailing the Adriatic and Mediterranean. Terminal 117 is the main cruise terminal for the Port of Venice. The historical sites of Italian cities are one of the principal attractions for cruise passengers; other potential attractions include the beaches at Bari, Etna in Messina, the coast and Pompeii in Naples and the picturesque small towns surrounding Portofino.

The Port of Naples is located in the centre of the city and has separate infrastructure for passengers directed towards the islands and locations in the Gulf of Naples, Salerno and the Pontine Islands. The Maritime Station is where the cruise ship berths are located. The cruise port of Civitavecchia is located about 80 km north-west of Rome, and is also a busy ferry and cargo port with good transport links to Rome. It comprises more than 20 piers, and is mostly used by ferry and container ships. Civitavecchia is a popular port of departure for a number of cruise lines, including Costa, Royal Caribbean, Oceania, Celebrity, Seabourn and Regent Seven Seas, which offer a wide variety of cruise options.

The Port of Barcelona (http://www.port-debarcelona.es) has a highly developed system of services, and as a major turnaround port has an extensive infrastructure and seven international passenger terminals, which have excellent transport links by bus and metro. The port has developed a plan for a further cruise home-porting terminal for 2013 as well as creating space for another berth to be used for transit calls.

In the Port of Palma de Mallorca cruise ships dock at the older cruise terminal on the southern side of the harbour, or at another pier that requires a 30 min walk to the town. The port of Alcudia also offers full infrastructure and services for cruise ships. The Port of Malaga (http://www.europemortreviews.com/MalagaSpain) is located over 100 km north-east of Gibraltar. The port covers over 69.2 ha of land and 7.1 ha of water surface. The East Wharf is used primarily for cruise vessels, and at 590 m long with an alongside depth of 17 m the wharf can accommodate the largest cruise vessels.

The Port of Istanbul (http://www.istanbultrails.com) is a very large deep-water seaport. Cruise ships dock on the European side of Istanbul between the Dolmabahçe Palace and the Golden Horn at the passenger terminal (Yolcu Salonu) in Karaköy, which is located exactly where the Golden Horn flows into the Bosphorus. The port of Kusadasi has built a new cruise terminal with a modern mini-mall called Scala Nuova designed as an traditional style of building and using traditional regional and local materials. The port has seven berths, up to 316 m in length and with depths of from 8.5 to 11 m.

The Port of Valletta is a large port located in the capital city of Malta that has a natural deep-water harbour and a breakwater that assures that vessels can enter and leave the port 24 h a day in all types of weather. The Port of Valletta’s Pinto Wharf is designed for cruise vessels. There are other berthing areas for cruise liners in Malta, such as the island of Gozo.

3.3.3 Port operations

In order to be open for international traffic, ports of call and home ports, regardless of their geographic position and size, have to regulate their management model according to relevant regulations that specify minimum acceptable conditions. All cruise ships are designed and operated in compliance with the strict requirements of the International Maritime Organization (IMO), which is the UN agency that regulates global standards for the safety and operation of cruise ships through adoption of treaties, regulations and resolutions, according to the Safety of Life at Sea (SOLAS) Convention.

The International Ship and Port Facility Security (ISPS) Code applies to ships on international voyages and to the port facilities serving such ships. A port holds a compliance certificate issued by the governing authority, and every such port has its own Port Security Officers (PSO), security equipment and a full
port security plan that must be approved by the governing authority.

Ships must also have their own security plans, security officers and on-board equipment. Ships must inform the Harbour Master’s Office of their ISPS compliance certificate expiry date before entering the port. Safety related regulations and requirements are very rigorously implemented in all ports.

The port of call must have an effective combination of airlift and airport capacity, transport links with road and rail, ground handling, hotel stock, tourism appeal and seamless passenger transfer systems. The Port of Barcelona offers a good example of well-organized services, and it also has an efficient combination of pilotage, port agency services, customs clearance and good working relations with the operation departments of cruise lines. Terminal operations may be improved by constructing new buildings or as a result of refurbishment to provide new technology, bonded baggage services, or improvements to security, communications, or services to the passengers, stevedoring, ship services including provision of fresh water and the disposal of waste and transport links with the airport. Such improvements have also been noticeable in the ports of Antalya and Palma de Mallorca in 2010.

Civitavecchia is also set to be the first port in the Mediterranean to invest in shore power, allowing visiting cruise ships to switch off their engines (cutting out emissions) and power up with renewable energy (photovoltaic and wind-powered) supplied by the Italian electrical company ENI, with Fincantieri providing technical support for the whole project. Shore power (aka cold ironing) is being strongly promoted and encouraged by the EU as a way to reduce CO₂ emissions from ships.

Note

1 Marina Frapa, Rogožnica was awarded the title of the Best World Marina in 2006 and 2007.

Web Resources

http://www.mint.hr
Port of Call: http://port-of-call.org
http://www.portbooker.com

Port Information

Barcelona: http://www.portdebarcelona.es/en/web/Port%20del%20Ciudada/cruzeros
Dubrovnik: http://www.portdubrovnik.hr
Malaga: http://www.europeportreviews.com/MalagaSpain.htm
Piraeus: http://www.olp.gr/en
Santorini: http://www.santoriniport.com
Split: http://www.portsplit.com
Venice: http://www.port.venice.it
The Atlantic part of Europe as a unique market of nautical tourism is characterized by the climatic impacts of the Atlantic Ocean and features of the sea. The coast of the European Atlantic extends along eight countries, from Gibraltar to Denmark, for 13,900 km of coast. Denmark, though a relatively small country has 7314 km of coast, when all its islands are included.

One of the main characteristics of the sea on the Atlantic coast is its tides. In parts of the UK and Brittany, for example, the tidal range can be as much as 9 m, and tidal currents and winds can be strong and cause steep waves. In the northern Atlantic above the 55th parallel, temperatures are low and occasionally cause frozen seas. People in these regions have developed a particular style of life, struggling with nature and adapting to it. Although in this research the Baltic Sea area is separately studied, countries in Northern Europe have a similar way of life to those in the Baltic Sea and similar problems. Denmark, for example, can be considered as belonging to the Baltic market, and Norway has many similarities, though its coast is almost entirely on the North Sea and a considerable part lies north of the Arctic Circle.

4.1 Geo-hydrographical Features of the European Atlantic Coast

The Atlantic Ocean is the entire body of water lying between the continents of America and Europe/Africa. It covers an area of about 100,000,000 km², with a length of coastline of about 112,000 km and with an average depth of nearly 4000 m. Covering 22% of the surface of the Earth, it is the second largest of the world’s oceans after the Pacific and is 6.5 times bigger than the USA. The maximum depth is the Puerto Rico trench at 8605 m. The east–west breadth of the ocean varies between 3000 km in the northern part to 6500 km near Antarctica. Although not the largest ocean in area, the Atlantic Ocean receives the waters of all the main rivers of the world: the Mississippi, Orinoco, Amazon, Congo, Niger and many others. The limits of the Atlantic were demarcated by the International Hydrographic Organisation in the year 2000 when they also created a new ocean, the Southern Ocean.
4.1.1 Ecological characteristics

Although the open oceans are still relatively free of human wastes there is a constant increase of marine pollution in coastal waters. The main sources of pollution are the offshore hydrocarbon industry, untreated human sewage and industrial waste. An overload of nutrients in some areas has caused uncontrolled algal blooms, a depletion of oxygen and reduction of animal life. The ecological impact on the Atlantic Ocean is most pronounced in the coastal waters of the countries of Northern Europe.

The surface waters of the open Atlantic are oligotrophic, with areas of a high level of productivity. Areas of mixing of cold and nutrient-rich waters with the warm Gulf Stream are a very special case. With increasing depth there is less and less penetration by light, and the food chain is based increasingly on detritus falling from the surface waters. This mesopelagic zone extends roughly between 200 and 1000 m. Life in these conditions requires highly specialized adaptations. Some species have very large and sensitive eyes, some have luminous organs, and most are transparent to avoid being prey to, for example, squid and crustaceans. Below 1000 m it is completely dark with effectively no light at all; the water temperature is typically 3°C and the quantity of oxygen is very low. Water pressure is enormous, and increases down through the bathypelagic (1000–4000 m), abyssopelagic (4000 m to the ocean floor) and hadopelagic (greatest depths) zones. The fact is that 60% of the Earth is covered by water greater than 1600 m deep, and this dark world is very little known. Although productivity is much less than in shallower regions, submarine exploration has revealed images of many strange and alien-looking creatures, with giant teeth and mouths, long feelers etc. The fish tend to be small, with only minimal bone structures; they are slower moving and even tend to be slower growing. A little light arises from bioluminescence, and about 90% of deep-sea animals produce their own light in order to communicate, to find food and even to evade capture. Some species throw out a bioluminescent liquid to repel predators, some produce light themselves, others carry specialized bacteria that produce light. A considerable migration, from the greater depths to the surface waters and back down, occurs once a day. This migration allows deep-water species to feed on plankton near the surface at night. Some surface species dive to depths below 2000 m to hunt.

From a biological point of view the extensive continental shelf areas, the rapid evaporation rate and high freshwater runoffs that cause a high circulation rate in the Atlantic Ocean are all favourable to the proliferation of life. Many species of plants and animals exist; more species can only be found in the Pacific Ocean. In coastal areas where there is an up-welling of cold nutrient-rich water from deeper layers there can be explosive blooms of plankton. The areas around coral reefs are examples of this effect. Some large species such as whales and other marine mammals exist in the colder parts of the ocean. A few millions tonnes of fish are caught every year. Tuna and some other species are the main catch from most of the Atlantic. Recent years of intensive protection policies by coastal countries have had only a limited success. The UN reports that most areas have been ‘overfished’, and as a result much of the time seasonal or other restrictions on fish catches are in force.

The worst areas of oil pollution in the Atlantic are the Gulf of Mexico, the Caribbean and the North Sea. Much pollution occurs along the coasts of North and South America. Industrial waste is a significant source of pollution in the Baltic, Mediterranean and parts of the North Sea.

4.1.2 Climate

Tropical cyclones (hurricanes) can develop off the coast of Africa near the Cape Verde islands and then move westward into the Caribbean any time from May to December, but are most frequent from August to November. The far northern regions of the Atlantic are usually covered with sea ice in the Labrador Sea, Denmark Strait and Baltic Sea from October to June. Clockwise
warm-water circulating current systems occur in the North Atlantic due to the Gulf Stream, and counter-clockwise warm water systems in the South Atlantic. In the northern Atlantic Ocean there are frequent icebergs between February and August, often with foggy conditions between May and September.

The salinity of the Atlantic is generally higher than in the other oceans, with a maximum of about 35‰ (parts per thousand) in the north and 37‰ in the middle part. Some areas of intensive evaporation such as in the Mediterranean can sometimes reach 39‰. At the higher latitudes precipitation exceeds evaporation and surface salinity decreases. The effect of currents, especially some warm-water currents like the Gulf Stream, can be felt over wide areas of the normally cold northern regions, for example the Norwegian coast, with the cold Labrador Current affecting deeper layers. Generally seawater temperatures in the Atlantic vary from between 2 and 5°C in the higher latitudes to around 30°C near the equator. Although there are now wide claims about global warming as an effect of human activity it is still not definitely proved. Periodic cycles of cooling and warming are frequently recognizable in all parts of the globe.

The northern part of the Atlantic is rich in islands, with a complex and varied coastline. By contrast the southern part has far fewer islands and a simple coastal structure. It is hard to draw clear boundaries between the Atlantic and other oceans; it is more informative to distinguish water masses with different temperature, salinity and density. Such distinctions can be very clear in the North Atlantic with the obvious contrast between the warm Gulf Stream and cold Arctic water mass.

Geologically, the Atlantic is the youngest of the oceans, originating about 180 million years ago with the break up of the Pangea plate. The form and structure of the continental coastlines of America, Africa and Europe support this theory, as does the existence of the Mid-Atlantic Ridge. This process of the widening of the ocean still continues today at a rate of about 1–10 cm/year.

The climate of the North Atlantic Ocean can be generally described as cold and snowy in the winter and wet in the summer. The southern Atlantic is mild to warm in winter and hot in the summer.

Because of their local characteristics, some parts of the Atlantic are particularly significant. Thus the North Sea has long been important as one of Europe’s most productive fisheries. It is also a zone of intense shipping between the countries of Europe and between Europe and the Middle East. A third factor in the economic importance of this area has been the extensive reserves of petroleum and natural gas beneath the seafloor.

The Norwegian Sea under the influence of a branch of the Gulf Stream generally enjoys ice-free conditions. Colder currents mixing with this warm water also create excellent fishing areas, especially around coastal regions of Iceland and Norway and the Shetland and Faroe islands.

The Irish and Celtic Seas have everywhere strong surface tidal currents with a speed of more than 4 knots in St George’s Channel and are locally even stronger elsewhere. The greatest ranges of tide occur on the north-west English coast. Tidal streams enter the Irish Sea from both the north and the south, meeting near latitude 54°N, just south of the Isle of Man.

Herring and whiting are fished, and there is some trawling for cod and flatfish.

### 4.1.3 Natural resources

Oil and gas are significant in the North Sea, the Gulf of Mexico and Caribbean seas. Other important natural resources are fishing, dredging, hunting of marine mammals (seals and whales) and many other species. The exploitation of aragonite sand, gravel aggregates, placer deposits, polymetallic nodules, precious stones etc. is also an important natural resource. Considering coral reefs as the most important areas of fishing, these are most common in the area of the Gulf of Mexico and generally between North and South America, although there are some important reefs close to Africa and Norway.
4.1.4 Economy

The Atlantic Ocean carries some of the world’s most heavily trafficked sea routes, between and within the eastern and western hemispheres. Other economic activity includes the exploitation of natural resources. The Kiel and Suez Canals and the Saint Lawrence Seaway are all very important waterways. Many of the world most important ports and terminals are situated on, or closely linked to, the Atlantic, such as: Alexandria (Egypt), Algiers (Algeria), Antwerp (Belgium), Barcelona (Spain), Buenos Aires (Argentina), Casablanca (Morocco), Colon (Panama), Copenhagen (Denmark), Dakar (Senegal), Gdansk (Poland), Hamburg (Germany), Helsinki (Finland), Las Palmas (Canary Islands, Spain), Le Havre (France), Lisbon (Portugal), London (UK), Marseille (France), Montevideo (Uruguay), Montreal (Canada), Naples (Italy), New Orleans (USA), New York (USA), Oran (Algeria), Oslo (Norway), Peiraiefs or Piraeus (Greece), Rio de Janeiro (Brazil), Rotterdam (the Netherlands), Saint Petersburg (Russia) and Stockholm (Sweden).

4.1.5 Telecommunications

Numerous submarine cables have been laid in the Atlantic Ocean, most of them between continental Europe and the UK, North America and the UK, and in the Mediterranean; numerous direct links via satellite networks also exist above the Atlantic Ocean.

4.1.6 Critical habitats and biodiversity

There are many protected species occurring in some areas and times of the year. Marine mammals, turtles, some species of salmon etc. are under special regulations for hunting, to prevent their complete destruction. The basic aim is to protect the ecosystems upon which some species depend, to prevent the extinction of species and to ensure the recovery of the habitat. Many new directives on both sides of the Atlantic relate to the environment and the protection of species. Among such species plankton biodiversity has a particularly important role, not only from carbon dioxide exchange but also in the controversial research on how large plankton communities can create their own weather systems. There are opposing theories about the causes of changes in temperature, salinity, currents etc. in plankton populations. Special attention to marine flora and fauna is part of EU policy. The principal goals are:

- Full implementation of EU nature legislation to protect biodiversity;
- Better protection for ecosystems, and more use of green infrastructure;
- More sustainable agriculture and forestry;
- Better management of fish stocks;
- Tighter controls on invasive alien species;
- A bigger EU contribution to averting global biodiversity loss.

4.1.7 Bio-geographic importance

The strategic straits in the Atlantic include the Straits of Dover, Straits of Florida, Mona Passage, The Sound (Oresund) and Windward Passage. The equator divides the Atlantic Ocean into the North Atlantic Ocean and South Atlantic Ocean. Branches of the Atlantic are the Gulf of Mexico, the Caribbean, the Baltic, the North Sea, the Mediterranean, the Black Sea, the Weddell Sea and Hudson Bay. As a distinctive feature of the Atlantic Ocean, the Mid-Atlantic ridge at a depth of 3700–5500 m is one of the most important features.

4.1.8 Social and economic value, scientific and cultural significance

Most of the east Atlantic is connected with EU countries. Thus an area of more than 4 million km² with a population of about 400 million people drains into the eastern Atlantic. This includes 27 countries, in which all the main policy decisions are taken on a principle of consensus. The creation of the single market and the corresponding increase in trade and general economic activity has caused the EU to emerge as a significant world power. The EU has adopted a principle of economic growth through investment in
transport, energy and research, based on systems of sustainable development.

The European ‘cultural industry’ employs more than 8 million people. Support is provided for many programmes of cultural events. Opportunities for young artists are offered by the integrated EU market and digital technologies. In many areas of EU policy there is a cultural component (e.g. science, IT technologies, social policy).

4.1.9 Aquaculture

Aquaculture consists of the farming of shellfish, fish and algae and is one of the world’s most rapidly growing economic fields. At present, about 50% of the world’s fish consumption is from aquaculture, with the European percentage being 20%. In Europe aquaculture is focused on fish rather than other farmed species. In 2009 the EC proposed a general strategy for European aquaculture.

Further Reading


4.2 The Main Features of European Atlantic Nautical Tourism

Nautical tourism on the coasts of European Atlantic has developed very much in response to the relatively unfavourable climatic and geological conditions of the region. In its western part many cities and harbours open directly to the Atlantic and harbours have been built with protective sea-walls. In its northern part the low-lying coast and a long struggle to drain the land led to the construction of safe harbours and the subsequent development of nautical tourism required considerable effort and financial investments. The sometimes frozen sea of the Baltic and arctic region has not been allowed to hinder some tourist activity on the water.

The region is subject to tides of varying ranges and special moorings have been developed, such as the sliding mooring that allows boats to rise and fall with the tide (Fig. 4.1).

MARINA INDUSTRY. The marina industry on the European Atlantic coast has developed in accordance with climatic conditions and the impact of the sea (Table 4.1). It is interesting to

<table>
<thead>
<tr>
<th>Marinas and berths</th>
<th>Belgium</th>
<th>Denmark</th>
<th>England*</th>
<th>France</th>
<th>Netherlands</th>
<th>Germany</th>
<th>Portugal</th>
<th>Spain</th>
<th>Sweden</th>
<th>Total European Atlantic</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–100</td>
<td>8</td>
<td>14</td>
<td>5</td>
<td>5</td>
<td>32</td>
<td>26</td>
<td>2</td>
<td>3</td>
<td>7</td>
<td>102</td>
</tr>
<tr>
<td>101–500</td>
<td>9</td>
<td>42</td>
<td>25</td>
<td>32</td>
<td>68</td>
<td>14</td>
<td>16</td>
<td>16</td>
<td>15</td>
<td>237</td>
</tr>
<tr>
<td>501–1,000</td>
<td>2</td>
<td>12</td>
<td>4</td>
<td>27</td>
<td>16</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>5</td>
<td>75</td>
</tr>
<tr>
<td>1,001–2,000</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>13</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>2,001–5,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>&gt;5,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Berths in total*</td>
<td>4,781</td>
<td>19,265</td>
<td>12,723</td>
<td>51,127</td>
<td>35,656</td>
<td>4,093</td>
<td>6,770</td>
<td>10,344</td>
<td>9,137</td>
<td>153,896</td>
</tr>
<tr>
<td>Number of marinas</td>
<td>19</td>
<td>68</td>
<td>36</td>
<td>79</td>
<td>118</td>
<td>40</td>
<td>21</td>
<td>26</td>
<td>29</td>
<td>436</td>
</tr>
<tr>
<td>Average number of berths per marina</td>
<td>25.63</td>
<td>283.31</td>
<td>353.42</td>
<td>647.18</td>
<td>302.17</td>
<td>102.33</td>
<td>322.38</td>
<td>397.85</td>
<td>315.07</td>
<td>352.97</td>
</tr>
</tbody>
</table>

*For England data are only available from South England, that is, for marinas on the English side of the English Channel.
note that private and commercial marinas in the Mediterranean give place to club, sports and communal marinas in the Atlantic. It is obvious that weather conditions and a shorter season do not prevent the development of private commercial marinas, which can be even better observed in the cold Northern Europe rather than on the Atlantic. A typical Atlantic marina is built within enclosed sea areas protected by a large sea-wall. The facilities offered in such marinas are suited to the basic needs of recreational boaters that sail along the Atlantic. Marinas are also usually indented into bays and canals and thus protected from high waves.

**CHARTER INDUSTRY.** The charter industry supplies vessels suited to the demand, which is principally for sailing.

**CRUISING INDUSTRY.** Large-vessel cruising is developed in the European part of the Atlantic, dominated by the fleet of the Carnival UK corporation, whose operations are supported by several universities and institutes providing qualified personnel for their supply. Small cruising is of a local type and is oriented towards excursions.

### 4.2.1 Belgium (North Sea)

Belgium is a small country with a short coastline of only 66 km; even so the marina industry is developing and now has 31 marinas, 19 of which are high quality (Table 4.2).

The limited Belgian coast and its hinterland are not suitable for either small or large cruising, at least not in terms of criteria sufficient for scientific research.

The facts that Belgium has a good geo-strategic position and that it is a well-developed and open country have attracted numerous world-famous companies and institutions.

In terms of support for the development of nautical tourism, it is important to mention the global-strategic corporation Brunswick Marine in EMEA, founded in 1971 and initiated by the US company Mercury Marine. This corporation covers the whole global market with the aim of becoming the best in the world, which it seems to have achieved. They connect many successful and highly profitable industries, from fitness to nautical tourism.

### 4.2.2 Denmark

Denmark is a country intersected with canals and with many large and small off-lying islands. Along its 7314 km of coast there are 443 islands, 419 of which are larger than 100 km² and 72 are inhabited. The intersecting canals and connectivity with the sea do not allow for a simple registering of marinas located by the coast. The inhabitants of islands have developed a coexistence with the sea and all industries of nautical tourism and other industries connected with the sea are developing well.

Denmark has two contrasting coasts: the west coast, which is on the North Sea, and

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<table>
<thead>
<tr>
<th>Basic data</th>
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</thead>
<tbody>
<tr>
<td>Area (in 000 km²)</td>
<td>30,528</td>
</tr>
<tr>
<td>Population</td>
<td>10,839,905</td>
</tr>
<tr>
<td>Coast in total (in km)</td>
<td>66.50</td>
</tr>
</tbody>
</table>

| High quality marinas | 19 |
| Sea marinas in total | 31 |

<table>
<thead>
<tr>
<th>Marinas according to the number of berths in quality marinas (19)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–100</td>
</tr>
<tr>
<td>101–500</td>
</tr>
<tr>
<td>501–1,000</td>
</tr>
<tr>
<td>1,001–2,000</td>
</tr>
<tr>
<td>2,001–5,000</td>
</tr>
<tr>
<td>&gt;5,000</td>
</tr>
<tr>
<td><strong>Total berths</strong></td>
</tr>
</tbody>
</table>

**Coefficient of saturation of coast with marinas:**

- Km coast per marina: 2.15
- Quality marina = 3.50
- Number of quality marina berths per km of coast = 71.89
- Average number of berths per marina = 251.63

*a* according to ADAC (2010) classification

*b* according to http://www.portbooker.com
the east coast on the Baltic and the two channels of the Skagerrak and Kattegat, this part being highly indented with numerous islands.

**MARINA INDUSTRY.** Capacities and type of constructions of marinas are suited to local climatic and geologic features, and for the purposes of statistics Denmark can be naturally divided into five regional groups.

According to one source, Denmark has 114 marinas along the coast and a total of 68 quality sea marinas. About 62% of quality marinas have a capacity of between 101 and 500 berths (Table 4.3).

In terms of size and the number of berths, 20.5% of marinas are small with less than 100 berths and 62% are medium with 101–500 berths. Larger marinas, i.e. those with 501–1000 berths, make up 17.5% of the total number of marinas. It has to be noted that such marinas are rare in Northern Europe.

The principal data on the marinas of Denmark are presented in Table 4.4.

**CHARTER INDUSTRY.** The charter industry has developed mainly in association with marinas and its position makes Denmark a gateway to the Baltic Sea, therefore the charter of yachts is based on sailing around the whole Baltic and not only around the Danish islands.

**CRUISE INDUSTRY.** The cruise industry in Denmark has developed much as in other countries, through the global market and large global companies. Denmark is a macro-destination for cruisers, connecting the Baltic and Arctic cruising through large cruisers specially adapted for such a type of cruising. Small or local cruising relates to single-day excursions around the islands and uses national traditional boats.

The most significant harbour for large cruisers is Copenhagen, but there are other harbours that accept large cruise ships.

4.2.3 **England**

Together with Ireland, Wales and Scotland, England is a huge market in terms of supply and demand in nautical tourism. Regarding educational development in all nautical tourism industries, England is the leading country in Europe. In the marina and cruising business, England is developing associations consisting of marinas or cruising subjects that satisfy their interests and support further development (Fig. 4.2).

**MARINA INDUSTRY.** On the 12,439 km of English coast, the marina industry is highly developed with 301 marinas of all types and with several important marina associations. For example, the ‘Trans-Europe Marinas’ group is an association of 27 marinas that offers members significant benefits. It includes 13 marinas in England as well as 14 in Ireland, France, Belgium, the Netherlands, Portugal and Spain. There are several such marina associations, which is a good indication of the quality of marina development throughout England. For now, only England has a marina

<table>
<thead>
<tr>
<th>Number of berths</th>
<th>Group 1 islands</th>
<th>Group 2 islands</th>
<th>Group 3 islands</th>
<th>Group 4 islands</th>
<th>Group 5 islands</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–100</td>
<td>3</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>101–500</td>
<td>12</td>
<td>19</td>
<td>1</td>
<td>10</td>
<td>–</td>
<td>42</td>
</tr>
<tr>
<td>501–1,000</td>
<td>4</td>
<td>6</td>
<td>–</td>
<td>2</td>
<td>–</td>
<td>12</td>
</tr>
<tr>
<td>1,001–2,000</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2,001–5,000</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>&gt;5,000</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total marinas</td>
<td>19</td>
<td>31</td>
<td>3</td>
<td>13</td>
<td>2</td>
<td>68</td>
</tr>
<tr>
<td>Total berths</td>
<td>5,036</td>
<td>9,229</td>
<td>405</td>
<td>4,630</td>
<td>66</td>
<td>19,265</td>
</tr>
</tbody>
</table>
development with international links. Apart from this internationalization, English marinas are very often linked into groups. For example, Sutton Harbour Marina (Plymouth, UK) has 490 berths and consists of three independent marinas, West Pier Marina, Guys Quay Marina and Sutton Harbour Marina. Marinas on the English coast are generally sheltered from sea waves and are completely protected and very often linked to town destinations. As a rule, these are marinas belonging to sports clubs with facilities for many water sports, such as diving, sailing and fishing and so on. In terms of the quality and scale of what is offered, marinas are adapted to the local population, members and boaters who sail into the marina. This is one of the reasons, in a commercial sense, why ADAC only singles out 36 marinas with 12,723 berths (Table 4.5).

The majority of quality marinas are relatively small, between 101 and 500 berths. Ireland, as far as is known, on its coast of 1448 km has 55 sea marinas of all types, but ADAC does not recommend any to its members, insofar as it offers no statistical analysis.

CHARTER INDUSTRY. The charter industry has developed in conjunction with marinas, and the supply of vessels and services for charters is large. England is one of the leading manufacturers of yachts and mega-yachts, and such yachts dominate the charter supply. The cost of charters and marinas is up to 50% higher than that of similar ones in the Mediterranean.

CRUISE INDUSTRY. The large-vessel cruise industry has developed on the English coast with the support of quality destinations and ports. A part of the cruise industry is associated with specialized departments of certain English universities that have, through their research, significantly contributed to the development of mainly the Carnival UK Corporation. In this context the universities of Plymouth and Southampton are particularly

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**Table 4.4. Marinas in Denmark according to the number of berths (2010) (source: ADAC, 2010; http://www.portbooker.com and other statistics).**

<table>
<thead>
<tr>
<th>Basic data</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (in 000 km²)</td>
<td>43,094</td>
</tr>
<tr>
<td>Population</td>
<td>5,475,000</td>
</tr>
<tr>
<td>Coast in total (in km)</td>
<td>7,314</td>
</tr>
</tbody>
</table>

| High quality marinas | 68 |
| Sea marinas in total (without islands) | 114 |
| Marinas according to the number of berths in quality marinas (68) | |
| 0–100 | 14 |
| 101–500 | 42 |
| 501–1,000 | 12 |
| 1,001–2,000 | 0 |
| 2,001–5,000 | 0 |
| >5,000 | 0 |
| Total berths | 19,265 |

Coefficient of saturation of coast with marinas:

- Km coast per marina:
  - Total = 64.16
  - Quality marina = 107.56
- Number of quality marina berths per km of coast = 2.63
- Average number of berths per marina = 283.31

*aaccording to ADAC (2010) classification
*baccording to http://www.portbooker.com

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**Fig. 4.2.** Marinas on the English Channel: (a) Brighton and (b) Port Solent Marina, UK (source: Premier Marinas).
significant. Nautical tourism, and in particular the cruising industry, is also a thematic area for teaching at Oxford and Cambridge universities, where the world-renowned researcher Prof. Ross K. Dowling, PhD is a frequent guest. Large cruiser operation in England deserves more attention and is dealt with in more depth in Section 4.4 in which co-author Prof. Philip Gibson, PhD analyses cruising in the UK. Cruising with small cruisers is very developed, but only for one-day sailing for visits to famous English destinations.

4.2.4 France

Both in its Mediterranean and Atlantic markets France is a respected world power in tourism.

Marina Industry. Along the 2877 km of French coast the marina industry is developing through 79 quality marinas with 51,127 berths.


<table>
<thead>
<tr>
<th>Basic data</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (in 000 km²)</td>
<td>130,395</td>
</tr>
<tr>
<td>Population</td>
<td>50,431,700</td>
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<tr>
<td>Coast in total (in km)</td>
<td>12,429</td>
</tr>
<tr>
<td>High quality marinas</td>
<td>36</td>
</tr>
<tr>
<td>Sea marinas in total</td>
<td>301</td>
</tr>
<tr>
<td>Marinas according to the number of berths in quality marinas (36)</td>
<td></td>
</tr>
<tr>
<td>0–100</td>
<td>5</td>
</tr>
<tr>
<td>101–500</td>
<td>25</td>
</tr>
<tr>
<td>501–1,000</td>
<td>4</td>
</tr>
<tr>
<td>1,001–2,000</td>
<td>2</td>
</tr>
<tr>
<td>2,001–5,000</td>
<td>0</td>
</tr>
<tr>
<td>&gt;5,000</td>
<td>0</td>
</tr>
<tr>
<td>Total berths</td>
<td>12,723</td>
</tr>
<tr>
<td>Coefficient of saturation of coast with marinas:</td>
<td></td>
</tr>
<tr>
<td>Km coast per marina:</td>
<td></td>
</tr>
<tr>
<td>– Total = 41.29</td>
<td></td>
</tr>
<tr>
<td>Average number of berths per marina = 353.42</td>
<td></td>
</tr>
</tbody>
</table>

On both its coasts, the Mediterranean and the Atlantic, France has a total of 406 marinas of all types, which puts it into the category of countries with a highly developed marina industry in tourism. It is interesting to note that quality marinas are frequently canal marinas, with the canals in which they are situated connected to the sea (Table 4.6).

In marina development France is directed towards building larger capacity marinas. In terms of size and quality on the Atlantic the marina of Port d’Arcachon with 2700 berths stands out.

Charter Industry. Together with the marina supply, a wide range of supply in the charter industry is also developing. This consists mostly of a number of world charter companies that keep their vessels in French marinas on the Atlantic coast.

Table 4.6. Marinas in France, the Bay of Biscay and the English Channel (Atlantic) and on inland waterways connected to the sea (2010) (source: ADAC, 2010; http://www.portbooker.com and other statistics).

<table>
<thead>
<tr>
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<th></th>
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</thead>
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<td>Area (in 000 km²)</td>
<td>674,843</td>
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<tr>
<td>Population</td>
<td>65,447,374</td>
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<td>Coastline: English Channel and Atlantic total (in km)</td>
<td>2,877</td>
</tr>
<tr>
<td>High quality marinas</td>
<td>79</td>
</tr>
<tr>
<td>Sea marinas total</td>
<td>406</td>
</tr>
<tr>
<td>Marinas according to the number of berths in quality marinas (79)</td>
<td></td>
</tr>
<tr>
<td>0–100</td>
<td>5</td>
</tr>
<tr>
<td>101–500</td>
<td>32</td>
</tr>
<tr>
<td>501–1,000</td>
<td>27</td>
</tr>
<tr>
<td>1,001–2,000</td>
<td>13</td>
</tr>
<tr>
<td>2,001–5,000</td>
<td>2</td>
</tr>
<tr>
<td>&gt;5,000</td>
<td>0</td>
</tr>
<tr>
<td>Berths in total</td>
<td>51,127</td>
</tr>
<tr>
<td>Coefficient of saturation of coast with marinas:</td>
<td></td>
</tr>
<tr>
<td>Km coast per marina:</td>
<td></td>
</tr>
<tr>
<td>– Total = 7.09</td>
<td></td>
</tr>
<tr>
<td>– Quality marina = 36.42</td>
<td></td>
</tr>
<tr>
<td>Number of quality marina berths per km of coast = 17.77</td>
<td></td>
</tr>
<tr>
<td>Average number of berths per marina = 647.18</td>
<td></td>
</tr>
</tbody>
</table>

⁴According to ADAC (2010) classification only in marinas in southern England
⁵According to http://www.portbooker.com
The cruise industry is developing throughout the Atlantic coast of Europe, and routes that connect France with all countries on the European Atlantic coast are being established.

Small-boat cruising on the French coast is carried out as it is everywhere with smaller traditional cruisers and mainly with one-day excursions.

Supporting industries. It should be mentioned that France is one of the more significant manufacturers of yachts and their charter companies mainly offer domestically manufactured vessels.

4.2.5 The Netherlands (North Sea)

The Netherlands is another European country highly active in nautical tourism and all of its sub-industries are constantly being developed.

Marina industry. The Netherlands’ marina industry has developed along the 451 km of the Atlantic coast, but considerably more so in the country’s hinterland. Along the coast the Netherlands have a total of 85 marinas and 118 high quality marinas with 35,656 berths. The Netherlands is a country with a population to boat ratio of 2:1, which, when the conditions are compared to the Mediterranean, where the ratio is far higher (around 36:1 in Italy, for example), is remarkable. The boat in the Netherlands is treated as a means of transport on a par with the automobile, and without which transport would be impossible. The reason for this is the particular character of the Netherlands, which is known as a country of land ‘stolen’ from the sea. A system of dykes encloses areas of land that are below sea level and protect the people of the Netherlands who are in every way linked to the sea. Life in the Netherlands is linked to navigation on numerous canals and the system of the connection of canal transport and roads in the Netherlands is the most perfect in Europe (Fig. 4.3).

Frequently marinas in the Netherlands are connected to some other tourist hospitality supply; for example, it is very often the case that in conjunction with a marina there is a camp-site, or not far from the marina a well-known Dutch cheese might be produced on a small family farm. Very good connections with all industries in all tourist destinations have been developed, and in particular in towns (Table 4.7).

Charter industry. The charter industry in Dutch waters has been adapted to both the sea and the inland waterways. The Netherlands is a significant manufacturer of large and small yachts and their own boat-builders dominate the local yacht supply.

Cruise industry. The cruise industry in all destinations is developing very intensively in both large and small cruising. Two important ports stand out: Rotterdam and Amsterdam. The famous Holland America Line cruising

Fig. 4.3. (a) Main dyke on the North Sea (IJsselmeer) and combination of road and canal traffic in Monnickendam, the Netherlands (source: the author).
company, now 137 years old, has its headquarters in Seattle (USA). The company has about 15 large cruisers and annually sails around 500 cruising routes making contact with about 350 ports in 100 countries. It is not a member of the Carnival UK cruise corporation, but operates independently and is on a recognized list of the best companies.

Cruising with small local cruisers is well developed with traditional Dutch cruisers in tourist destinations and more modern tourist boats in towns (Fig. 4.4).

**Supporting Activities.** Support for the development of all nautical tourism industries, and in particular cruising, is supplied by numerous Dutch universities that have departments for the training of staff and for research into cruising (e.g. the University of Svenson).

The costs of sailing and other services in nautical tourism are similar to those in the Mediterranean.

### 4.2.6 Germany (North Sea)

The nautical tourism industry in Germany is highly developed, even though the Germans say that it is limited compared to the Mediterranean. Even though tourism makes a contribution of around 4–5% to the GDP, which means that nautical tourism contributes less than 1%, it nevertheless represents a considerable market supply in all nautical tourism industries. Germany has developed its nautical tourism, at least regarding investment, mostly on the calmer Baltic coast and its rivers and lakes. The natural conditions on Germany’s cold North Sea coast may not seem highly conducive to nautical tourism, though there has been some development on its islands with numerous events and regattas that link the nautical tourism industry to other industries. Such development is more apparent on the Baltic coast with its milder climate and more sheltered conditions. The Kiel Canal (Nord-Ostsee-Kanal) at 98.26 km in length that connects the North Sea and the Baltic is a significant factor for German sea transport and nautical tourism development.

With regard to Germany, it is important to note the well-developed model of sustainable development and destination partnership management, in the sense of cooperation between the fishing industry, marine and fishing institute, as well as with higher education institutions that deal with the sea. In this way not only is sea ecology maintained but fish farming is monitored and maintained within the framework of the principles of sustainable development together with international treaties on marine protection. Regarding nautical tourism support, in particular in the tempestuous North Sea, the search and rescue (SAR) company DGzRS has specially trained and equipped crews for sea rescue. All nautical tourism industries are well represented with certain specific features.

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<table>
<thead>
<tr>
<th>Basic data</th>
<th></th>
</tr>
</thead>
<tbody>
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<tr>
<td>Population</td>
<td>16,587,551</td>
</tr>
<tr>
<td>Coastline total (in km)</td>
<td>451</td>
</tr>
</tbody>
</table>

| Marinas (all) high quality       | 118      |
| Sea marinas total                | 85c      |

<table>
<thead>
<tr>
<th>Marinas according to the number of berths quality marinas (118)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0–100</td>
<td>32</td>
</tr>
<tr>
<td>101–500</td>
<td>68</td>
</tr>
<tr>
<td>501–1,000</td>
<td>16</td>
</tr>
<tr>
<td>1,001–2,000</td>
<td>2</td>
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<tr>
<td>2,001–5,000</td>
<td>0</td>
</tr>
<tr>
<td>&gt;5,000</td>
<td>0</td>
</tr>
</tbody>
</table>

| Berths in total         | 35,656   |

Coefficient of saturation of coast with marinas:
- Km coast per marina:
  - Total = 5.31
  - Quality marina = 3.82

Number of quality marina berths per km of coast = 79.06
Average number of berths per marina = 302.17

---

*According to ADAC (2010) classification

*According to http://www.portbooker.com

*The number of sea marinas (85) is less than the number of quality marinas according to ADAC (118) because http://www.portbooker.com views sea-coast marinas very strictly and does not include canal marinas, regardless of whether they are connected to the sea. This is not the case with ADAC.
MARINA INDUSTRY. Germany’s marina industry in the North Sea is exposed to low temperatures and strong winds and waves. It is well covered by the SAR sea rescue service, which is one of the best known rescue services in the world.

All marinas in Germany and the North Sea belong to sports clubs and their members. Given the unfavourable weather conditions, marinas are well equipped with basic facilities necessary for boaters and yachts. In principle, they link their marina supply to the supply of some other tourist industries such as, for example, on the island of Helgoland. On that island, which is exposed to the largest waves, the marina is built on the relatively protected side of the island and has good hospitality facilities. The total supply of that small island in the North Sea is much esteemed despite the weather conditions. Apart from Helgoland, German investors on Sylt Island have developed an elite tourism supply that complements four marinas with from 200 berths per marina. It is certainly necessary to point out the €500m project Port Olpenitz, which is being constructed on the East Sea location (54°39.5’N, 10°02.5’E). That project is for one of the biggest and best equipped marinas in this part of Europe, with 2500 berths, and which will be an important part of an elite tourism project that will have a supply of elite villas with around 6000 beds and two high category hotels with 375 rooms, pools, ski centres and so on.

Marinas in the North Sea are small in capacity, but they are well organized (Table 4.8).


<table>
<thead>
<tr>
<th>Basic data</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (in 000 km²)</td>
<td>357,111,91</td>
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<tr>
<td>Population</td>
<td>81,758,000</td>
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<tr>
<td>Coastline total (in km)</td>
<td>450</td>
</tr>
</tbody>
</table>

| High quality marinas | 40 |
| Sea marinas total   | 259 |

Marinas according to the number of berths in quality marinas (40):

<table>
<thead>
<tr>
<th>Range</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–100</td>
<td>26</td>
</tr>
<tr>
<td>101–500</td>
<td>14</td>
</tr>
<tr>
<td>501–1,000</td>
<td>0</td>
</tr>
<tr>
<td>1,001–2,000</td>
<td>0</td>
</tr>
<tr>
<td>2,001–5,000</td>
<td>0</td>
</tr>
<tr>
<td>&gt;5,000</td>
<td>0</td>
</tr>
</tbody>
</table>

Berths in total: 4,093

Coefficient of saturation of coast with marinas:

- Total = 1.74
- Quality marina = 11.25

Number of quality marina berths per km of coast = 9.10

Average number of berths per marina = 102.33

*According to ADAC (2010) classification

*According to http://www.portbooker.com (Baltic and Atlantic together)

CHARTER INDUSTRY. Germany’s charter industry in the North Sea does not offer a large number of vessels but is sufficient for the demand. Charter is generally more oriented to calmer seas and reflects the demand.

CRUISING INDUSTRY. Germany’s cruising industry in the North Sea is well developed and two
important destinations are Bremen and Hamburg. Bremen is linked with the port of Bremerhaven, which is itself an interesting destination in its own right (Fig. 4.5). Hamburg is a significant destination and port, which can be reached by canal. Each of these ports is adapted to the natural conditions and to the conditions that the destination’s management has created. In both cases the port and the tourist destination have developed together, offsetting in that way the unfavourable influences of the sea and climate. Another significant German cruising destination in the North Sea is the town and port of Cuxhaven.

The large-cruiser cruise industry has been developed by several world cruise companies and in particular by cruisers belonging to the German company AIDA, which now has nine large ships and by 2013 will have 12.

The islands close to Cuxhaven support the development of trip tourism using small cruisers.

German investors in the North Sea region, either as a group of investors or as individuals, own medium-sized cruisers, such as, for example, the Marco Polo. Some of them run independently and some operate through specialized agencies.

Cruising with small traditional cruisers in the German part of the North Sea coast is relatively developed, but only as local trip tourism.

**Supporting Activities.** The development of nautical tourism, in particular the cruising industry, is supported by a few universities for applied science, which have cruising departments and chairs, such as the Institut für Wirtschaftsinformatik, University of Hanover.

The publication *Berlitz* is significant for development in cruising, and comes out annually as an overview of all large world cruisers, with its descriptive and copious amounts of information of interest to potential cruiser travellers.

### 4.2.7 Portugal

Portugal in tourism, as in the economic sphere, is developing under the influence of its large European sister, Spain.

**Marina Industry.** Portugal’s marina tourism industry is developing along its 1793 km Atlantic coast and the shorter length of the southern Algarve coast, which has a more Mediterranean character.

Portugal has 61 marinas, of which ADAC has categorized 21 as high quality with 6770 berths (Table 4.9).

Portugal’s marinas have a smaller capacity and because of the influence of the Atlantic and large and powerful waves, every town has a strong harbour wall within which the port and marina are constructed.

**Charter Industry.** The charter industry is developed within attractive tourist destinations and towns along the Portuguese coast.

**Cruise Industry.** The large-vessel cruise industry is developed through facilities in ports that dock large cruisers. Here, Lisbon is the leader and is joined by Porto.

Cruising with small traditional cruisers is developed day-trip tourism, linked to attractive tourist destinations along the Portuguese coast.

![Fig. 4.5.](a) The Maritime Museum and (b) marina at Bremerhaven (source: the author).
SUPPORTING ACTIVITIES. As supporting activities in nautical tourism, pontoon production and equipment for mooring yachts is developing. The world renowned Marinetek NCP Company is a top manufacturer of pontoons in Europe and is broadening its activities with new manufacture in Portugal.

4.2.8 Spain (Atlantic)

Spain’s Mediterranean coast is one of the most successful areas of nautical tourism, and to some extent that continues on its shorter Atlantic coast.

MARINA INDUSTRY. The marina industry on the Atlantic coast has developed mainly through smaller marinas that are well protected from the influence of large and powerful waves from the Atlantic.

The marinas of the Atlantic coast of Spain are mainly of smaller capacity than in the Mediterranean and, on 950 km of coast, 26 quality marinas have been built with 10,344 berths (Table 4.10).

CHARTER INDUSTRY. Because of the smaller capacity of the marinas as well as the smaller demand from boaters for marina supply on the Spanish Atlantic coast, the charter industry, in a somewhat smaller scope, has adapted its supply to the accentuated demand.

CRUISE INDUSTRY. The large-cruiser industry in ports and destinations on the Spanish Atlantic coast is considerably less developed than on the Mediterranean. Trip cruising with traditional small boats is of a local nature and often linked with hotels and other tourist facilities.

4.2.9 Sweden

Sweden as a Northern European country has three interesting characteristics from the point


<table>
<thead>
<tr>
<th>Basic data</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Area (in 000 km²)</td>
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<td>Population</td>
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<tr>
<td>Coastline total (in km)</td>
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<tr>
<td>High quality marinas</td>
<td>21</td>
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<tr>
<td>Sea marinas total</td>
<td>61</td>
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</tr>
<tr>
<td>Marinas according to the number of quality marina berths (21)</td>
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<td></td>
</tr>
<tr>
<td>0–100</td>
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<tr>
<td>2,001–5,000</td>
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<td></td>
</tr>
<tr>
<td>&gt;5,000</td>
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<td></td>
</tr>
<tr>
<td>Berths in total</td>
<td>6,770</td>
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<tr>
<td>Coefficient of saturation of coast with marinas:</td>
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<td></td>
</tr>
<tr>
<td>Km coast per marina:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Total = 29.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Quality marina = 85.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of quality marina berths per km of coast = 3.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average number of berths per marina = 322.38</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*aAccording to ADAC (2010) classification


<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
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<tr>
<td>Coastline total (in km)</td>
<td>950</td>
<td></td>
</tr>
<tr>
<td>High quality marinas</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Sea marinas total</td>
<td>556</td>
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<tr>
<td>Marinas according to the number of quality marina berths (26)</td>
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<td></td>
</tr>
<tr>
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<td>101–500</td>
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<tr>
<td>501–1,000</td>
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<td>2,001–5,000</td>
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<td></td>
</tr>
<tr>
<td>&gt;5,000</td>
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<tr>
<td>Berths in total</td>
<td>10,344</td>
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</tr>
<tr>
<td>Coefficient of saturation of coast with marinas:</td>
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<td></td>
</tr>
<tr>
<td>Km coast per marina:</td>
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<td></td>
</tr>
<tr>
<td>– Total = 1.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Quality marina = 36.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of quality marina berths per km of coast = 10.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average number of berths per marina = 397.85</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*aAccording to ADAC (2010) classification

*bAccording to http://www.portbooker.com
of view of nautical tourism. It is a highly developed European country with a long Baltic coast and around 450 km on the Skagerrak, which is effectively part of the North Sea, and the Kattegat, which is connected to the Baltic to the east.

In these channels the coast is indented and is full of islands, which Sweden and Denmark, each within their state borders, have developed and use for nautical tourism. Part of the area is situated above the 66.56 parallel, i.e. the Arctic Circle.

Of the 3218 km of Swedish coast, the significantly smaller part is situated on the North Sea, while a larger part is dominantly situated on the Baltic, making Sweden the country with the longest coast on the Baltic Sea.

MARINA INDUSTRY. The Swedish marina industry on the North Sea, i.e. on the Skagerrak, has developed over 29 high-quality marinas with 9137 berths, and some less equipped local marinas. In that area Sweden mainly has medium and large marinas, as for example Rää marina with 1100 berths and Limhamn marina with 1100 berths (Table 4.11).

CHARTER INDUSTRY. The Swedish charter industry in the North Sea is characterized by boats appropriate for sailing in the North Sea, for which conditions Swedish skippers are trained.

CRUISE INDUSTRY. The cruise industry, in respect of large cruisers, has developed in a very similar way to other Northern European countries and is very much an international business and cruisers sail under all flags. Sweden is only one of the main destinations of interest to large cruisers in their sailing routes in the Scandinavian region. Small cruising is organized as trip tourism and connects tourist destinations on the Swedish coast.

SUPPORTING ACTIVITIES. Sweden is a developed maritime and tourist country with high standards, and is a manufacturer of vessels of various lengths and types. The marina industry is developed with the support of other powerful Swedish industries, e.g. the automobile industry sponsored one of the largest Ocean Match Races, the Volvo Ocean Race, which in 2011 started in Alicante (Spain) and finished in Galway (Ireland), and which gathers all of the most famous world names of professional skippers who compete on a trip around the world (Fig. 4.6).

The regatta route as well as other points of interest was covered by specialized TV channels, which in that way support the development of the nautical tourism industry.

Capital linked to that regatta exceeds the national budgets of smaller European countries. Compared to capital and industries that are connected, for example, to the popular Formula 1 racing, trans-oceanic races could be considered as even more significant.


<table>
<thead>
<tr>
<th>Basic data</th>
<th>45,295</th>
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<td>Area (in 000 km²)</td>
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<td>Population</td>
<td>9,415,570</td>
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<tr>
<td>Coastline total (in km)</td>
<td>3,218</td>
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<table>
<thead>
<tr>
<th>High quality marinas</th>
<th>29</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sea marinas total</td>
<td>141</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marinas according to the number of quality marina berths (29)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–100</td>
</tr>
<tr>
<td>101–500</td>
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<tr>
<td>501–1,000</td>
</tr>
<tr>
<td>1,001–2,000</td>
</tr>
<tr>
<td>2,001–5,000</td>
</tr>
<tr>
<td>&gt;5,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Berths in total</th>
<th>9,137</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Coefficient of saturation of coast with marinas:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Km coast per marina:</td>
</tr>
<tr>
<td>Total = 22.82</td>
</tr>
<tr>
<td>Quality marina = 110.97</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of quality marina berths per km of coast = 2.84</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average number of berths per marina = 315.07</td>
</tr>
</tbody>
</table>

*aAccording to ADAC (2010) classification
*bAccording to http://www.portbooker.com

**Web Resources**

http://www.portbooker.com
Fig. 4.6. Volvo Ocean Race Route 2011–2012 (source: ‘Volvo Ocean Race’).
4.3 The Main Features of European Atlantic Cruising Industry Ports

Cruise ship ports, indeed all ports receiving large ships, operate strict systems of control so that familiarity with local regulations is essential for visiting ships. The Port Authority will assign them an exact position to moor or anchor, and the Master must be in constant radio contact during arrival and departure and provide specific information about the ship, such as name, International Maritime Organization (IMO) or MMSI number – meaning the call sign, radio station identity, state of registration, ETA (estimated time of arrival), ETD (estimated time of departure) and name of the last port of call. Also information must be provided about their route, the health of passengers and crew, immigration and customs formalities and technical details of the ship – maximum present static draught in metres, waste systems, security, dangerous goods carried and any other important information. A crew and passenger list must be provided prior to arrival and whether a deep sea or local pilot is on board or if one is required. For all this there are international forms. A valid International Ship Security Certificate must be provided, along with information on their current security level, the name of the Ship Security Officer, name of the Authority that issued the ISPS certificate, and a report on the ship’s capability to execute the Ship Security procedures. Before departure a clearance certificate from customs must be obtained.

All this information will be supplied to the local ship agent, who will pass it on to the Harbourmaster’s office in the form of an EDI (Electronic Data Interchange) standard message.

The main responsibility of the harbour office is to constantly manage sea transport through traffic forecasts, traffic control, berthing of ships, navigation assistance, radar coverage, radio connections, collection and dissemination of information, coordination of operations and control of peripheral equipment. It also has to monitor the movement of all shipping in its area in addition to the arrivals and departures of ships. It is also in charge of policing the harbour area, monitoring dangerous goods and organizing pollution control.

In accordance with Marpol 73/78, the International Convention for the Prevention of Pollution from Ships, and EU Directive 200/59/EG, ports are obliged to provide facilities for the reception of residues of oil and noxious liquid substances and other waste. Port facilities must be adequate to meet the needs of ships using them without causing any delay. Concessions have been granted by all cruises ports to a number of companies that contracted to collect or receive and process different types of waste from ships at set tariffs organized through the shipping agent. ‘EcoPort’ status can be obtained by any port within the broad European Sea Ports Organization (ESPO) membership upon the completion of a Self Diagnosis Method (SDM) checklist. Additional credit is provided to ports that are certified with PERS, the only port-sector specific environmental management standard, and ISO 14001. In general, all details of port facilities in a specific country and port facility security officers can be found on the link http://gisis.imo.org. All ports have their own set of procedures for spills, collisions, groundings, fire and for the evacuation of a ship or the port area.

4.3.1 Port management and ownership

To consider a few specific examples of major ports: the Antwerp Port Authority gives land, warehouses, covered area and quays as concessions to private operators. The Port Authority manages the utility lines, pipes and wind turbines in conjuction with other companies.

The Port of Zeebrugge is managed by the autonomous Port Authority MBZ NV as a company regulated by public law. The city of Bruges is the main shareholder. The Port Authority is responsible for the construction of quay walls and jetties, road works and the maintenance of the specified infrastructure. Private enterprises have the concession for the port area.

The role of the Port of Rotterdam Authority is to enhance their competitive position as a leading logistic hub and industrial complex. As a public limited company with two shareholders, the Municipality of Rotterdam and the Dutch State, the Port Authority
operates in the domain of shipping and the port industrial area, and also invests in the development of the existing port area and of new port sites, such as Maasvlakte 2, public infrastructure and the handling of shipping.

The Port of Dover has been operated as a trust port for over 400 years. At the beginning of 2009, the Government issued Modernising Trust Ports Edition 2. As a consequence, major trust ports had to review their corporate structures and present their proposals for restructuring by April 2010. A voluntary scheme was submitted to the Government for permission to introduce private capital into the port. The goal is to expand business whilst delivering community benefit through the establishment of the Port of Dover Community Trust as an independent agency that would be run by the community for the community, with a direct stake in the success of the port.

The Port of Le Havre is managed by a state agency called Port Autonome du Havre. The Grand Port Maritime du Havre (Le Havre Port Authority) was established in 2008 replacing the Port of Le Havre. Grand Port is a public institution responsible for administrative public service tasks and missions of industrial and commercial public service; it is managed by a management board of four members and a supervisory board of 17 members elected from State representatives, employees, the local community and the Chamber of Commerce and Industry. It is operated as a public institution of trade and industry, and is responsible for the management of all port facilities in its district.

The port also has the Development Board of the Grand Port Maritime du Havre (GPMH) which comprises 30 member representatives of the port community, personnel representatives of the companies working in the port, representatives of the regional and local authorities and their grouping situated in the port administrative boundaries.

The Port Authority of Amsterdam manages, operates and develops the port by order of the Amsterdam City Council. The port area covers more than 1900 ha including port estates, quays, roads, railway tracks, green spaces and another 600 ha of waterways. Amsterdam Seaports includes the ports of Amsterdam, Zaanstad, Beverwijk and Velsen/Ijmuiden. In 1989 the Staatsvissershavenbedrijf (Ijmuiden Fishing Port Authority) was privatized by the establishment of Zeehaven Ijmuiden NV as the private manager, developer and owner of the Port of Ijmuiden. This structure of a private port manager with the participation of companies and authorities is unique in the Netherlands. Zeehaven Ijmuiden NV has responsibility for the development of the Port of Ijmuiden.

The Hamburg Port Authority (HPA) was established in October 2005 in the course of the merging of the port-related competencies of different authorities. The main principle of the HPA is that of ‘one face to the customer’. That means that HPA is the central contact agency for all questions relating to infrastructure, navigational and operational safety and port security, property management and economic conditions in the port and other issues.

In Bremen the Public Port authority, or Hansestadt Bremerisches Hafenamt, is responsible for all management functions in the port area in the municipality of Bremen, including the Port Authorities for Bremerhaven and Bremen. The Port Authority manages shipping traffic control, port safety and security with licensed service providers for safety-related services, prevention of risk and remittance of the seamen’s employment office. It is also in charge of infrastructure works such as building, road traffic, waterways, waste management and soil protection for the overseas port area in Bremerhaven, which is included in the municipality of Bremen.

The Autoridad Portuaria A Coruña (the A Coruña Port Authority) is responsible for managing and operating the Port of A Coruña. It coordinates port and transport operations and manages and controls all port services. The port authority plans developments, oversees construction and ensures that regulations are observed.

4.3.2 Port infrastructure and superstructure

One important objective of a port is to develop and maintain their facilities in line with international standards. Although their
infrastructure may vary in the level of modernization and organization, there are international regulations that they are required to meet. (These are considered in Section 3.3 in the Mediterranean section).

The Port of Antwerp is the second largest port in Europe for international freight shipping with enormous storage capacity. Antwerp is located at the upper end of a tidal estuary, which is navigable by ships as far as 80 km inland. The Port of Antwerp is the most extensive port area in the world, covering 13,057 ha, with 157 km of quays, six locks, 21 bridges, 30 docks and 266 buoys on the River Scheldt. The port has inland connections by rail, waterway and road, and to the historical heart of the city.

The Port of Zeebrugge-Bruges is a large ferry port in Belgium located on the North Sea that also has a terminal for cruise ships to dock at the Swedish Quay. Zeebrugge is a gateway to Brussels, Bruges and Ghent, and its own seafront promenade is within walking distance of the dock. The port is about 2 km away from Blankenberg and 15 km away from Brugge, which can be reached by train or bus from Blankenberg. In 2011, Zeebrugge welcomed 75 cruise ships and approximately 245,000 cruise passengers.

The Cruise Terminal of Rotterdam is situated in the heart of the city. To reach the port cruise ships proceed for about 2 h on the New Waterway, without locks or draft restrictions, to the historic Rotterdam Cruise Terminal at the Holland America quay. Cruise ships have a manoeuvring area in the port and can turn around in front of the terminal at Rijnhaven (turning circle about 260 m) or at Walhaven (turning circle about 360 m). The quay and terminal in Rotterdam can accept the largest ships currently in use. The port offers all relevant services, such as bunkering, waste disposal, food and water supplies, etc. In 2010, the Tourist Office and the Grand Port Maritime du Havre (GPMH) signed an agreement aimed at fostering the development of the cruise trade in Le Havre. The port established first-class technical facilities in full accord with the ISPS safety and security standards, and is fully equipped with a new baggage scanner, baggage handling area and check-in counters to accommodate passengers under optimum conditions.

The Port of Dover is a commercial, ferry and cruise port with modern transport links and award-winning customer service. The port is less than 2 h from London and is perfect for both turnarounds and for port of call visits. The Port of Dover is the second largest cruise port in England. The Cruise Port facilities are located in the Western Docks with two dedicated terminals.

Portland Port is one of the world’s largest man-made harbours and offers a gateway to some of Britain’s most fascinating inland attractions. Portland’s easy access to the main Channel shipping lanes is unrivalled along the south coast of England.

The Port of Cherbourg is located in Normandy at the entrance to the English Channel and has the world’s largest artificial harbour covering an area of about 1500 ha. The artificially constructed sea-walls shelter the commercial harbour and allow it to be a safe port, protected from rough weathers, strong winds and swells.

Cruise passengers call at Le Havre when travelling to Paris. Le Havre has the slogan of the Gateway to Paris’. The Port of Le Havre has the infrastructure capacity to accommodate any type of cruise ship. The port consists of a series of canal-like docks, the Canal de Tancarville and the Grand Canal du Havre, that connect Le Havre to the Seine, close to the Pont de Tancarville, 24 km upstream. The facilities designed for passengers are situated in a tidal dock directly at the port entrance. There are two piers at the Pointe de Floride, both designed for cruise ships and of an overall length of 1080 m. The harbour is accessible 24 h a day. The port offers all relevant services, such as bunkering, waste disposal, food and water supplies, etc. In 2010, the Tourist Office and the Grand Port Maritime du Havre (GPMH) signed an agreement aimed at fostering the development of the cruise trade in Le Havre. The port developed first-class technical facilities in full accord with the ISPS safety and security standards, and is fully equipped with a new baggage scanner, baggage handling area and check-in counters to accommodate passengers under optimum conditions.

Nantes is located in western France on the Loire river, 25 km from the Atlantic coast. The Port of Nantes Saint-Nazaire provides all the services that can be expected from a transit port with three passenger terminals.

The Port of Amsterdam is at the seaward end of the North Sea Canal, which gives access to the heart of the city whose Passenger Terminal is situated 25 km inland up the canal. In Ijmuiden itself cruise ships berth at the Felison Terminal. The port is located 30 min
away from both Amsterdam city centre and Schiphol airport. Ijmuiden is a starting point for the Baltic, UK and North Cape cruising.

In 2012, it is estimated that 194 cruise ships will dock at Amsterdam and Ijmuiden together, and about 1350 river cruise ships will berth at the capital city. Cruise ships dock at the Amsterdam Passenger Terminal by the De Ruijterkade and in the eastern port area, which is a 10-min walk from the downtown area.

Passengers taking river cruises up the Rhine and heading for Germany and Switzerland embark from piers adjacent to the Amsterdam Central Railway Station. The facilities of the Passenger Terminal Amsterdam include 600 m of quays with a water depth of 10.5 m; vessels can moor both to port and starboard and under normal weather conditions; ships up to 330 m can easily turn in the terminal.

The Port of Hamburg is one of the greatest harbours in the world with 320 berths for ocean-going ships and 199 berths for general cargo and bulk traffic, 145 berths at dolphins, 83 berths for coastal shipping and 38 berths dedicated to container ships and bulk cargoes. Berths have depths alongside from 7 to 17 m. The Port of Hamburg has 55 landing facilities, 177 bridges, 170 km of public roads within the port and 350 km of railway tracks. The port covers a total of 18,000 ha of hard-surface terminal areas. The further development of the port infrastructure and the activities and duties of the Hamburg port authority are mainly based on the Port Development Plan. As a cruise destination Hamburg has three different dedicated berths available. In the Hafen City there are two berths and along the promenade of the Landungsbrücken smaller cruise ships can dock. The new pier in Altona opened in August 2009. In April 2011, the terminal infrastructure of Aldona was completed. For the first time in Hamburg’s cruise history the season 2012 will extend through an 11-month period.

The new Columbus Cruise Centre at Bremerhaven (CCCB) was opened in 2003, and the Columbus Railway Station was upgraded to make the new centre a world-class facility for German ocean-borne tourism. CCCB is a modern cruise terminal built to provide efficiency and excellence in tourism for passengers, ship-owners, tour operators and shipping agents. In 2011 the Bremerhaven port was awarded the Port Environmental Review System (PERS) certificate. The certification verifies that the port’s environmental management programme is in line with the requirements set by the EcoPorts PERS, the only port sector-specific environmental management standard.

The Port of Lisbon in Portugal is an important cruise port destination, having a favoured geographic location and being easily accessible as a port of call for trans-Atlantic cruises from the East Coast of the USA. Located on the banks of the wide Tagus estuary, Lisbon has a long tradition in the cruise market, and features a 15.5 m deep channel and over 1500 m of berthing quay with a depth of between 8 and 10 m. The Port of Lisbon receives all types of cruise ships, from the smallest to the largest in the world, that bring more than 400,000 passengers per year. In addition to the excellent natural conditions, ships arriving in Lisbon have two passenger terminals located in the centre of the city, with the most modern safety equipment and a variety of services on offer.

Vigo is the main port of the Galician region of Spain; it is one of the world’s largest fishing ports and one of the busiest for shipping generally. Known as ‘The Gateway to the Atlantic’, Vigo is the largest city on the north-western coast of Spain. It is a place where it is still possible to encounter something of the life of the local inhabitants and explore an area still largely unaffected by mass tourism. In 2011, the port accommodated 118 cruise ships.

The Port of La Coruña is also located in Galicia, in the north-west of Spain, and with its panoramic ocean setting and verdant surrounding countryside offers considerable appeal for visitors.

Bilbao is the capital of Spain’s Basque region and is located in the Gulf of Biscay. Ships dock at the Getxo Marina. The terminal has a land area of 6750 m² and a 355 m long quay. The centre of Bilbao is a 20-min metro ride from the port.
4.3.3 Port operations

The cruise port of Port Rotterdam basically offers services to visiting cruise liners free of charge. The port authority regularly invites shipping agents, travel agents, harbourmasters, customs, sea port police (boarder control), traffic police and the fire brigade to meetings to discuss business requests. The port also assists with matters such as the organization of special events, including press assistance. The Port Authority supervises shipping, day and night, with ten modern patrol vessels and a sophisticated Traffic Guidance System.

The Port of Dover endorses the principles contained in the ESPO environmental code of practice. The Port authority’s goal is to work towards a cleaner environment through the implementation of effective management strategies, cooperation with relevant authorities and consultation with user and interest groups. The Port of Dover is ISO 14001 certified.

Le Havre as an international port has a fully computerized management system, which allows continuous identification, follow-up and traceability of every ship and its generated waste. An E-coport ‘one-stop shop’ informs management about the collection of waste and its processing by the appropriate sector. The Grand Port Maritime du Havre (Le Havre Port Authority) has a department with 100 agents, approved by the Prefect and the Public Prosecutor to carry out general surveillance missions in the harbour area and specific control and surveillance missions at the entries and exits to the terminals. The system of a standardized memory chip badge (compatible with biometric progress) now accounts for about 18,000 subscribers. In January 2010, the Port of Le Havre Authority was certified with ISO 28000 for the corporate organization set up as regards security. It is the first European port authority and the second worldwide after Houston to be so certified, thus offering a high level of security to its customers.

The Port of Amsterdam is responsible for all traffic control in the region. From the inland waterway, access to Amsterdam is via the Oranje locks near the Ijsselmeer or through the Amsterdam–Rhine canal, and the authority oversees both the operation of the locks, the waterways and the mooring of ships. Care for the environment in the port area and the influence of the port on its surroundings is an important aspect of the Port of Amsterdam policy. In December 2011, the Port of Amsterdam launched the first port-App, iamPort, with which it is possible to check river cruise mooring places on a map, and also possible to receive a message when a ship reaches a particular destination. The Port of Amsterdam handles its own nautical schooling and training and uses its own facilities, including a sophisticated traffic simulator. This training is officially recognized and consists of traffic controller training (Vessel Traffic Service), radio communication training and pilot training at a distance (LOA). The diploma of the VTS-education and the LOA are officially acknowledged by the Ministry of Transport and International Maritime Organization (IMO).

Web Resources

Amsterdam Port: http://www.portofamsterdam.com
Antwerp Port: http://www.portofantwerp.com
Dover Port: http://www.doverport.co.uk
Global Integrated Shipping Information System: http://gisis.imo.org
Hamburg Cruise Center: http://www.hamburgcruisecenter.eu/en

4.4 The Cruise Business in the UK

The UK and Northern Ireland is a unified state that comprises four distinct countries:
Scotland, Northern Ireland, Wales and England. It is an island nation with a proud heritage and maritime tradition that stretches back before records began. Along the coast of the country there are many port towns and cities that have, over the ages, played their part in connecting the UK to the world and the world to the UK.

On the south coast are Falmouth, Plymouth, Dartmouth, Portland, Poole, Southampton (Fig. 4.7), Portsmouth and Dover, all English ports that make use of their location to provide port facilities for short and long sea crossings and for cargo and passenger transportation. On the east coast Tilbury, Harwich, Felixstowe, Hull and Newcastle are well-known English ports, while Leith and Aberdeen are Scottish ports (Table 4.12). On the west coast are Greenock in Scotland and Liverpool in England, plus Milford Haven, Swansea and Cardiff in Wales, which also play their part in providing maritime centres for shipping business.

As time has passed, and with the ever-changing cycle of business, these various ports have seen fluctuations in terms of volumes of trade and the types of trade with some ports flourishing in more recent times and others in decline. This has created interesting patterns in relation to cruise business and has led to the current state where there are clear winners and losers but also considerable potential for change and further development. As a maritime nation the UK has always been home to a significant fleet of ships. From the days of King Henry VIII and Queen Elizabeth I the combination of maintenance of border control, trading and outreach to develop empire created the need for ships to sail the seven seas. In the early days of cruising for leisure or pleasure, famous brand names such as Cunard Lines and P&O Cruises set benchmarks that others followed. Now those names still dominate the world of cruising, albeit from within a US parent corporation.

This section of the chapter reflects on the current state of ‘cruising’ as a specific type of tourism business activity in the UK. This is done by first charting the evolution of UK-based cruising and providing a timeline that highlights key moments when change occurred and new directions emerged. Second, an analysis of the UK-based cruise brands and companies is provided together with an overview of cruise brands that target UK markets. This will provide a context and framework for the section that will help the reader to make sense of this complex business world. Thereafter, the

Fig. 4.7. Independence of the Seas leaving Southampton (source: P. Gibson).
section provides an overview of cruise ports and destinations in the UK with a discussion of the role of consortia in developing incoming cruise tourism. Finally the section concludes by considering the future for cruise businesses in the UK.

### 4.4.1 Through an historical lens

According to Cartwright and Harvey (2008), the advent of a practical application of steam engines for the purpose of propelling ships was the harbinger of the modern-day cruise industry. Until that time ships were utilitarian vehicles that were manufactured and deployed primarily for conveying goods and people from point to point without particular regard to the pleasures of the journey. With the development of powered vessels, the passenger shipping industry saw a revolution in the way that people could be transported at relative speed and comfort over larger distances than had been the case when ships used brute force or sails. In Scotland in 1801, the tug Charlotte Dundas is said to have been the first example of applying this scientific and technological development (Gibson, 2006b), which was then copied by commercial shipping companies and the naval fleets of various countries.

The move from commercial enterprise to the more leisure-bound necessities of entertainment took some time to evolve. In 1843, the Peninsular and Oriental Steam and Navigation Company (or, as it was later to become, P&O Cruises) positioned one of their paddle steamers from London to the Black Sea for the purpose of passenger travel and enlightenment (Quartermaine and Peter, 2006), although thereafter through to the 1920s the company became known for transporting people around

### Table 4.12. Cruise Business in the UK (Cruise Europe, 2011; Drivylas, 2011; Passenger Shipping Association, 2011).

<table>
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<td>London</td>
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<td>20</td>
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<td>1,729,873</td>
<td>1,818,622</td>
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the world on their ships on scheduled journeys (Cartwright and Harvey, 2008).

In the 19th century Samuel Cunard was awarded the contract to deliver mail between the USA and the UK thus setting en train the early steps for the famous name ‘Cunard Lines’ to enter the common lexicon of cruise history (Gibson, 2006b). In the 20th century cruising arrived as a serious form of relaxation for the wealthy classes. Travel company Thomas Cook had started the trend for the wealthy to embark on grand tours (Towner, 1985) in 1841 and, by the 1930s, shipping companies like Cunard Lines converted ‘liners’ such as the Mauretania that had previously traversed the Atlantic on line voyages between Plymouth or Southampton and New York into customized cruise ships. Around this time White Star (a company fated to become part of Cunard Lines) introduced the Titanic into service; a ship that has secured instant recognition from a tragic end (Tibballs, 1997).

Liners, passenger ships and cruise ships thus co-existed for a period of time, with the former two taking advantage of opportunities to make profits from a more mobile business market or those seeking to emigrate, or for the latter, to make profits from satisfying the indulgences of the wealthy classes (Cartwright and Harvey, 2008). The second world war changed much of that. P&O lost nine out of their fleet of 20 ships and Cunard lost eight ships from their fleet of 17 ships. Vessels were used to convey troops but were easy targets in hostile waters. After the war, jet engines for aircraft meant that a new boom period for travel was possible with airlines accessing hitherto inaccessible destinations at speed and in relative comfort. Cruise ships had a brief resurgence in the 1950s to 1970s but they were beginning to be perceived as anachronistic – for the older generation and of a bygone era. The legacy of this period was that famous brand names such as P&O Cruises and Cunard Lines along with smaller cruise companies Fred Olsen and Saga Cruises had a certain cachet. They were representative of a type of holiday that was well regarded by a section of the population but not the mainstream choice. Other cruise brands such as Union Castle, Shaw Savill and Sovereign Cruises disappeared (Cartwright and Harvey, 2008).

The resurgence in cruising driven by Carnival Cruises, Norwegian Cruise Line (NCL) and Royal Caribbean Cruise Lines (now Royal Caribbean Cruise Ltd) tapped into a new market that was more informal and more mass market oriented. The zenith of a new dawn for cruising was marked by a popular TV show that was produced in the USA but featured a British owned Princess Cruises ship. Princess Cruises was a company that was at the time operated by P&O Cruises. The ‘Love Boat’ was popularist, light entertainment but the impact was significant (Schwichtenberg, 1984). The US cruise brands became stronger as revenues increased and they set about constructing new vessels that were increasingly more sophisticated and larger. Scale and economy of scale in a deregulated trading environment became critical elements of the business model (Dickinson and Vladimir, 2007).

British cruise operators were not slow to take advantage of this boom. According to Cartwright and Harvey (2008) there were 225,000 British cruise passengers in 1992 and 800,000 in 2000. Iconic ships such as Cunard’s Queen Elizabeth 2 and P&O Cruises’ Canberra featured during this renaissance and were then usurped by newer builds such as the Queen Mary 2 and the Oriana. Cruise companies were targets for an increasingly bearish market. The main contenders were Royal Caribbean and Carnival Corporation. They were at the forefront in a race to the top that was characterized by the battle between the two to acquire these two British brands (Kester, 2003). In the end they were both purchased by Carnival Corporation in a move that saw the rival companies join the same family (Pinder and Slack, 2004). Princess Cruises was separated from P&O Cruises and Cunard Lines and P&O Cruises were reconfigured to ensure their brand identities were individual and targeted at different markets. New vessels were purchased and today Carnival UK, Carnival Corporation’s business identity in the UK, operates three ships under the Cunard Lines brand: Queen Mary 2, Queen Victoria and Queen Elizabeth with a total of 6688 berths and P&O Cruises operates seven ships: Adonia, Arcadia, Aurora, Azura, Oceana, Oriana and Ventura with a total of 14,608 berths.
Many ports in the UK have been established over hundreds of years. For example, the busiest cruise port, Southampton, began life in medieval times (Butt, 2007). It was easily accessible from London and the southeast of England and benefited from being sheltered by the Isle of Wight and well located for access to the English Channel. Plymouth, where the author works, was a major liner port in the late 19th century and early 20th century, being close to the Atlantic and the western outreaches of the mainland and therefore more convenient for passengers (Plymouth City Council, 2011). Dover (Fig. 4.8) was one of the Cinque Ports, a federation of five ports located in the southeast of England and with a pedigree stretching back 1000 years (The Cinque Ports, 2011).

4.4.2 Cruise business in the UK in the early 21st century

Much about the cruise business in the UK has been influenced by the aforementioned historical picture. A market has been nurtured and developed so that UK-based cruise passengers can take advantage of the UK’s maritime infrastructure and the business is built using the cumulative knowledge that has emerged over time (Gibson, 2006a). Rail, road and air connections have been constructed to help to position the UK’s ports into what they are today. In the first instance rail networks were a natural extension of the shipping transportation system (Rimmer, 1998), providing fast and direct services to population centres. Road and air connections added to this inter-modal transport mix creating options for cruise ports to attract fly-cruise customers from other countries or from more distant parts of the UK and for others to drive to the port (Chang, 2005).

More people are flying into the UK to join a cruise than ever before. According to the Passenger Shipping Association (PSA, 2011) the increase in foreign passengers joining a cruise in 2011 was 32% greater than had been the case in 2009. In addition the UK is regarded as a cruise destination with many visitors seeing the country as an increasingly attractive option. A total of 541,000 international cruise passengers visited the UK in 2010 – an increase of 21% over the 2009 figure (PSA, 2011). The net result in cruise business can be seen in Table 4.12.

Fig. 4.8. Fred Olsen’s Balmoral at Dover (source: P. Gibson).
Table 4.12 demonstrates the dominance of Southampton as a major homeport or turnaround port followed at some distance by Dover. Reflecting on history, while Southampton has seen major investment and significant growth, some ports like Plymouth have been unable to capitalize on the potential for cruise growth because of constraints imposed by the port’s primary focus as a naval base. Changing circumstances make for new opportunities and the cruise industry is notable as being opportunistic as has been evidenced by the way the industry turns potential problems into business gains (Dickinson and Vladimir, 2007). Therefore, if the UK’s Royal Navy were to relocate, a new era could arise that sees cruise ships taking advantage of Plymouth’s location as a stepping off point for the Mediterranean or Caribbean.

By examining the map of the UK and Europe (Fig. 4.9) it is possible to appreciate the positive and negative aspects of developing cruise business in the UK:

- The UK is an island and much of its business is undertaken internationally – this means the country has need of ports and airports for a multitude of purposes.
- As is the case for any sophisticated modern country, ports are multi-function so cruise ships often compete with car transporters and cargo vessels for port space.
- The climate in the UK favours seasonal cruising although winter cruising is possible to locations such as the Canary Islands.

Fig. 4.9. UK and Europe.
The UK is in close proximity to many high calibre Northern European ports of call.

The southern ports provide relatively easy access to the Mediterranean Sea and the Atlantic Ocean.

The English Channel is one of the busiest waterways in the world, being a highway for vessels carrying cargo to ports in Northern Europe.

Cruise business is big business in the UK. Drivylas (2011) believes that every time a cruise ship visits Southampton £2.5 million is generated. In addition he claims that there are up to 30,000 jobs reliant on cruise business in the UK. This level of activity has been possible because of investment. Both Southampton and Dover have invested in their cruise business infrastructure. While Dover’s state-of-the-art cruise terminal 2 (see Fig. 4.10) was opened in 2000, Southampton has been steadily increasing the number of cruise terminals (see Fig. 4.11) and has their fifth terminal scheduled for completion in 2014 at a cost of £30m (BBC News, 2010). Prior to this the fourth terminal ‘Ocean Terminal’ opened in 2009, supported by funds provided by Carnival UK in a 20-year deal between Associated British Ports and the cruise operator that provided the company with priority usage. Port developments are also seemingly mirrored by cruise company investments with Carnival UK recently investing in new custom-built offices in Southampton to house their 1000-strong workforce. The industry giants’ head-quarters in Southampton support P&O Cruises, Cunard Lines and Seabourn Cruises. Royal Caribbean International, Celebrity Cruises, Fred Olsen and Saga Cruises and MSC also offered cruises from Southampton in 2011.

In an example of the power of the cruise ‘dollar’, an argument has erupted because Liverpool has been accused of using public money to attract cruise trade

![Fig. 4.10. Air-bridge at Dover Cruise Terminal (source: P. Gibson).](image-url)
Market Suppliers on the European Atlantic Coast

in an uncompetitive way. Liverpool is fighting to be allowed to construct a cruise terminal for the highly lucrative turnaround business (Daily Echo, 2011). Homeports or turnaround ports attract financial premiums because visitors may also spend on transportation, accommodation, local travel, shopping and leisure activities. Southampton city councillors are defending their right to remain dominant in the cruise industry by challenging the right for Liverpool to make use of government funding to construct a £21m terminal. The logic is that Southampton and other ports do not benefit from such government funding and that Liverpool should repay the funds if they are to host turnaround vessels rather than day visitors. In a twist to the story Carnival UK has announced that they would be willing to move Cunard Lines to sail from Liverpool (Reeve, 2011). Fuel costs are increasing and sailing from Liverpool would provide a cost saving in this respect.

4.4.3 UK cruise destinations

In Table 4.13 an analysis of destinations in the UK is provided showing traffic flow and passenger numbers into the various ports in 2010. The data are extrapolated from information presented in Table 4.12.

<table>
<thead>
<tr>
<th>Ships</th>
<th>Passengers</th>
<th>Average pax per ship</th>
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</thead>
<tbody>
<tr>
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<td>742</td>
</tr>
<tr>
<td>Ullapool</td>
<td>7</td>
<td>1,314</td>
</tr>
<tr>
<td>Scrabster</td>
<td>9</td>
<td>2,157</td>
</tr>
<tr>
<td>Milford Haven</td>
<td>4</td>
<td>2,390</td>
</tr>
<tr>
<td>London</td>
<td>18</td>
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<td>1,200,000</td>
</tr>
</tbody>
</table>

Fig. 4.11. Baggage handling at Ocean Terminal Southampton (source: P. Gibson).
The largest volumes are recorded for ports where the primary business is as a turnaround or homeport. Home-porting is lucrative because of the implications for the local economy. Drivylas (2011) states that over £300m is generated from cruise business in Southampton alone. This is contributed to by the jobs that are created for this industry in the local area, the expenditure by crew and passengers, the supply chain costs and the multiplier effect, which relates to the economic value of the ripple effect when spending goes further than the immediate beneficiary (Hall and Braithwaite, 1990).

The majority of destinations attracted ships carrying fewer than 1000 passengers. For some, this is because the port is inaccessible for larger ships or because the port is a tender port where passengers are ferried shore-side by the cruise ships’ tenders. Destinations that attract ships carrying in excess of 1000 passengers tend to be city destinations that have the infrastructure to manage this volume of visitors. Smaller destinations are more suited to absorbing passenger numbers from smaller ships, so there is logic in the business activity that is presented by these statistics.

For passengers visiting any port there is usually an interplay of activities relating to the business of shipping and the demands of tourism. As more ships are introduced and cruise vacations become increasingly more mainstream so there is a demand to modify the appearance of a port so the tourist experience is enhanced. Compare Figs 4.12 and 4.13.

Figure 4.12 shows what a passenger may see when disembarking from their ship in a small harbour or port area while Fig. 4.13 demonstrates the hi-tech experience concomitant with contemporary cruising in a large cruise terminal. The contrast is stark and highlights a challenge faced by cruise managers to ensure the land-based element of the experience fits the image that is implied for the cruise (Pantouvakis, 2006).

Where smaller ports gain an advantage is in the utilization of goodwill. In Falmouth (a port in Cornwall in England’s West Country) an initiative was introduced to harness the welcoming power of local

Fig. 4.12. View from a quayside (source: P. Gibson).
residents. The scheme was known as ‘Falmouth Ambassadors’ (Fig. 4.14), where local residents with a desire to share their love of their area were invited to volunteer to spend time with visitors and to share with them their knowledge of where to go and what to see (Discover Falmouth, 2011). This approach is less likely to be successful.
in ports where volumes are high but the impact on the visitor experience is calculated to be significant and the programme was recognized for providing excellent customer service by the national tourist board.

The rather difficult task of persuading cruise itinerary planners to include the UK in an itinerary presents real challenges to destinations that may be attracted to the notion of securing large numbers of day visitors from cruise ships. Cruise Britain (2011) highlights a number of consortia that represent groups of ports and who in turn aim to create synergies and economies by working together. Examples of these consortia are shown in Table 4.14.

In addition Cruise Britain showcases individual ports such as Southampton (Fig. 4.15), Guernsey, Dover, Harwich, Holy Loch (in Scotland), Liverpool, London central, London Cruise Terminal, Milford Haven, Jersey, Tyne (Newcastle) and Portsmouth (Cruise Britain, 2011).

Consortia provide an opportunity for ports that may have less financial backing to make a case in a cooperative venture that harnesses the co-located and co-dependent nature of geographical proximity. Ports in consortia may not all gain from a sales trip to one of the big cruise trade fairs such as Seatrade yet, for the smaller port, there is more potential to be gained by being in a consortia than by going solo. This type of initiative can use expert sources to network with cruise decision makers and can create the case for itineraries to be considered with consortia ports in mind. In one year a ship may visit Torbay in Devon and the next it may visit Plymouth some 35 miles away. The opposite of this scenario is equally clear – without an expert presence at these cruise trade fairs no ships will call.

Consortia are funded by calling on members (generally businesses or organizations who could be called stakeholders) who tend to have vested interests, to make a subscription payment to cover the administrative costs. The consortia then decide whether to appoint an operational manager to act on their behalf under the directive of a committee or to appoint a marketing company to undertake distinctive activities on the group’s behalf. In previous years, central government made grants available to develop this type of initiative but the funds have all but disappeared so those that remain are virtually self-funding.

One consortium that crosses borders is Cruise Atlantic Europe. Members include A Coruña, Dover, Bilbao, Brest, Cork, Lisbon, Porto and St Malo. These ports create a conveniently co-related and co-located set of options for cruise itinerary planners. The members promote themselves by identifying the advantages of each location, the strengths each area provides and the benefit in using the group to plan the cruise itinerary.

### Table 4.14. Consortia in the UK.

<table>
<thead>
<tr>
<th>Consortia</th>
<th>Ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cruise Wales</td>
<td>Cardiff, Fishguard, Holyhead, Iffracombe, Isles Of Scilly, Mounts Bay, Milford Haven, Newport, Swansea, Plymouth, Dartmouth, The English Riviera, Lyme Regis, Portland, Poole, Oban, Orkney, Peterhead, Portree, Scrabster, Stornoway, Ullapool</td>
</tr>
<tr>
<td>Destination Southwest</td>
<td>Falmouth, Truro, Fowey, Aberdeen, Edinburgh, Fort William, Glasgow, (Greenock), Holy Loch, Invergordon, Lerwick</td>
</tr>
<tr>
<td>Cruise Scotland</td>
<td>Aberdeen, Edinburgh, Fort William, Glasgow, (Greenock), Holy Loch, Invergordon, Lerwick</td>
</tr>
</tbody>
</table>

#### 4.4.4 Cruise ports in the UK

This section provides an analysis of cruise ports and provides an overview of the type of ports in each geographical area together with a brief summary about attractions. In the first instance Table 4.15 provides information about Scottish ports.

The largest city in Scotland is Glasgow. It was a city famed for shipbuilding and its
### Table 4.15. Selection of ports in Scotland.

<table>
<thead>
<tr>
<th>Port</th>
<th>Berths</th>
<th>Min depth/max length</th>
<th>Anchorage</th>
<th>Attractions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aberdeen</td>
<td>2</td>
<td>9 m/160 m and 9 m/120 m</td>
<td>Yes</td>
<td>Balmoral Castle&lt;br&gt; Royal Lochnagar Distillery&lt;br&gt; Pitmedden Gardens&lt;br&gt; Aberdeen City&lt;br&gt; Royal Deeside</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Wildlife – flora and fauna&lt;br&gt; Island history&lt;br&gt; Island geology</td>
</tr>
<tr>
<td>Lerwick</td>
<td>3</td>
<td>9.2 m/205 m and 6.8 m/145 m</td>
<td>Yes</td>
<td>Edinburgh Castle&lt;br&gt; Royal Mile&lt;br&gt; Royal Yacht Britannia&lt;br&gt; Edinburgh City&lt;br&gt; Golf</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6.0 m/90 m</td>
<td></td>
<td>Wildlife – flora and fauna&lt;br&gt; Island history&lt;br&gt; Island geology</td>
</tr>
<tr>
<td>Edinburgh (Leith and Rosyth)</td>
<td>2 (Leith)</td>
<td>9.5 m/210–350 m</td>
<td>Yes</td>
<td>Edinburgh Castle&lt;br&gt; Royal Mile&lt;br&gt; Royal Yacht Britannia&lt;br&gt; Edinburgh City&lt;br&gt; Golf</td>
</tr>
<tr>
<td></td>
<td>2 (Rosyth)</td>
<td>9.5 m/500 m</td>
<td></td>
<td>Cawdor Castle&lt;br&gt; Dunrobin Castle&lt;br&gt; Brodie Castle&lt;br&gt; Loch Ness&lt;br&gt; Culloden Battlefield, Glenmorangie Distillery&lt;br&gt; The City of Inverness&lt;br&gt; Lochs and Glens&lt;br&gt; Edinburgh&lt;br&gt; Glengoyne Distillery&lt;br&gt; Glasgow City (retail or art)&lt;br&gt; Golf</td>
</tr>
<tr>
<td>Inverness (Invergordon)</td>
<td>4</td>
<td>10.5 m/300–350 m</td>
<td>Yes</td>
<td>Cawdor Castle&lt;br&gt; Dunrobin Castle&lt;br&gt; Brodie Castle&lt;br&gt; Loch Ness&lt;br&gt; Culloden Battlefield, Glenmorangie Distillery&lt;br&gt; The City of Inverness&lt;br&gt; Lochs and Glens&lt;br&gt; Edinburgh&lt;br&gt; Glengoyne Distillery&lt;br&gt; Glasgow City (retail or art)&lt;br&gt; Golf</td>
</tr>
<tr>
<td>Glasgow (Greenock)</td>
<td>2</td>
<td>12.6 m/376 m</td>
<td>No</td>
<td>Glasgow City (retail or art)&lt;br&gt; Golf</td>
</tr>
</tbody>
</table>

**Fig. 4.15.** Queen Mary 2 berthing in Southampton (source: P. Gibson).
maritime heritage. Now, however, the city has seen the paraphernalia of shipbuilding deconstructed and, while ships still visit Greenock, the largest harbour close to the city, the vestiges of maritime history are only to be seen by digging beneath the surface. Many of the city’s iconic buildings were constructed on the back of global trade and shipping but these are somewhat overwhelmed by more modern constructions. That said the city is proud of its past and provides a broad set of experiences for cruise guests. In contrast the second largest city is also Scotland’s capital. Edinburgh is fortunate to have an iconic and emblematic castle sitting on top of a rocky cliff overlooking the centrally located Princess Street Gardens and the main shopping street. Edinburgh is a ‘must see city’ for travellers, boasting many attractions within the city and easily accessed from the cruise ports of Leith and Rosyth. In cruising terms Leith would probably describe itself as the ‘marquee’ port: alluding to the destination’s status as a pre-eminent place to visit in the region.

Further north are the ports of Invergordon and Aberdeen. These two ports sandwich whisky country. The region around the Spey in the north-east of Scotland is home for many well known whisky brands including Glenmorangie, Glenfiddich and Glen Grant. In addition, Invergordon is in close proximity to Inverness and the surrounding wilderness of the Highlands. Aberdeen is the centre of Scotland’s oil exploration industry but it is also a city of historical wealth and architectural interest. In general, Scotland is a country of contrasts. It boasts stunning scenery, predominantly as represented by the islands, lochs and mountains that are found on the west coast. It is said to be where golf was invented and there are many golf courses that visitors would recognize from prestigious tournaments such as the British and Scottish Opens.

Wales is also a proud, once independent, country. The main population is to be found around the capital, Cardiff and in the south. In the north the country is more mountainous. The city of Cardiff has seen a lot of development and investment over the years resulting in the regeneration of the waterfront areas. The country is peppered with historical and geological attractions that are convenient to the cruise terminals (Table 4.16). A benefit in including Wales in an itinerary is the contrast between town, city and country that can be easily experienced in a short time. Welsh people are avid sports followers and this can be seen in terms of the country’s love of rugby union. The country’s national stadium is in the centre of Cardiff and can be visited as part of an excursion.

Finally, most of the largest ports in the UK are located in England (Table 4.17). In geographical terms these ports give access to cruise destinations in Scandinavia and the Baltic Sea to the east and to the northern coast of France and further to destinations in the Mediterranean Sea and Atlantic Ocean to the west. A number such as Harwich, Dover and Tilbury provide relatively easy access to

<table>
<thead>
<tr>
<th>Table 4.16. Selection of ports in Wales.</th>
</tr>
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<tbody>
<tr>
<td><strong>Port</strong></td>
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<tr>
<td>----------</td>
</tr>
<tr>
<td>Cardiff</td>
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<tr>
<td>Milford Haven</td>
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</table>
London and all that this world-famous city has to offer. Even Southampton is often identified as being Southampton (London), thus suggesting the two are inextricably connected. Southampton and Dover host most cruise homeport or turnaround cruises while other ports such as Guernsey and Falmouth are more often ports of call. These last two are in the far west of the country, which tends to be the most favoured climatic area of the UK and, for many people, this area is said to be very attractive for the seascapes and beaches coupled with the accompanying outdoor lifestyle.

### 4.4.5 The future of cruise business in the UK

The future of the cruise business in the UK appears to be good. The worldwide economic problems in 2007–2011 have created a different landscape yet the cruise operators remain buoyant and upbeat. The UK’s cruise ports continue to invest in their infrastructure with an eye on continued growth. The Passenger Shipping Association (PSA) is particularly positive, citing for 2011: an increase in passenger numbers by 6%; 1 in 9 package holidays is now a cruise vacation; the high-end

<table>
<thead>
<tr>
<th>Port</th>
<th>Berths</th>
<th>Min depth/max length</th>
<th>Anchorage</th>
<th>Attractions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southampton</td>
<td>4</td>
<td>10.5 m/360 m</td>
<td>Yes</td>
<td>London</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10.2 m/480 m</td>
<td></td>
<td>Stately homes and gardens</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11.7 m/460 m</td>
<td></td>
<td>New Forest</td>
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<td></td>
<td></td>
<td>10.2 m/370 m</td>
<td></td>
<td>Solent</td>
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<td></td>
<td></td>
<td>10.2 m/360 m</td>
<td></td>
<td>Isle of Wight</td>
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<tr>
<td></td>
<td></td>
<td>10.2 m/370 m</td>
<td></td>
<td>Salisbury</td>
</tr>
<tr>
<td>Dover</td>
<td>3</td>
<td>All 10 m/300 m</td>
<td>No</td>
<td>Dover Castle</td>
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<td></td>
<td>White Cliffs</td>
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<td>London</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Stately homes and gardens</td>
</tr>
<tr>
<td>Harwich</td>
<td>1</td>
<td>10 m/330 m</td>
<td>No</td>
<td>Suffolk</td>
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<td>Dedham Vale – Constable Country</td>
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<td>Royal Parks</td>
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<td></td>
<td>Theatre, sport and retail</td>
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<td>Isles of Guernsey</td>
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<td>Beaches</td>
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<td>Watersports</td>
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<td></td>
<td></td>
<td>Fishing</td>
</tr>
<tr>
<td>Tilbury</td>
<td>1</td>
<td>13 m/400 m</td>
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<td>London</td>
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<td>Royal Palaces</td>
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<td>Theatre, sport and retail</td>
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<tr>
<td>Guernsey</td>
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<td>5 m/140 m</td>
<td>Yes</td>
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<td>Beaches</td>
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<td>Fishing</td>
</tr>
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<td>Liverpool</td>
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<td>10 m/350 m</td>
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<tr>
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<td></td>
<td></td>
<td>Art Galleries</td>
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<td>Retail and sport</td>
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<td>Newcastle</td>
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<td>Art, leisure and sport</td>
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<td>Retail</td>
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<td>Historical properties</td>
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<td>Cornwall</td>
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<td>Eden Project</td>
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<td>Bodmin</td>
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<td>Beaches of Cornwall</td>
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<td></td>
<td>Watersports</td>
</tr>
<tr>
<td>Tyne</td>
<td>2</td>
<td>9 m/335 m</td>
<td>No</td>
<td>Newcastle</td>
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<tr>
<td></td>
<td></td>
<td>8.6 m/108 m</td>
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<td>Art, leisure and sport</td>
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<td>Retail</td>
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<td>Cornwall</td>
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<td>Eden Project</td>
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<td>Dartmoor</td>
</tr>
<tr>
<td>Falmouth</td>
<td>4</td>
<td>7.5 m/180 m</td>
<td>Yes</td>
<td>Cornwall</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7.5 m/202 m</td>
<td></td>
<td>Eden Project</td>
</tr>
<tr>
<td></td>
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<td>6.5 m/190 m</td>
<td></td>
<td>Dartmoor</td>
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<td></td>
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<td>6 m/135 m</td>
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<td>Bodmin</td>
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<td></td>
<td>Beaches of Cornwall</td>
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<td>Watersports</td>
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</table>
cruising market (ultra-luxury) has grown by 6% since the previous year; 7% increases in the price of cruises are being reported; 10% increase in number of people cruising from the UK; and for 2011 an extra eight new ships being added to the world cruise fleet.

The figures are impressive yet it is a definite reduction compared to the double-digit growth of the early to mid-2000s. The ‘unknown’ in the mix is the likelihood of continued recession, which could reverse these positive figures. The cruise industry is resilient and history tells us that at times of adversity some might say fortune favours the brave. The maritime future of the UK remains open for business and whether that be as a host to cruise passengers visiting from emerging wealthy classes from BRIC countries (Brazil, Russia, India and China) or as the homeport for cruise passengers sailing on ships with a sense of ‘Britishness’ is to be seen.
5 Nautical Tourism Market Suppliers in the Baltic and Arctic Regions*

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¹University of Lapland, Rovaniemi, Finland; ²Department of Nautical Tourism, University of Dubrovnik, Croatia; ³University of Split, Maritime Faculty, Hrvatska; ⁴Bremerhaven University of Applied Science, Bremerhaven, Germany

The nautical tourism market of the Baltic has developed according to the climatic conditions and shows both larger and smaller investments. Apart from the Baltic, it is necessary to also mention the Arctic. Because the latitude of the Arctic Circle at 66.34°N passes through Sweden the climatic conditions have a considerable impact on living in the region and affect the tourism market. For the purposes of this research it is logical to connect the markets of the Baltic and the Arctic. The fact is that highly developed countries have entered this market, but their development is at the very highest of world standards and they have established a specific approach that is attractive to many tourists and boaters in Europe and the world.

It is an interesting fact that people on the Mediterranean live with the misconception that the Mediterranean is dominant in a maritime sense and has the most developed nautical tourism in Europe, which is incorrect: Northern European countries, despite the harsh climate and low temperatures, have very highly developed nautical tourism and people are very much oriented towards use of the sea. For example, Italy and Croatia have one vessel for a population of about 35 people, while Norway and the Baltic states have a ratio of 1:1 or 1:2. The reason for this is the long and rich maritime history of Northern European countries.

Research into nautical tourism in the Baltic, and in particular in the Arctic, is scarce and it is carried out within an institute for tourism and at a few universities. The basic characteristics of this research are a high level of community spirit among all the Baltic states and the Arctic, as well as directing itself towards the specific potential of the Baltic Sea.

5.1 Geo-hydrographical Features of the Baltic Sea

The Baltic Sea area comprises the Baltic proper with the Gulf of Bothnia, the Gulf of Finland and the entrance to the Baltic Sea bounded by the parallel of the Skaw in the Skagerrak. The Baltic Sea area can further be divided into the Kattegat, the Belts and the Sound, the Baltic

* Sections 5.1 and 5.5 written by A. Haahti (antti.haahti@ulapland.fin) and S. Pekkala (satu.pekkala@kemijarvi.fi); 5.2 by T. Luković (tlukovic@unidu.hr); 5.3 by K. Božić (bozic.kastela@gmail.com); 5.4 by A. Papathanassis (alexis@papathanassis.com).
Proper, the Gulf of Riga, the Gulf of Finland, the Bothnian Sea and the Bothnian Bay.

The Baltic Sea can be characterized as a semi-enclosed ecosystem, with slow water exchange, giving the Baltic water a residence time of 25–35 years. The catchment area of the Baltic Sea, 1.7 million km², is four times larger than the area of the basin of 415,000 km². There are no tides in the Baltic, except for the Kattegat area; however, seasonal variation in the water level can be more than 1.5 m due to the changes in atmospheric pressure and winds. The cold bottom water, periodically forced into the Baltic Sea, follows the deeper parts of the Arkona, Bornholm and Gotland basins in an anti-clockwise main northern current along the eastern side of the Baltic Sea. Both the surface and bottom currents run anti-clockwise around the Baltic Sea following the western part of the sea back southwards.

The Baltic Sea, being a comparatively cold sea, has a mean temperature of 5°C. Large parts are normally ice-covered during the winter, and the ice conditions are strongly related to the severity of the winters. In the northern parts, the average duration of the ice cover is 4–6 months, whereas in the southern part the ice cover may be less than a month. The actual ice conditions in the Baltic Sea vary rather substantially. The Bothnian Bay and the eastern Gulf of Finland freeze almost every year. Ice starts forming in the bay-heads of the Bothnian Bay and the Gulf of Finland during November. Once a decade there might be a winter where only a small area in the southern Baltic remains ice-free. At its widest, the annual ice cover ranges from 52,000 km² to 415,000 km², which is equivalent to 12–100% of the surface area of the Baltic Sea, the Kattegat and Skagerrak. On average, a 218,000 km² area is covered by ice. The annual ice cover is at its most extensive between January and March, usually in late February and early March. The break-up of the ice starts in the south and progresses to the north. The northern Baltic Sea first opens at the beginning of April. By the beginning of May, ice exists only in the Bothnian Bay, where the last ice melts during the first half of June at the latest (Fig. 5.1).

5.1.1 Ecological characteristics

The Baltic Sea area is a globally unique and sensitive northern brackish-water ecosystem with extraordinary environmental conditions. It is geologically young, semi-enclosed and shallow with a mean depth of 53 m. The salinity in the surface water ranges from 8 practical salinity units (psu) in the southern Baltic proper to 5 psu in the Gulf of Finland and the Bothnian Sea and close to 0 at the far ends of the Gulf of Finland and the Bothnian Bay. In the Kattegat salinities are near Atlantic levels. The bottom salinity ranges from 16 psu in the southern Baltic proper to 10–12.5 psu in the Gotland deep and only 6.5–7 psu in the Bothnian Sea. The present salinity range has existed for a few thousand years and only a small number of marine and freshwater species have been able to adapt to its brackish water. These few species entered the area from the Atlantic during its early history and are still trying to adapt to the low salinity and show signs of stress through slower growth, smaller size and greater sensitivity to other types of stress. Together with a small number of freshwater species and even fewer truly brackish-water species they form an ecosystem that is less diverse than that of the North Sea, but the Baltic Sea is unique in its biodiversity.

The exchange of water with the North Sea is, due to geomorphological and climatic factors, limited and slow resulting in a long residence time of the water, in some parts of the Baltic Sea area up to 25 to 35 years. Nutrients and other pollutants therefore accumulate easily in the Baltic Sea. The water is vertically stratified with two distinct layers. The upper water body with low salinity reaches down to 20–70 m and receives oxygen from the air. The lower, more saline oxygen-rich North Sea water that enters only episodically through the Danish straits and the Sound is denser and hence heavier and forms the deeper water mass. The interval between such episodes may be several years and their ecological implications are significant. The permanent stratification combined with a high nutrient input frequently causes oxygen depletion in the deep water mass. In summer, there is typically also thermo-clinic
stratification at a depth of 15–20 m, caused by differences in temperature between surface and deeper waters. The climate ranges from sub-arctic to temperate and large parts of the Baltic Sea can annually be ice-covered.

Due to the ice age, land uplift is still an ongoing, unique process along the coastal areas of the northern Baltic Sea (about 10 mm/year in the northern part and 4–5 mm/year in the Stockholm archipelago and the Finnish Archipelago Sea). This continuous land uplift process has formed globally unique coastal land forms and biotopes, e.g. coastal meadows, shallow ‘glo-lakes’ and ‘fladas’ (flada and glo-lake are different successive stages in the process of a lagoon being separated from the sea by land uplift). Furthermore, the land uplift has created large archipelago areas with several tens of thousands of islands in the Baltic Sea that have no parallel in other areas of the world. Other specific coastal biotopes that are not found outside the Baltic Sea area.

Fig. 5.1. Ice conditions in the Baltic (source: Swedish Meteorological and Hydrological Institute).
are the esker islands with sandy, rocky and shingle beach vegetation, boreal Baltic islets and Baltic narrow inlets, specific brackish water-influenced coastal meadows and southern Baltic (brackish water) reed stands. These biotopes are all identified in the EU Natura 2000 network.

5.1.2 Critical habitats

Some of the species in the Baltic Sea are so-called habitat-forming species, i.e. key species. They have an indisputable importance by creating a life-supporting environment for other species and that is why their occurrence is most important. Typical habitat-forming species are plants such as the bladder wrack (*Fucus vesiculosus*), the red alga black carrageen (*Furcellaria lumbricalis*) and eelgrass (*Zostera marina*). A few animals have a habitat-forming role, e.g. the common mussel (*Mytilus edulis*) forms mussel banks that are inhabited by other animals. As much as 90% of the marine and coastal biotopes around the Baltic Sea are to some degree threatened today and many of these areas are important habitats for rare or endangered species. During the last decades, the occurrence of both bladder wrack and eelgrass has declined dramatically mainly due to the effects of eutrophication: decreasing water transparency, increasing sedimentation and increasing amounts of fast growing filamentous algae. A functional and healthy marine ecosystem is highly dependent on its coastal areas. In this sense, Baltic lagoons and wetlands are very important for biological reproduction and for the biodiversity of the Baltic Sea as a whole. The shallow bottom areas along the coasts are highly productive, especially in the archipelago areas, and they provide nursery, breeding, spreading and resting grounds for many different Baltic Sea species. This shallow integrated land–water zone receives nutrients and suspended matter from the surrounding land mass and the atmosphere. Such coastal shallow water areas and lagoons can act as a filter for nutrients and pollutants. Many of the coastal habitats in the archipelagos are threatened. The main threat is eutrophication, largely due to nutrient-rich runoff from land-based sources. The high nutrient levels in eutrophic waters promote excessive growth of filamentous algae, which may suffocate the area’s natural communities. Another characteristic feature of eutrophication is increased turbidity leading to shading of macro-algae and aquatic plants. Benthic fauna suffer when large mats of free-floating algal matter settle near the bottom in sheltered coastal areas, because the bacterial decomposition of these mats depletes the oxygen in the near-bottom waters.

5.1.3 Diversity

Due to exceptional salinity conditions, the Baltic Sea is characterized by low species diversity of freshwater and marine origin, as well as true brackish water species, forming a unique mixture. The number of macroscopic marine fauna species decreases from more than 800 in the Kattegat (with salinity of 23 psu) to less than 70 species in the low-salinity waters of the Stockholm archipelago, where salinity is approximately 5–6 psu. In the Gulf of Bothnia, only about 52 marine species have adapted to the low salinity waters. Further north in the Bothnian Bay, all but one of the 32 plant species are of freshwater origin. The same pattern is seen in the fish community. Marine species dominate in the Kattegat, while freshwater species occur in coastal areas. More than 120 non-indigenous marine species have also been recorded in the Baltic and around 80 of those have established reproducing populations in some parts of the Baltic Sea. The Baltic marine and coastal areas consist of globally important breeding grounds, nurseries, shelter and food sources for coastal birds and waterfowl. Diversity of coastal biotopes is high and the biotopes are characterized by a number of many threatened aquatic and terrestrial species. From the colder phases of the Baltic Sea that prevailed in the earlier postglacial times, some relict animal species, such as the ringed seal (*Phoca hispida botttnica*) in the northern part of the Baltic and a few crustaceans, contribute to the specific pattern of biodiversity in the Baltic Sea area. It is believed that there are two
distinct populations of harbour porpoises (*Phocoena phocoena*) in the Baltic Sea area: one in the Baltic Sea transition area encompassing Skagerrak, Kattegat, the Belt Sea, the Sounds and the Fehmarn Belt (ca. 40,000 individuals); and, a second population in the central Baltic Sea. The latter population has become very rare (only a few hundred individuals) compared to the situation in the 19th and early 20th centuries when harbour porpoises were widespread throughout the entire Baltic proper as far north-east as to the Åland Islands and the entrance of the Gulf of Finland. As a consequence of environmental programmes and conservation measures, the reproduction of many top predators such as the white tailed eagle, the grey seal (*Halichoerus grypus*) and the common seal (*Phoca vitulina*) has continuously increased during recent decades. Eutrophication changes the species composition significantly and leads to loss of biodiversity.

### 5.1.4 Spawning or breeding grounds

The Baltic Sea area encompasses many highly important staging areas for seabirds and more than 30 bird species breed along the shores. The Baltic Sea is an important breeding ground to over 24 bird species included in Annex I of the EU Bird Directive, and in addition the Baltic Sea is important to tens of nationally threatened species. The shallow parts of the Baltic coastline are of great importance for migrating waterfowl, including millions of Arctic ducks, geese, swans, cranes and waders, on their way to northern breeding grounds in spring time. Other productive parts, such as shallow marine hard-bottom areas of the Baltic Sea, are of international importance for diving ducks during the winter and migrations periods. The Baltic Sea is the principal wintering area for the velvet scoter (*Melanitta fusca*) in Europe (93% of the populations), the common scoter (*Melanitta nigra*; 60%) and the long-tailed duck (*Clangula hyemalis*; 91%). Eutrophication has impacts on the bird populations. While some bird species benefit from eutrophication most are adversely affected. The impacts are caused by change in habitat and food availability, but the health of many birds is also directly threatened by the toxins that occur in harmful algal blooms (HAB).

For the marine fauna, including fish species, the Baltic coastal ecosystem serves as an important spawning and breeding environment, where shallow coastal waters and offshore banks covered with different habitats such as algal communities and seagrass beds often are of special importance as nursery areas. The ability of the Baltic Sea to serve these purposes depends on the meteorological and hydrological processes in the drainage area and on the hydrographical conditions in the sea itself, which is very sensitive to disturbances, natural as well as those induced by man. Bladder wrack and eelgrass meadows are among the most important spawning and nursery grounds, but they are also among the most threatened by eutrophication when rapidly growing filamentous algae take over. The most important commercial marine fish species in the Baltic Sea are cod, herring, salmon and sprat and in coastal waters eel, pike, perch and pike-perch. The main spawning areas are situated in the western and south-western parts of the Baltic Sea. Spring-spawning herring is also distributed throughout the Baltic Sea, forming several local stocks. Autumn-spawning herring is currently scarce. Sprat is distributed throughout most of the Baltic Sea and is regarded as one stock. It reproduces in the Baltic proper, the Gulf of Riga and the Gulf of Finland. The species composition of fish changes significantly as eutrophication progresses. Cyprinids such as roach (*Rutilus rutilus*) and silver bream (*Blicca bjoerkna*) benefit but, for example, salmonids decrease.

### 5.1.5 Integrity

Over time, the effects of pollution have become evident in the Baltic Sea area. Eutrophication and the impact of oil spills and persistent hazardous substances have had a negative effect on the marine ecosystem and marine biodiversity. However, the Baltic Sea is still a unique biological living environment providing livelihoods and possibilities
of transportation. Eutrophication is considered the most serious environmental challenge of the Baltic Sea where excess nutrient inputs lead to elevated nutrient concentrations. This in turn stimulates the growth of algae leading to an imbalanced functioning of the system.

This imbalance is seen as an increase in the production of organic matter, its sedimentation to the sea floor, and there is also an increase in oxygen consumption. All this leads to oxygen depletion and recurrent internal loading of nutrients as well as death of benthic organisms, including fish. Excessive nitrogen and phosphorus loads coming from land-based sources are the main cause of the eutrophication of the Baltic Sea. About 75% of the nitrogen load and at least 95% of the phosphorus load enter the Baltic Sea via rivers or as direct waterborne discharges. About 25% of the nitrogen load comes as atmospheric deposition. Shipping adds to the problem of eutrophication of the Baltic Sea with its nutrient inputs from sewage discharges and nitrogen oxides (NOx) emissions. Additional information about the causes and effects of eutrophication in the Baltic Sea can be found in Baltic Sea Environmental Proceedings No. 115A2 and 115B3 (IMO/MEPC, 2009).

Eutrophication is one of the four thematic issues covered by the Baltic Sea Action Plan. In order to achieve ‘clear water’, which is one of the main objectives of the HELCOM Baltic Sea Action Plan4, phosphorous and nitrogen inputs to the Baltic Sea must be further cut by about 42% and 18%, respectively. Reductions in nutrient inputs have so far mainly been achieved through improvements at major point sources, such as sewage treatment plants and industrial wastewater outlets. Achieving further reductions will be a tougher task, requiring actions to address diffuse sources of nutrients such as run-off from over-fertilized agricultural lands. Reaching concentrations of nutrients close to natural levels requires measures to reduce loading from all sectors including shipping in the Baltic Sea. Therefore, the Baltic Sea countries have resolved to act jointly within the IMO to eliminate the discharge of sewage from ships, especially from passenger ships and ferries.

5.1.6 Vulnerability

The Baltic Sea is highly susceptible to degradation caused by human activities. The drainage basin is four times larger than the Baltic Sea and nine countries surround it with a total population of about 85 million people living in the drainage basin area. The sea receives human-induced waste as discharges from municipalities and industry, run-off from agriculture, deposition from the air and ship-generated impact from operational and illegal pollution as well as ship accidents. Problems associated with eutrophication, toxic substances, transport and physical activities are further accentuated in the almost enclosed Baltic Sea area where harmful substances are accumulated through time.

The Baltic Sea with its low number of species is considered to be very vulnerable to external disturbances. Each individual species is of special significance to the structure and dynamics of the whole ecosystem. The disappearance of single key-species could have a profound influence on the functioning of the whole system. The ban of a number of hazardous substances such as PCB and DDT has resulted in some improvements in the last 20 years, especially for species in the higher parts in the food web such as seals and birds of prey. However, eutrophication, alien species and overfishing are still threats that need to be taken seriously.

5.1.7 Bio-geographic importance

The Baltic Sea has a long coastline, including the sandy beaches in the south and the fragmented shores of extensive rocky archipelagos, which forms a diverse interface between land and sea. The land uplift is still an ongoing process along the coastal areas of the northern Baltic Sea area. The archipelagos in the Baltic consist of several tens of thousands of islands, islets and skerries (i.e. small rocky islands) surrounded by bays and lagoons that contribute to an area of high and diverse productivity. The archipelago land- and seascape is made up by a fine patchwork of ecosystem types, each with a specific function and structure. The archipelago can be divided into
different zones according to a topographical, climatological and botanical viewpoint, reaching from the mainland towards the open sea.

The boundary lines coincide more or less with the tectonic features in the bedrock created in Archean times. The inner archipelago contains thick foliage, meadows, silt and clay shores surrounded by shallow waters with reeds. The central archipelago consists of thin layers of soil and the shores are dominated by moraine, and large bays surround the islands. Specific for the outer archipelago is the richness of rocky shores and exposed bare islands with a high diversity of aquatic species. The Baltic Sea area is influenced by Atlantic, continental and boreal ecological features. Due to species’ distribution patterns, the Baltic Sea area can be further divided into the Skaggerak, the Kattegat, the Belt Sea and the Sound, the Baltic proper, the Gulf of Riga, the Gulf of Finland, the Bothnian Sea and Bothnian Bay (Fig. 5.2).

![Map of the Baltic and surrounding areas](image-url)
5.1.8 Social and economic value, scientific and cultural significance

A fairly stable and largely urbanized population of about 85 million people live within the Baltic Sea catchment area. The urbanization rate is relatively high in this region, particularly in Denmark, Sweden and Germany, where more than 80% of the population lives in urban areas. In Estonia, Latvia and Lithuania the urbanization rate is about 70%. The least urbanized countries are Finland and Poland, in which the urbanization rate is below 70%. The population is primarily distributed in settlements along the coast. Population density in the whole area varies considerably from over 500 inhabitants/km² in the urban areas of Poland, Germany and Denmark to less than 10 inhabitants/km² in the northern parts of Finland and Sweden.

5.1.9 Fishing areas of great commercial significance

In the Baltic Sea region fishing traditionally plays an important role in food supply. Fishing in the Baltic is mainly focused on marine species, but also on some freshwater species and those that migrate between the sea and rivers. The Baltic Sea ichthyofauna counts about 100 fish species. Cod, herring, sprat and salmon are the main commercially exploited species in sea fisheries and are all regulated by quotas. More than 90% of the total catch in the region is made up of these species. Other commercially exploited species, mainly in the coastal areas, are eel, sea trout, flat fish (e.g. flounder), pike, pikeperch, perch, vendace and white fish. Some of these species are often exploited to the same, or an even higher, extent in recreational fisheries. Nowadays aquaculture for human consumption amounts to about 9% of sea fish landings. The most important fish farming activity in the Baltic Sea countries is salmon and trout farms located on rivers, lakes and in coastal waters.

5.2 The Main Features of Nautical Tourism, Baltic and Arctic

The nautical tourism industry in the Baltic has developed in all three of its sub-industries in a way that is adapted to climatic and other conditions. It should be emphasized that in this market the concept of maintainable development and cooperation among the Baltic states is at the highest developmental level. The fact of the obvious differences among the Baltic states encourages the more developed countries to help those less developed, offering a valuable example of good international relations. A somewhat milder and warmer climate on the southern part of the Baltic than on the North Sea has enabled the development of tourism and all nautical tourism industries.

Many of the islands in the Baltic have become attractive destinations for hotel and camping tourism, and local cruising supports that development. Sailing is very developed in the warmer southern part of the Baltic and in its northern parts in the summer period. This market connects the Baltic states and to the Arctic and to Norway.

Norwegian nautical tourism in the area to the north of the Arctic Circle and its development in regard to climate conditions is impressive and particularly important for Norway. However, Norwegian nautical tourism is simply a result of the kind of life people live on boats and the sea, in conditions difficult to understand for Mediterranean people.

Marina industry. The marina industry in the Baltic is developing with the marinas along the coast, the number of which cannot be precisely stated because of numerous islands and channels. Small boat moorings use either mooring blocks, posts or sliding moorings (Fig. 5.3). Tidal ranges in the Baltic are considerably less than in the Atlantic.
CHARTER INDUSTRY. The charter industry in the Baltic has developed through both large and small companies. Vessels of all kinds are rented, though there are considerably less mega-yachts than in the Mediterranean.

CRUISE INDUSTRY. The cruise industry in the Baltic has developed with large cruising, which provides multi-day cruising tours in the Baltic and the possibility to leave the Norwegian coast. Besides cruisers there are many passenger and ferry services that transport passengers and cars to many of the islands and attractive destinations in the Baltic area.

Small ship cruising is very developed as well, mainly offering daily excursions.

5.2.1 Finland

Finland is a country that climatically belongs to the Arctic part of the Baltic. Its winters are harsh and severe with temperatures as low as -40°C. Such conditions make it difficult to develop nautical tourism despite its 1250 km Baltic coastline.

MARINA INDUSTRY. Finland has 155 marinas, all of which are club-type marinas, yet ADAC does not recommend them to their members since they are not considered to be top quality marinas. Finland is one of the countries where Mediterranean people can hardly understand that despite the harsh climate in the cold European north (Fig. 5.4) the number of vessels is almost

Fig. 5.3. (a) Marina, local cruisers and (b) the combination of sliding moorings and posts at Warnemünde, Germany (source: the author).

Fig. 5.4. (a) Marina in Finland in the winter period and (b) the icebreaker Sampo (source: the author and Kemi Tourism).
approximately the same as the number of its inhabitants.

**CHARTER INDUSTRY.** In accordance with marina industry development, and the main characteristics and possibilities of navigation, the charter industry is relatively undeveloped, and boat rental is only possible in the short summer period.

**CRUISE INDUSTRY.** The cruise industry in Finland includes weekend cruising, multi-day cruising in the Baltic and the like. They also provide interesting cruising on icebreakers above the Arctic Circle, which Prof. Antti Haahti and Satu Pekkala deal with in more depth in Part 3 of this book.

**SUPPORTING ACTIVITIES.** Finland has developed quality shipbuilding for large cruisers and mega-yachts. In 2008, for example, in their STX Europe (Turku) shipyard, they built the largest cruising ship at that time, the *Oasis of the Seas*, for Royal Caribbean Cruises Ltd Company. The *Oasis* has 16 decks, 2700 berths and can house 5400 passengers, which is why she still belongs to the class of the largest world’s cruise vessels. ‘Marinetek Finland Oy’, Helsinki, is the European leading manufacturer of concrete pontoons and equipment for yacht berths. This company and its partner companies are improving their product quality together. Marinetek Group does business as a concern with subsidiaries in Finland, Russia, Latvia, the UK, Turkey, the USA, United Arab Emirates, India, Croatia, Sweden and the Ukraine.

### 5.2.2 Norway

Norway in its northern part is an Arctic country, where nautical tourism has grown in and adapted to local weather conditions. Norway has a coastline of 25,148 km (which includes mainland of 2650 km, long fjords, small islands, and minor indentations of 22,498 km) and a length of island coastlines of 58,133 km. There are 963 marinas on the coastline, but none of them accepted as of ADAC standard. This fact is explained by the character of the marine industry in Norway, which is predominantly linked to fishing rather than tourism. Similarly, the charter industry is less developed. On the other hand the cruise industry is comparatively well developed. It offers particularly interesting and well-organized cruising in the Arctic. Among world cruise companies Norwegian Cruiser Line (Fig. 5.5) is a leading company that operates with ten large ships throughout the world.

Data on nautical tourism in Norway is scarce, and the characteristics of Norwegian nautical tourism, particularly as concerns its cruising and marinas, require some additional research to establish some clearer data.

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**Fig. 5.5.** (a) Cruise ship *Norwegian Epic* and (b) Lysefjorden Marina in Norway (source: Norwegian Cruise Line and Lysefjorden Marina).
5.2.3 Germany (Baltic)

With the mild Baltic of the East Sea (Ostsee) Germany has established nautical tourism as a part of its overall highly developed tourist supply, both along the 1939 km coastline and through the popular summer resorts on a few of the islands in the East Sea. Nautical tourism in this area is effectively linked to many other marine industries, such as fishery, yacht building, souvenir production, the car industry, etc. In 1784 construction began on the 100 km Kiel Canal (Nordostseekanal), part of the Elbe River system, connecting the North Sea with the Baltic, making it possible for yachts and large ocean liners to pass easily from Baltic ports to the open sea (Fig. 5.6). The canal is one of the longest man-made seaways in the world, and carries constant heavy traffic, which is among the heaviest in the world.

Ever since the beginning, German investors and the state have been constantly investing in the development of the canal and it now looks just like it was in 1895. Along the course of the canal many industries have developed, particularly the oil industry. The largest ship to pass along this canal in 2009 was 225 m long and 32.26 m high. Yachts also navigate along this canal but are permitted to moor only at the few designated facilities.

German’s industries are the most coordinated in the Baltic, and its marine industries are almost perfectly connected into a sustained development system. Marine research institutes are a constituent part of fishing ports and are also frequently linked to marinas. The German Search and Rescue service (SAR), which has a supranational status at sea, is concerned with all vessels’ safety at sea.

MARINA INDUSTRY. The German marina industry in the Baltic has 127 quality marinas (Table 5.1) and the support of numerous major industries, such as the automobile industry. Marinas are mainly located in small and attractive towns, where principally German investors are involved in tourist and other economic industries. Life on the German Baltic coastline is very dynamic, and the economy is successfully developing through partnerships and cooperation.

The existence of so many marinas is a sign of the developed economy and dynamic life on the German Baltic coast. Most tend to be relatively large marinas, one of the most distinctive being the Marina Ancora (Neustadt, Holstein) with 1400 berths.

German marinas supply recreational boaters with basic services. The demand for complementary facilities is met through the generally developed tourist destinations. In this way the whole range of industries at the destination develop together (Fig. 5.7). All the results of research carried out in the Mediterranean can be equally applied here. As indicated in the research, marinas with both berthing and maintenance services for yachts are highly profitable, while other services are barely breaking even. Expansion of the scope of services within a marina actually

Fig. 5.6. (a) Kiel Canal and (b) fishing port and sea research institute in Warnemünde summer resort (source: the author).
has a negative impact on its financial stability so that the development of such facilities in cooperation with the local destination has beneficial results on both sides.

### Table 5.1. German marinas in the Baltic (2010)

<table>
<thead>
<tr>
<th>Basic data</th>
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<tbody>
<tr>
<td>Area (in 000 km²)</td>
<td>357,111.91</td>
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<tr>
<td>Population</td>
<td>81,758,000</td>
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<tr>
<td>Total coastline (in km)</td>
<td>1,939</td>
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<table>
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<th>Marinas per number of berths in quality marinas (127)</th>
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<tr>
<td>0–100</td>
<td>57</td>
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<td>101–500</td>
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<tr>
<td>2,001–5,000</td>
<td>0</td>
</tr>
<tr>
<td>&gt;5,000</td>
<td>0</td>
</tr>
<tr>
<td>Berths in total</td>
<td>24,525</td>
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</tbody>
</table>

| Coefficient of saturation of coast with marinas: |
| Km coast per marina: |
| Total = 7.49 |
| Quality marina = 15.27 |

| Number of quality marina berths per km of coast = 12.65 |
| Average number of berths per marina = 193.11 |

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### CHARTER INDUSTRY.

The charter industry on the German Baltic coast is more developed than in other Baltic countries and is supported by, for example, sports competitions, fishing tourism and other tourist activities. There are almost no mega-yachts for charter in this region.

### CRUISE INDUSTRY.

The German cruise industry can hardly be treated separately from the rest of the Baltic, because the connection between the countries and investors is very strong. It has a number of ports capable of docking both large and small cruisers. Although the leading German cruise company AIDA stands out, there are also a number of small cruise companies that operate successfully in the Baltic and they are well connected to German ports. Small ship cruising in the Baltic is well developed, particularly in German destinations. As in other European countries, local traditional cruising has developed with typical Baltic traditional vessels. Small ship cruising excursions are supported by small private investors and medium-large companies specializing in this type of cruising.

### SUPPORTING ACTIVITIES.

There are both large and small regattas; for example, in the renowned summer resort of Warnemünde a prestigious regatta takes place in the high tourist season involving a number of classes of sailing boats, and is sponsored

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![Fig. 5.7.](a) German Baltic marina and (b) cruise and fishing port in Büsum; an example of sustainable development with other industries (source: the author).
by the Mercedes and BMW car factories and Bavaria, the big manufacturer of sailing boats. As for the preservation of traditional maritime crafts there is the well-known National Marine Manufactures Association (NMMA), and in the domain of marina development support there is the prestigious International Council of Marine Industry Association (ICOMIA).

IMCI, the International Marine Certification Institute (CE) has 26 international members from 12 European countries, Canada, New Zealand and the USA. The institute is committed to adding value to recreational craft industries, in particular to developing the quality of sports marinas. They certify marina quality, and award up to a maximum of 5 stars to non-profit sports marinas.

### 5.2.4 Poland

Poland is a Baltic country that has developed nautical tourism in spite of its short coastline of only 440 km. Besides its 35 coastal marinas Poland also has a number of lakeside marinas (Table 5.2). Charter and cruising activities are growing steadily.

**Marina Industry.** Poland has 35 marinas in total, 14 quality marinas on the Baltic coast (Table 5.2) and 11 on inland lakes. On the sandy shores of the Baltic, Poland has an intensively developing tourism industry. There are several dynamic city centre developments with new high-quality marinas. One of these is the Marina Sopot, which has the longest wooden pier in Europe. In the immediate vicinity is the old Gdynia marina, suggesting the intensive level of marina development in Poland. However, all are built and organized as club-owned marinas. The need for private investors is obvious and will require the development of new skills and knowledge of nautical tourism, which is the task of Polish universities.

**Charter Industry.** Development of the charter industry is in accord with both the climatic conditions and marina development.

**Cruise Industry.** The cruise industry has been developing both in the Baltic and on the lakes of Poland. Small cruising has increased at tourist destinations in the summer season. Large ship and, to a greater extent, small ship cruising are associated with attractive tourist destinations and are a part of the complete tourist supply.

**Supporting Activities.** For centuries, Poland has been developing seafaring and industries related to the sea. Poland is one of the most significant European countries to be developing mariculture, particularly in regard to juvenile fish-farming and business. Poland has several prestigious universities and institutes that deal with sea-related issues, and intensively study nautical tourism. They work in association with their developed neighbours such as Germany and the University of Bremerhaven.


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<td>Area (in 000 km²)</td>
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<td>Coastline total (in km)</td>
<td>440</td>
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| High quality marinas⁴ | 14 |
| Sea marinas total⁵    | 35 |

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<th>Marinas per number of berths in quality marinas (14)</th>
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<tr>
<td>2,001–5,000</td>
<td>0</td>
</tr>
<tr>
<td>&gt;5,000</td>
<td>0</td>
</tr>
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| Berths in total⁶ | 1,198 |

<table>
<thead>
<tr>
<th>Coefficient of saturation of coast with marinas:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Km coast per marina:</td>
</tr>
<tr>
<td>– Total = 12.57</td>
</tr>
<tr>
<td>– Quality marina = 31.43</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of quality marina berths per km of coast = 2.72</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average number of berths per marina = 85.57</td>
</tr>
</tbody>
</table>

⁴According to ADAC (2010) classification
⁵According to http://www.portbooker.com
As a part of the marina industry they produce vessels mainly for export. The most important is Delpia Yachts shipyard founded in 1990, which in the development of their programme cooperates with marinas, marine engine factories and other related companies.

Vessel and nautical equipment fairs and sports regattas are well organized in the Polish part of the Baltic. Polish nautical tourism, especially since Poland joined the European Union, has been growing fast and operating in conjunction with the other developed Baltic countries.

5.2.5 Sweden

Sweden, as a north European country with developed nautical tourism, has been the subject of market research within the north-Atlantic part of Europe, although its Baltic part is more significant, comprising around 75% of the total coastline. Sweden is thus more appropriately considered as a predominantly Baltic country. As with all countries of this region nautical tourism has developed in accord with the seasonal weather conditions and in conjunction with other related industries.

The island of Gotland is a tourist destination and an important centre of Swedish nautical tourism, both for its marinas and as a cruising port.

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area (in 000 km²)</td>
<td>45,295</td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>9,415,570</td>
<td></td>
</tr>
<tr>
<td>Coastline in total (in km)</td>
<td>3,218</td>
<td></td>
</tr>
<tr>
<td>High quality marinas</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>Sea marinas total</td>
<td>141</td>
<td></td>
</tr>
<tr>
<td>High quality marinas (Baltic)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0–100</td>
<td>36</td>
<td>26</td>
</tr>
<tr>
<td>101–500</td>
<td>21</td>
<td>17</td>
</tr>
<tr>
<td>501–1,000</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>1,001–2,000</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2,001–5,000</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>&gt;5,000</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Berths in total</td>
<td>4,790</td>
<td>2,547</td>
</tr>
<tr>
<td>Coefficient of saturation of coast with marinas:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Km coast per marina:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Total = 22.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Quality marina = 51.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of quality marina berths per km of coast = 2.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average number of berths per marina = 118.34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to ADAC (2010) classification

According to http://www.portbooker.com
members’ berths, and the profit is frequently invested in the maintenance and development of marinas. As a rule marinas are developing in connection with the attractive destinations offered in tourist centres and cities.

**CHARTER INDUSTRY.** The charter industry is developing in marinas according to demand, mainly with chartering vessels and small yachts.

**CRUISE INDUSTRY.** The large-cruiser cruise industry of Sweden and the whole Baltic region extends beyond national borders, making precise statistics more difficult. In summer there are many shorter excursions in small local boats between attractive destinations, which operate as an adjunct to the general tourist supply in the Baltic. A few Swedish ports have facilities for docking large cruisers.

**SUPPORTING ACTIVITIES.** To support their nautical tourism Sweden has developed numerous linked industries. High quality design and manufacture mean that Swedish yachts are recognized as some of the best in the world. Numerous regattas and other activities support the development of Swedish nautical tourism, which continues into the winter period as a specific form of nautical tourism: sailing with ice yachts on the frozen sea. Both in winter and in summer there is fishing, and fish processing is also closely connected with the development of tourism.

### 5.2.6 Other (Estonia, Latvia, Lithuania and Russia)

There are four more countries with a coast on the Baltic: Estonia, Latvia, Lithuania and Russia. These are countries with transitional economies, but thanks to having highly developed neighbouring countries their economic and any other development is rapid. These Baltic countries have more than 4000 km of coastline between them: Estonia 3794 km, Latvia 498 km, Lithuania 90 km and Russia 110 km. All show some development of nautical tourism in the form of a few marinas, which are as yet of fairly basic quality and facilities, as follows:

- Estonia 91;
- Latvia 29;
- Lithuania 5.

These are organized as sports marinas, but have not yet reached a standard sufficient to be included in categorized lists.

A few ports, such as Tallinn and Riga, have facilities for docking large cruise ships and are included on the itineraries of some companies.

In terms of this research there are as yet insufficient data, either on the present state of development or immediate plans in the tourist industry, to give any detailed analysis.

### Table 5.4. Quality marinas on the coastlines of the Baltic and Arctic — summary (source: ADAC, 2010; http://www.portbooker.com and other statistics).

<table>
<thead>
<tr>
<th>Marinas and berths</th>
<th>Germany</th>
<th>Poland</th>
<th>Sweden</th>
<th>Total Baltic and Arctic</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–100</td>
<td>57</td>
<td>10</td>
<td>38</td>
<td>105</td>
</tr>
<tr>
<td>101–500</td>
<td>64</td>
<td>4</td>
<td>24</td>
<td>92</td>
</tr>
<tr>
<td>501–1,000</td>
<td>5</td>
<td>0</td>
<td>–</td>
<td>5</td>
</tr>
<tr>
<td>1,001–2,000</td>
<td>1</td>
<td>0</td>
<td>–</td>
<td>1</td>
</tr>
<tr>
<td>2,001–5,000</td>
<td>0</td>
<td>0</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>&gt;5,000</td>
<td>0</td>
<td>0</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Berth totala</td>
<td>24,525</td>
<td>1,198</td>
<td>7,337</td>
<td>33,060</td>
</tr>
<tr>
<td>Number of marinas</td>
<td>127</td>
<td>14</td>
<td>62</td>
<td>203</td>
</tr>
<tr>
<td>Average number of berths per marina</td>
<td>193.11</td>
<td>85.57</td>
<td>118.34</td>
<td>162.86</td>
</tr>
</tbody>
</table>

*aData available for Germany, Poland and Sweden only.*
5.3 The Main Features of Cruising Industry Ports of the Baltic

5.3.1 Port management and ownership

The Baltic is a rapidly developing region as a cruising area with many unique attractions to offer, but it differs in some notable respects from the Mediterranean and Northern Europe where cruising is a more established activity. This is partly due to the inevitable differences in geography and climate, to the relatively short season, but partly also to the fact that it is still a relatively unexplored market. Very much in its favour is the fact that so many countries, with all their rich variety of national character and culture, are situated so close together and can be visited by cruise ships with only minimal sailing times between them.

There are, of course, differences in the political and economic background against which the industry is developing and these also will affect some aspects of the way that ports are managed.

Our approach here will be to offer a number of examples of ports on the Baltic and to give some relevant details from which some of the differences mentioned above will become apparent.

The Norwegian port of Oslo has some of the most modern facilities in Scandinavia. The Oslo Port Authority was established in 1735 and has seen much development since. The Port of Bergen is the leading cruise port in Norway, and in recognition of its economic importance cruise ships have been permitted by parliament to receive tax-free supplies.

Drammen is a freshwater port situated where the Drams River flows into the Drams Fjord some 40 km south-west of Oslo. The Port Authority is a non-profit agency owned by the municipalities of Drammen, Lier, Røyken and Hurum og Svelvik.

The Port of Trondheim comes under the control of the Trondheimfjord Intermunicipal Harbour (TIH), which administers the four ports of Trondheim, Orkanger, Stjordal and Muruvik as a harbour cooperation programme.

Flam Cruise Port is one of four harbours on the spectacular Aurlandsfjord, of which one branch, Nærøyfjord, is a UNESCO World Heritage site and one of the great attractions for visiting cruise passengers.

Sweden has a long coastline on the west side of the Baltic and the Gulf of Bothnia. The public Port of Stockholm actually comprises three distinct ports: Stockholm, Kapellskär and Nynäshamn, jointly administered by the Stockholms Hamn AB port authority.

The Port of Helsingborg is a new cruise destination with many attractions for tourists. It is controlled by the Helsingborg Hamn AB and currently receives more than 11 million passengers per year. Most cruises out of Helsingborg are for relatively short weekend excursions.

The Port of Gothenburg has seen a considerable increase in the number of visits by cruise ships, partly as a result of an effective cooperation between the port and the city’s marketing and event company Gothenburg & Co. It is also a member of Cruise Baltic, which has established a network of 27 destinations in ten different countries.

Copenhagen Malmö Port (CMP) administers the twin ports of Malmö in Sweden and Copenhagen in Denmark. CMP has a well-developed infrastructure and a strong industrial development targeting both global markets and the immediate Baltic region, and it has enormous potential for growth. In Sweden the port areas are the property of the City of Malmö, from whom CPM leases the harbour area.

In Germany, Lübeck is the only port on the Baltic Sea that offers a direct link with the European inland waterway system. Lübecker Hafen-Gesellschaft (LHG) port authority has been handling the administration and operation of the public ports in the Hanseatic City of Lübeck for more than 60 years.

Szczecin is the seventh largest city in Poland, and is the country’s largest seaport. Its port authority also administers the port of Swinoujscie, about 60 km to the north-west.
The Port of Gdansk Authority Spółka Akcyjna is a Joint Stock Company and is a commercial partnership that was established in 1998 and operates under the provisions of the Act on Seaports and Harbours and the Code of Commercial Companies.

The most northern ice-free Baltic seaport of Klaipeda is Lithuania’s third-largest city. The city dates back to the construction of the castle of Memelburg at the mouth of the Dane River in 1252. It is a rapidly developing cruise port with 15 m of depth for visiting ships and with much new investment in harbour facilities and a modern geographic information system (GIS).

Riga in Latvia is an important commercial port with a good sheltered harbour that has begun to attract cruise ships. It is administered by the Freeport of Riga Authority, which comes under the control of the Ministry of Transport.

Tallinn is the capital of Estonia and is considered one of the best preserved cities in Europe. The city lies about 60 km across the Gulf of Finland from Helsinki; it is a UNESCO World Heritage site and a great attraction for visiting cruise passengers.

The Russian Port of St Petersburg consists of three large commercial seaports: Bolshoi, Kronstadt and Lomonosov. It is one of the great destinations in this part of the world. The port authority is a federal non-profit agency.

In Finland the Port of Helsinki is recognized as an important element in the life of the city and the development of the whole region.

5.3.2 Port infrastructure and superstructure

Port infrastructure and superstructure that relates specifically to cruising is usually a small part of the function of most ports. In most cases the main attraction for cruise tourists is the associated city, although only a few cities have the advantage of docking facilities close to the centre of the town, so that in most cases an efficient transport system linked to the port is essential.

The Norwegian Port of Oslo contains a total of almost 10 km of quays with up to 11 m depth alongside and it covers a total area of 120 ha. The tidal range of less than 30 cm is insignificant. The Revier Quay, Akershus Quay south and Vippetangen Quay together offer 880 m of quays that are equipped for handling cruise ships.

The approach to the Port of Drammen passes through the Svelvik Sound, which is 100 m wide and with a depth of 11 m, and the Drammen Fjord. Again there is an insignificant tidal range.

There are a total of 1870 m of quays at Drammen, which has six private industrial quays that pay dues to the port authority. There are four roll-on/roll-off quays with depths of 7, 9, 10 and 10 m.

The two ports of Oslo and Bergen handle almost all of Norway’s trade. Port facilities in Bergen can accommodate from eight to ten cruise ships depending on their size, and has a full range of modern maritime and technical services, supplies, transport and other operations.

The Port of Trondheim has a cruise ship quay that takes ships up to 350 m long and up to 14 m draft. It can accommodate up to three cruise ships simultaneously, and all services are available, including pilotage, warehouse space, fresh water, cranes, provisions, ship repairs and tugs, and also has good connections to the airport. A tidal range of 2.4 m is significant for larger ships.

The Port of Gothenburg in Sweden is ice free, which means a longer season. The absence of tides and just 1.5 h required from the open sea to the harbour are additional attractions for cruise lines. In recent years, Gothenburg as a Christmas City has proved to be a popular destination in December and in this way has extended the cruise season. The Port of Gothenburg has two terminals for cruise ships; one at the centrally located Free Port and the other at Arendal, where the largest cruise ships can berth.

Stockholm (http://www.stockholmshamnar.se/en) has many quays with berths for vessels of all dimension and drafts. Facilities specifically for cruise ships are currently being extended.

The twin ports of Copenhagen in Denmark and Malmö in Sweden are 26 km apart and connected by the Øresund Bridge. They are jointly operated by Copenhagen Malmö Port AB (http://www.cmport.com) and together
anticipate 375 cruise ship visits in 2012, up 15% from 2010. In Copenhagen a maximum of ten cruisers can be accommodated simultaneously. There is a total quay length of almost 3 km with a maximum draft of 10 m. Cruise ships of over 6 m draft are requested to take a harbour pilot.

In Germany the port of Lübeck has the Terminal Skandinavienkai, which is one of Europe’s largest ferry and roll-on/roll-off terminals. Handling up to 90 vessel visits per week, the terminal is linked to important European and Scandinavian industrial centres.

In Poland the Port of Szczecin is connected by road with Berlin and with the European highway network, and it is also connected to the European inland waterway system. It is thus an important traffic intersection and a popular river cruise destination. In the heart of the city is the Waly Chrobrego Quay, where cruisers up to 215 m long with a draft of 6.5 m can be accommodated.

The Port of Gdansk with its deep-water outer port can accommodate the largest vessels that cruise the Baltic. There are facilities for vessels up to 765 m in length and 15 m draft. The inner port spreads along the Port Canal and the Vistula estuary and can accommodate vessels of up to 10.2 m draft and 225 m in length.

The Latvian Freeport of Riga offers about 3000 m of quays with 21 berths with a depth between 6.5 and 10 m. It has been an important commercial port for more than nine centuries.

Estonia is a state in the Baltic region of Northern Europe, and the port of Tallinn is the largest in Estonia. Taking into account both cargo and passenger traffic, it is one of the largest port enterprises on the Baltic. This UNESCO World Heritage Site has a cruise ship dock at the Old City Harbour, only 500 m from the city centre.

In Russia the port of St Petersburg is administered by a federal non-profit agency. It can accept cruise ships up to 320 m length and 11 m draft, and they are becoming an increasingly significant part of the local economy, though the cruise terminals on Vasilevsky Island, of which there are four, are several kilometres from the city centre.

Pilotage is required for all vessels entering the harbours and waterways of the Port of St Petersburg, ice-breakers being available when necessary.

5.3.3 Port operations

There are a different number of cruise passengers systems operating in the Baltic ports. Most have full International Maritime Organization (IMO) certification and ISPS.

To consider a few examples, Oslo in 2008 handled 2.7 million foreign passengers of which about 300,000 were on cruise ships and 2.4 million on international ferries. The Port of Oslo is ice-free and tidal effects are negligible, which ensures a maximum length of season and in the order of 5000 vessels a year passing through.

Bergen is other popular destination and the leading cruise port in Norway. It is one of the most important centres for the cruise business in Europe receiving about 200 cruise ships with more than 120,000 passengers each year. All ships have to report their arrival time at least 24 h prior to arrival at port of Drammen, due to an IMO standard.

The Port of Trondheim is certified compliant with ISPS and IMO standards in both its cruise terminals, and full maritime services, technical, provisions, supplies and consumables, transport and customs operations are available 24 h/day.

Flam harbour with a tidal range up to 2 m, a quay length of 110 m and depth of 12 m, has all services. The whole Alesund region has a long tradition of cruise traffic due to the exceptional attractions of the fjords. More than 200 cruise visits with around 250,000 passengers are expected each year.

In Sweden the port of Stockholm, with approximately 12 million passengers annually and a steady trend towards an annual increase, is the most active passenger port in the Baltic. International ferry passengers account for the greater part of this number, but there is a rapid growth in cruise ship visits, currently around 260 per year, there being facilities for such ships close to the centre of the city.
In 2011, 65,000 passengers arrived in Gothenburg on 52 vessels. This can be compared to the five vessels and 3600 passengers of 2002. The trend looks set to continue and it is estimated that this year (2012) around 70,000 passengers will arrive on 62 vessels.

Copenhagen Malmö Port had in 2011 more than 355 visits from 66 different ocean cruise vessels from 36 international shipping companies, 15% more than in 2010. Never before has Copenhagen been included so many times in the route planning of cruise lines. Nearly 750,000 passengers from more than 115 countries are expected to visit Copenhagen between April and October. The Baltic is a high yield destination with relatively short distances between ports such as Oslo, Stockholm, St Petersburg, Tallinn and Helsinki, which can all be visited in a week when sailing out of Copenhagen.

The German port of Kiel has three passenger terminals, the Norwegenkai, Schwedenkai and Ostseekai, the latter being the main cruise terminal, receiving over 100 cruise vessels and 200,000 passengers each year. Located in the city centre, it is a modern terminal with excellent facilities for both passengers and vessels. The terminal can serve 3000 passengers at the same time. The port of Lübeck handles about 350,000 passengers per year.

The Polish Port of Szczecin receives a few thousand cruise passengers each year, while in Gdansk there are generally more like a few hundred. Located at the mouth of the river, the Port of Gdansk, as well as the adjacent area, is ice-free and tide-free all year round, so that despite the potentially severe winter weather navigation conditions are reasonably favourable, making Gdansk one of the more approachable ports in the Baltic.

In Latvia the Freeport of Riga receives about 300,000 passengers, of which 15,000 are on cruise ships. The number of cruise passengers in 2012 increased by 75.5% compared to 2011.

The port of Tallinn serves about 260,000 cruise ship passengers per year. The port has 5500 m of quays with a draft of 11 m.

Helsinki is Finland’s main passenger port, and during the summer season international cruise ships make almost 300 visits and bring over 360,000 tourists to Helsinki.

It can be seen from these figures the degree to which cruise tourism is a rapidly expanding economic activity, with a particularly marked trend in the Baltic where it is likely that many potential markets have yet to realize their full potential and more perhaps remain to be discovered.

Further Reading


Web Resources

Baltic Ports Organization: http://www.bpoports.com
Baltic Sea Tourism Commission: http://www.balticsea.com
Bergen Port: http://www.cruise-norway.no/CDA/viewfile.aspx?id=71
Copenhagen Malmö Port AB: http://www.cmport.com
Cruise Critic: http://www.cruisecritic.com
Drammen Port: http://drammenhavn.no/index.php
Oslo Port: http://www.randburg.com/no/osloport
Stockholm Port: http://www.stockholmshamnar.se/en
World Port Source: http://www.worldportsource.com

5.4 Cruising in Northern Europe and the Baltic Sea

Still considered a relatively off-the-grid cruise destination and certainly overshadowed by the popularity of the Mediterranean, Northern Europe has charms of its own... Europe's northern region boasts a kaleidoscope of cultures, languages, currencies, artistic traditions and ancient histories.

Ranson (2011)

During recent years, cruise tourism has been increasingly present in the attention of tourism stakeholders, promising growth and profit margins. A review of a number of sector-specific statistical sources confirms a persistent growth trend in passenger numbers. For instance, the Cruise Line International Association (CLIA) reports a global annual growth rate of 7.6%, pointing out that there is ample room for market penetration (CLIA,
In this context, European source markets appear to be the most promising growth motor for the cruise industry’s next decade. According to the European Cruise Council (2010), the annual passenger growth rate in European source markets lies in the region of 11%.

The ‘cruise growth euphoria’ is partly fuelled from a variety of forecasts, assuming that the near 100% capacity utilization will persist in the long term. Simply stated, given a state of under-capacities cruise vessels will remain full (Kollwitz and Papathanassis, 2011). Under this premise, future demand could be equated to the projected supply of lower berths. There are a number of weak signals challenging this assumption. Whilst the numbers of cruise passengers are steadily increasing, the average ticket price and cruise duration is decreasing indicating price competition (Papathanassis, 2011b) and cruise operators are increasingly relying on onboard revenue to maintain their profitability (Vogel, 2009). An adjustment of cruise passenger growth forecasts, omitting the full capacity utilization assumption, indicates a stagnating US source market by the year 2018 (Papathanassis, 2011b). The growth trend in Europe is expected to continue until year 2030 (ibid). Moreover, mainly due to overcrowding and ‘market-expired’ capacities in the Caribbean, US cruise operators are increasingly shifting capacities in Europe. It is worth mentioning that in 2009, the deployment of US cruise products in Northern Europe consisted of 25 vessels (35,345 lower berths), representing a cruise supply increase of 58% (Papathanassis, 2011a).

Northern Europe is already a rapidly developing cruise region and is expected to increase in popularity over the next years.

5.4.1 Regional characteristics

The Baltic cruising region is an enclosed sea area (often referred to as the East Sea) located in Northern Europe. Its coast includes the Scandinavian Peninsula (Norway, Denmark, Sweden and Finland) and a large part of the Northern European coast (Germany, Poland, Russia, Lithuania, Estonia, Latvia). The salinity of the Baltic is lower than that of the Atlantic due to the large number of freshwater rivers and streams flowing into it. During the winter (January–May) a large proportion of the sea freezes. The summer season is relatively short, but it is tempered by the Gulf Stream exhibiting temperatures between 10 and 21°C. Finally, due to the latitude of the region, the summer months are characterized by very long days. For cruisers this presents the opportunity to experience ‘white nights’. The region features a rich history underlined by trade starting with Viking settlers and traders and reaching its peak in the emergence of the Hanseatic cities. This common history and interaction between the peoples of the region has resulted in a kaleidoscope of cultures, offering a rich experience for culturally interested cruisers.

5.4.2 Northern European cruise itineraries

The Northern European-Baltic cruise region consists of numerous countries and ports of call:

- Denmark: Aarhus, Copenhagen, Skagen, Ronne, Bornholm;
- Estonia: Tallinn, Saaremaa;
- Finland: Helsinki, Vaasa;
- Germany: Warnemünde (Berlin), Kiel (Hamburg), Lubeck (Travemünde);
- Latvia: Riga;
- Norway: Oslo, Bergen;
- Poland: Gdynia;
- Russia: St Petersburg;

Traditionally, Northern European itineraries featured lengths between 2 and 4 weeks during the summer season (June and July). Moreover, the region was dominated by cruise operators featuring high-end small and mid-size vessels. It follows that this cruising region is perceived as more attractive for the traditional, older and more affluent cruise market. However, over the last years, following a gradual extension of the cruising season from May to September and the deployment of newer, larger vessels, the region is gaining popularity with a larger, younger and more international passenger population. The majority of Northern European ports are near the corresponding cities and
in many cases within walking distance. Public transportation is safe and relatively low priced and English is widely spoken. Cruisers wishing to independently explore ports-of-call and sample a multitude of cultures are well served (Figs 5.8 and 5.9). According to Nilsson et al. (2005), the majority of cruise visitors (between 50 and 75%) in this region take organized tours, depending on the size of the host city, port surroundings, nationality and age.

5.4.3 Economic impacts and demand

Cruise Baltic, a port alliance consisting of 19 destinations in the Northern European/ Baltic Region, estimated that (Cruise Baltic,
2007) the cruise sector generates an annual turnover (direct and indirect) between €343m and €443m annually and created between 5500 and 11,500 jobs for its members. The average passenger spending varies depending on the port visited and the nationality of the passengers and ranges between €15 and €75 (Nilsson et al., 2005).

According to Cruise Baltic (2011), most visited ports are: Copenhagen, St Petersburg, Stockholm, Tallinn, Helsinki and Oslo, totaling approximately 2.5 million passengers in 2010. Compared to the 830,000 passengers at the beginning of the decade, this reflects an average annual growth of 12.7%. Those key ports represent the larger proportion (2010: 80%) of the total cruise visitors in the region (2010: approx. 3 million) and have experienced constant growth over the last years (Fig. 5.10).

On the other hand, smaller ports, such as Gdynia, Åhus, Riga, Turku and Visby, have not experienced this rate of growth.

5.4.4 Challenges and perspectives

The main challenges faces by the Northern European/Baltic cruise region can be summarized under the following.

Reputation and image

Whilst enjoying an ‘insider’s tip’ image, this region does not dominate the ‘attention radar’ of the mass cruise market and is widely regarded as a preferred option for older cruisers (60+). In principle, this is not necessarily a disadvantage, but it ultimately restricts passenger development, investments in recreational infrastructure (also for the local, younger populations) and ultimately the longer term economic sustainability of the developing ports in the region. Particularly, when placed in the competitive context of alternative cruise regions such as the Mediterranean, image and reputation become a critical success factor.

A wider spectrum of visitors implies a larger range of cruise operators and brands, enabling lower risk and increased revenue streams. Apart from being able to smoothen seasonality, ports (especially the smaller ones) can reduce their dependence on a single tour operator and improve their negotiating power.

Seasonality

Due to weather conditions, the Northern European/Baltic region enjoys a relatively small cruise season (May to August), finding

Fig. 5.10. Key Northern European ports – passenger development (source data: Cruise Baltic, 2011).
its peak during June and July. For a number of cruise lines, this small revenue window represents a significant limitation and renders the region less attractive in comparison with others: (i) the peak season overlaps with the high-season in the Mediterranean and the Canary Islands; and (ii) partly due to the short season, prices are relatively high and itineraries are fairly long, rendering the region less attractive for younger cruisers and families.

Localized overcrowing

Overcrowding is a time-specific and localized phenomenon (i.e. cannot really be attributed as a characteristic of an entire region at all times). None the less, a large number of overcrowding instances will ultimately damage the reputation of the region. Overcrowding, defined as the perceived presence of too many visitors in a confined space at a particular time, ultimately depends on the:

- Design, dimensions and location of the port facilities;
- Visitor capacity of a destination’s transportation and facility infrastructure;
- Frequency and degree of seasonality of visiting cruise ships; and
- Crowd and traffic management practices employed by the local authorities.

Jaakson (2004) elaborated on the phenomenon of tourism bubbles, where many attractions and facilities are concentrated in a restricted area of a destination. On the one hand, the concentration of tourist attractions in a particular area makes it more convenient for visitors and more attractive for local businesses, whilst containing tourist activity and its externalities in a particular area. On the other hand, such a concentration, combined with high seasonality and a small port that is within walking distance of the main attractions is likely to result in overcrowding.

Even though currently overcrowding is not a major issue in the Northern European/Baltic region, the above-mentioned characteristics apply to a number of its ports and as passenger numbers and anchoring ship sizes increase, the more likely it is that it will become one. According to Cruise Baltic (2007: 15), the average ship size has increased by over 100% over the last 5 years (1995: 583 pax/ship, 2010: 1262 pax/ship). Assuming that age and nationality influence the preference of self-exploration over organized tours (Nilsson et al., 2005: 36), as larger ships, carrying a more international and younger group of passengers discover the region, more overcrowding instances are expected to arise. Finally, the observed trend towards shorter itineraries may well imply a shorter duration of stay ashore, which in turn also facilitates overcrowding.

In light of the above challenges, it becomes evident that managing them requires planning and coordination beyond the scope of an individual port. Regional destination management to manage the cooperation amongst ports assumes an importance equivalent to local destination management aimed at increasing the competitiveness and attractiveness of each individual port.

5.4.5 Bridging the gap between local and regional destination management – PORTFolio analysis

The attractiveness of a cruise region for cruise operators and passengers extends beyond the scope of a limited set of destinations. This presents a challenge of regional cruise development, where a number of local authorities and businesses simultaneously compete for local demand and cooperate for regional attractiveness and complementarity. Adopting a portfolio logic, one could classify cruise regions on the dimensions of their degrees of:

- **Tourism development**: natural and man-made attractions, tourism-relevant activities and events (e.g. festivals, shopping possibilities) and amenities for guests (e.g. accommodation, tourism information/content services);
- **Infrastructure development**: Accessibility (transportation system), ancillary services (e.g. banks, telecommunications, medical facilities) and availability (destination marketing/branding).
On this basis one could classify the ports of a particular itinerary in the following categories (Fig. 5.11):

- **Authentic/Emerging Cruise Destinations**: ports are relatively new in the cruise landscape and compete on the basis of cost. The main challenge for such ports is the development and marketing of tourist attractions, whilst developing a positive presence in the potential visitors’ perceptions.

- **Exclusive/Developing Cruise Destinations**: destinations with developed and well-established tourism attractions, mainly due to historical reasons, aiming to further expand the scope of their activities to increase visitor numbers and diversify their tourism portfolio (e.g. by developing cruise tourism). The main challenge for such destinations is the funding and improvements of infrastructure, enabling larger visitor traffic (e.g. cruise terminals).

- **Gateway Cruise Destinations**: a number of ports have a maritime tradition and well-developed infrastructure aimed at maritime transport and trade. Cruise tourism is perceived as an opportunity to maximize the utilization of the existing infrastructure and generate new revenue streams for the local economy. Positioning themselves in the regional cruise tourism landscape and integrating tourism in the scope of the local economic development strategy are key tasks here.

- **Established/Mature Cruise Destinations**: finally, over a longer period of time, established cruise destinations have managed to create and maintain the image of a ‘must-visit’ port and are considered indispensable for regional cruise itineraries. Sustainability of this reputation, the quality of experience offered to the visitors and the perceived authenticity of such destinations are the key concerns of the local business and tourism authorities.

![Fig. 5.11. Cruise PORTfolio matrix (source data: Papathanassis, 2011b).](image-url)
From a cruise operator’s and an itinerary planner’s perspectives, a cruising region’s attractiveness necessitates a mix of different kinds of ports. An ‘imbalanced’ portfolio of cruise destinations in an itinerary carries a number of risks, mainly affecting reputation/image and economic sustainability. For example, a cruise region consisting mainly of established and gateway destinations may suffer from overcrowding and the externalities of mass tourism (e.g. exploitation, apathy). In turn, this image may inhibit repeaters and ultimately drive cruise operators in the search for novel regions. A typical example of this is the Caribbean. Over the last years, the majority of US cruise operators have begun penetrating European source markets and deploying vessels elsewhere for exactly these reasons.

An application of the Cruise PORTfolio matrix concept for the Northern European/Baltic region (Fig. 5.12) indicates that the region is still at the initial stage of development and many ports still require both tourism and infrastructure development.

Nevertheless, this development needs to be coordinated in order to economically benefit the individual ports, whilst maintaining balances at the regional level and avoiding the duplication of destination marketing costs. In this respect, regional port alliances have a key role to play.

5.4.6 Managing regional cruise development: the role of port alliances

Typically, regional destination management organizations focus on providing support for the marketing and promotion activities of their members, allowing them to pool their activities and share their costs (e.g. web-presence, in trade fairs, televised media campaigns). Apart from facilitating communication between its member-ports, cruise port networks, such as the Cruise Baltic

Fig. 5.12. Cruise PORTfolio Northern Europe/Baltic.
(http://www.cruisebaltic.com), also provide content and conduct market research on behalf of their members.

Nevertheless, this rather ‘passive’ role is arguably not sufficient to deal with the destination development challenges facing the region; especially when considering the increasing concentration characterizing the cruise sector. Dealing with seasonality and sustainability issues, individual ports need to agree and implement common standards for the entire region. In order to improve their negotiating position over large cruise operators, small ports and a variety of stakeholders need to coordinate their activities and facilitate the development of an attractive, diverse and balanced portfolio of cruise destinations (see previous section). This is of course a very challenging task as it requires dealing with a ‘prisoner’s dilemma’ involving different national boundaries, cultures, legal systems and interests. There are public as well as private stakeholders that need to commit to a common regional strategy and integrate it to their own individual objectives and realities. Saint Augustine (354–430) is believed to have said that ‘the world is a book and those who do not travel read only a page’ (http://en.wikiquote.org/wiki/Travel). At the end of the day, it is the itinerary that defines a cruise. And just as a book is more than a collection of arbitrary pages, an itinerary is more than the sum of its ports.

**5.5.1 Opportunity in obsolescence**

The gale force winds froze the shores of the town of Kemi in the Gulf of Bothnia on a chilly December evening in the year 1986. The mayor, Mr Leino, was pressed to find new opportunities of economic development for the municipality and the region. The jobs seemed to be in danger in the local forest industry, and the two paper mills were slowing down. He pondered upon his ideas while driving late from his office. He pressed forward too fast, but managed to handle the car on the icy road. He wanted to have a look at the *Sampo* icebreaker (Fig. 5.13), which was located in the Ajos, the northernmost Finnish harbour. The winds threw the snow into whirls that made it tough to see the road in the dark of the night and made driving unsafe. He pressed on over the slippery road as he needed to have a talk with the harbourmaster, Mr Heikki Honkaheimo, who shared his views about the future use of the icebreaker (Simonen, 2007).

He looked out from his car window towards the harbour where he saw the massive silhouette of the *Sampo* icebreaker in the port. The ship was to be retired as it had become obsolete. It was still in perfect condition after having assisted innumerable commercial ships stuck in the severe winter in nightmarish ice conditions for over three decades. The municipality was about to lose the great *Sampo*. He did not like that idea and he had voiced this to citizens on several occasions. He had argued for the future use of the great ship, but there was little understanding of his ideas, and the idea was not appreciated by the local politicians. But he knew well the history of the ship, and was sure he would navigate his ideas to a safe port (Simonen, 2007).

**5.5 Arctic Adventure Cruising, *Sampo* as a Case Study**

We are much obliged to Mrs Marika Tomminen and Mr Esa Ruuskanen for their time and helpfulness in providing informative insights on the *Sampo* Icebreaker cruising operations.

**Web Resources**

Cruise Baltic: http://www.cruisebaltic.com

The icebreaker *Sampo* operated in active icebreaking duty in 1961–1987 before its reassignment to its current task at the port of Ajos in Kemi. Its good quarter of a century of service saw some colourful phases not entirely without drama. All in all, the *Sampo*’s decades of service are a part of the Finnish winter maritime shipping history (Kulju, n.d.).
Finland is the only country in the world where all ports freeze during wintertime. During the coldest periods of normal winters, temperatures can drop even below −30°C. In Finland, the coldest ever measured temperature, −51.5°C, was recorded in Kittilä’s Pokka, in January 1999.1

Due to its geographical location, Finland’s import and export industries rely greatly on maritime transport and, therefore, having winter ports operational is essential for international competitiveness.

In arctic conditions, icebreakers are responsible for the functioning of maritime shipping. Icebreakers mainly assist merchant vessels and clear paths important to the industry.

Towards the end of the Sampo’s active icebreaking duty, 35% of the Finnish maritime shipping occurred during wintertime. For example, in the winter of 1984/1985, Finnish ports recorded a total of 13,382 overseas vessel departures and arrivals, with total cargo of 18 million tons.

In the coastal shipping between Finnish ports, 2184 departures and arrivals were recorded. These vessels carried cargo of total 2.2 million tons. These numbers give a good picture of the significance of icebreakers.

Since 1970, all 22 of the Finnish winter ports, from Ajos in the Bothnian Bay to Röyttä, have been kept operational all year round. The only exception in the Sampo’s history can be tracked to March 1972, when the ports of Kemi, Oulu and Raahe were forced to close for 4 days due to exceptionally heavy pack-ice. In addition to the actual winter ports, the Sampo assisted maritime shipping to numerous smaller ports.

The Sampo was constructed in 1960 at the Wärtsilä shipyard in Helsinki. The vessel was named after its predecessor, which was built in 1898 and served the country for over half a century. The new Sampo was an essential part in rebuilding the Finnish icebreaker fleet that took place during the decades after the Second World War. The first new generation icebreaker, the Voima, was launched in 1952, and was given to the Finnish Maritime Administration a few years later. As a new technical feature, the Voima had two fore propellers that guaranteed a stronger stream to the bow, which in turn reduced resistance in breaking the ice. The same technique was utilized later when constructing the Sampo.

In 1958, constructing the first so-called archipelago icebreaker was completed. The vessel was named Karhu. Its sister vessels were the Murtaja, completed in 1959, and
the Sampo, completed in 1960. In addition, in December 1966, the Finnish Maritime Administration acquired the ‘stepsister’ of the aforementioned vessels, the Hanse, which was constructed in Finland for the Federal Republic of Germany. These vessels were called the Karhu class icebreakers.

The Sampo may have played an important role in the development that led Germans ordering the Hanse. In the spring of 1965, Sampo spent a week at an exhibition in Hamburg to impress the Germans. One gets a good example of the Sampo’s everyday duty by examining the events of the harsh winter of 1965/1966. In terms of the amount of ice, the winter was extremely difficult, and all the ports of the Gulf of Bothnia were forced to close due to ice problems (Kulju, n.d.).

Shipping to Kaskinen was cut between 6 February and 10 April, to Rauma between 13 February and 5 March and to Pori between 20 February and 20 March. An indication of the harshness of the winter is that even the southern port of Hamina was forced to close for a while.

That winter, the Sampo began its preparations on 10 November and the operational pennant was raised 6 days later. First, the Sampo embarked to the Bothnian Bay to assist shipping at Oulu and, if necessary, at Rautaruukki. This mission occupied the Sampo all the way to the early days of January.

Next, the Sampo moved to Vaasa and Kaskinen and assisted there up to mid-January, after which it was transferred to the Gulf of Finland. At the end of January, the Sampo mainly assisted shipping at Porkkala and Hanko. For a little over a week at the beginning of February, the Sampo was hard at work by Utö.

After Utö, the Sampo assisted the shipping of ports in eastern Finland, up until 7 April. The longest assignments reached all the way to northern parts of the Baltic Sea. Next, the Sampo moved back to Porkkala, and by the end of April the vessel was back operating at Utö waters.

At the end of the winter, the Sampo was during 23–26 May, the Sampo assisted shipping to Kemi, Oulu and Rautaruukki. The Sampo returned to Helsinki on 28 May, at which point the operational pennant was lowered down.

(Source: http://www.sampotours.com/media/sampo_history.pdf)

Without the icebreakers there would be no maritime traffic during the coldest winter months, with the single exception in Finland of the southern port of Hanko. Otherwise all shipping is dependent on the icebreaker services over most parts of the Baltic Sea during winters. Shipping plays a key role within the Baltic Sea area as a unifying element in the region. Compared to land transport via rail and roads, shipping is a rather slow but relatively sustainable transport mode. The Baltic Sea has some of the densest maritime traffic in the world. Depending on the season, about 1900 to 2400 ships are en route in the Baltic on an average day, not including ferries, smaller fishing boats or leisure craft. Among those ships, around 200 are oil tankers with a cargo up to 150,000 tons. Several ferry lines connect the States in the Baltic proper. Some of the world’s biggest ferries are transporting goods and people between Estonia and Finland, Sweden and Finland and there are several other ferry lines, i.e. between Sweden and Germany, Sweden and Estonia, Denmark and Germany and between Denmark and Sweden. In summertime large numbers of cruise ships from all over the world enter the Baltic Sea area to call at the many coastal cities of cultural interest, such as Helsinki, St Petersburg, Tallinn, Riga, Gdansk, Rostock, Lübeck, Copenhagen, Visby and Stockholm (Table 5.5).

5.5.2 Creating opportunity awareness

Mr Leino had often been on board the Sampo with his guests. He wanted to buy the icebreaker. The jobs were decreasing in the forest industry and at the paper mills in Kemi. This caused economic uncertainty that had to be handled. The mayor thought about creating new jobs in tourism. Kemi was traditionally an
### Table 5.5. Ports and passengers on the Baltic.

<table>
<thead>
<tr>
<th>Port</th>
<th>Number of international passengers</th>
<th>Sewage reception facilities available (according to the GISIS PRF database)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2006&lt;sup&gt;a&lt;/sup&gt;</td>
<td>2007&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Denmark</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copenhagen</td>
<td>829,000</td>
<td>871,000</td>
</tr>
<tr>
<td>Fredrikshavn</td>
<td>2,594,000</td>
<td>2,624,000</td>
</tr>
<tr>
<td>Gedser</td>
<td>1,507,000</td>
<td>1,612,000</td>
</tr>
<tr>
<td>Grenaa</td>
<td>170,000</td>
<td>168,000</td>
</tr>
<tr>
<td>Helsingør</td>
<td>10,721,000</td>
<td>10,966,000</td>
</tr>
<tr>
<td>Rodby Faergehavn</td>
<td>6,789,000</td>
<td>7,058,000</td>
</tr>
<tr>
<td>Ronne</td>
<td>1,409,000</td>
<td>1,421,000</td>
</tr>
<tr>
<td>Estonia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tallinn</td>
<td>6,760,000</td>
<td>6,514,000</td>
</tr>
<tr>
<td><strong>Finland</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helsinki</td>
<td>9,045,502</td>
<td>9,021,519</td>
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<tr>
<td>Mariehamn</td>
<td>2,681,114</td>
<td>2,707,864</td>
</tr>
<tr>
<td>Naantali</td>
<td>137,000</td>
<td>150,906</td>
</tr>
<tr>
<td>Turku</td>
<td>3,162,612</td>
<td>3,022,447</td>
</tr>
<tr>
<td>Vaasa</td>
<td>78,000</td>
<td>72,909</td>
</tr>
<tr>
<td>Germany</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kiel</td>
<td>1,465,603</td>
<td>1,543,703</td>
</tr>
<tr>
<td>Lübeck</td>
<td>314,884</td>
<td>354,314</td>
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<td>Puttgarden/Fehmarn</td>
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<td>2,541,144</td>
<td>2,583,043</td>
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<td>Sassnitz-M</td>
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<tr>
<td>Latvia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Riga</td>
<td>246,900</td>
<td>441,914</td>
</tr>
<tr>
<td>Ventspils</td>
<td>51,700</td>
<td>50,720</td>
</tr>
<tr>
<td>Lithuania</td>
<td></td>
<td></td>
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<tr>
<td>Klaipeda</td>
<td>240,198</td>
<td>285,216</td>
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<tr>
<td>Poland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gdansk</td>
<td>156,511</td>
<td>170,833</td>
</tr>
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<td>Gdynia</td>
<td>509,139</td>
<td>530,975</td>
</tr>
<tr>
<td>Kolobrzeg</td>
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<td>34,391</td>
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<tr>
<td>Świnoujście</td>
<td>929,899</td>
<td>876,427</td>
</tr>
<tr>
<td>Russia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>St Petersburg</td>
<td>319,800</td>
<td>306,900</td>
</tr>
<tr>
<td>Sweden</td>
<td></td>
<td></td>
</tr>
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<td>Gothenburg</td>
<td>2,199,150</td>
<td>2,102,663</td>
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<tr>
<td>Helsingborg</td>
<td>10,763,267</td>
<td>10,973,554</td>
</tr>
<tr>
<td>Kapellskär</td>
<td>1,381,798</td>
<td>1,973,554</td>
</tr>
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<td>Karlskrona</td>
<td>110,815</td>
<td>118,194</td>
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<td>Karlskrona</td>
<td>414,944</td>
<td>432,860</td>
</tr>
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<td>Malmö</td>
<td>156,603</td>
<td>174,980</td>
</tr>
<tr>
<td>Nynäshamn</td>
<td>226,113</td>
<td>209,495</td>
</tr>
<tr>
<td>Stockholm</td>
<td>8,249,304</td>
<td>8,434,842</td>
</tr>
<tr>
<td>Trelleborg</td>
<td>1,696,646</td>
<td>1,816,301</td>
</tr>
<tr>
<td>Umeå</td>
<td>77,669</td>
<td>71,017</td>
</tr>
<tr>
<td>Varberg</td>
<td>170,332</td>
<td>168,206</td>
</tr>
<tr>
<td>Visby</td>
<td>77,578</td>
<td>62,000</td>
</tr>
<tr>
<td>Ystad</td>
<td>1,936,622</td>
<td>1,878,383</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>87,529,150</td>
<td>88,798,862</td>
</tr>
</tbody>
</table>

n.i.: no information
<sup>a</sup>Saurama <em>et al.</em> (2008).
<sup>b</sup>Centre for Maritime Studies (2008).
<sup>c</sup>Centre for Maritime Studies (2009).
industrial town, and all car-driving tourists just passed by Kemi on their way to northern Lapland skiing destinations. Tourism had been practically non-existent in Kemi at the time. Mr Leino had occasionally organized icebreaking trips for visitors and other dignitaries to the town on a small tugboat in the harbour. The feedback had been most enthusiastic, and these insights had grown into an idea for the future uses of the icebreaker. For some time he had formulated his ideas about real icebreaking cruising tours (Simonen, 2007).

And he knew that if it could be great fun and of interest and highly liked by his professional guests, a great number of other visitors might find it equally enjoyable. There was plenty of ice in the Gulf of Finland and the Bothnian Bay, and an armada of Finnish-made icebreakers had kept the trade lines open over Nordic winters for the northern industries' exports and imports. The necessary elements for icebreaker cruises were there for everybody to experience. But he did not get much understanding for his voiced vision. He knew that he was not going to give up. And as an experienced administrator he expected some time to be needed to get acceptance enough for his idea. He did not foresee it would take years to push through (Simonen, 2007).

5.5.3 Oy Jäänmurtaja-Kemi-Icebreaker Ltd

He knew he had the stamina to face the long infighting in the corridors of local political power. All icebreakers in Finland are state owned and Sampo was being sent to retirement after 27 years of service for being too small. Technologically it was obsolete as it was basically too narrow for the modern fleets. But functionally it was perfectly ship-shape (Ruuskanen, 2011).

In introducing the Sampo icebreaker cruises there was actually nothing to compare it with. It was a new introduction of an experience in the cruising market. The innovative idea was elaborated by the few persons who envisioned this opportunity in obsolescence. It became a commercial success almost overnight among Finns, and a highly popular 'once in a lifetime' experience (Ruuskanen, 2011).

The vessel was bought in October 1987 for 1 million marks for a new company, the Oy Jäänmurtaja-Kemi-Icebreaker Ltd, established by the city council of Kemi. The event received very much attention. Sampo divided opinion and stimulated much discussion. In spite of the financial risks and pessimistic general opinion the city council learned always to back up Sampo. The vessel was transferred into the ownership of the harbour services in order to continue support after a few years. The bankruptcy of the Wärtsilä Marine, the seller of the ship, caused some concerns in 1989. The sale was considered such a risky operation that Wärtsilä had reserved the right to buy the vessel back for the same price but with the bankruptcy of the seller this option was gone for the municipality. Luckily the new owners became very much involved with the icebreaker's new positioning as a cruiser (Ruuskanen, 2011).

It turned out to be a very successful combination of technology, machinery and elements of nature that were combined into creating an emotionally significant experience. Sampo became the first touristic icebreaker in the world, which created international demand. And Kemi received 'The Best Touristic Product 1987' award in Finland for implementing the excellent idea (Simonen, 2007).

5.5.4 Cruises start

Sampo started icebreaker cruises in the spring of 1988. The early idea was that tourists would enjoy the cruise in their finery on and below decks, drink cocktails and enjoy good meals while watching the winter scenery pass by. The management team found out fairly soon that, in reality, what tourists wanted was an active holiday. They wanted to drive snowmobiles or huskies on the ice to the icebreaker, play in the snow and try floating in the sea dressed in the crew’s survival suits. This was soon provided for. The cruise took originally 6–8 h and included also information talks inside the vessel and the breaking of 'steel ice' (2–3 m thick clear ice) from a crane lift that, in
the early days, was attached to the front of the vessel. Later the cruise was made into a 4 h trip, and a lunch service was included in the ship’s traditional restaurant. The demand determined the contents and modes of the cruise, and once the total package was formulated, it has not been much changed afterwards. Charter cruises for private groups started the same spring and summer restaurant function later in the summer from Ajos as its home port (Ruuskanen, 2011); there is evidence of intense enthusiasm for the experience.2

5.5.5 International tourism experience

The cruising experience was international from the very beginning. The ship provided a unique experience to visitors representing different nationalities. There is no language barrier because it is a universal experience. Only very small children, disabled people and blind or wheelchair bound may be constrained in their experiences. The important element in the experience is getting literally into arctic nature. Many people never see vast marine fields of ice, the Aurora Borealis, nor are they able to experience the mystics of Polar nights. Sampo is able to provide all this within easy access, safely and in a comfortable setting (Ruuskanen, 2011; Tomminen, 2011).

The vessel was built in 1960 and is an outstanding example of the Finnish icebreaker industry’s manufacturing capabilities. About 60% of icebreakers in the world are made in Finland. Sampo3 was the flagship of late president Kekkonen and received state visitors and was kept in top condition. The vessel is conserved in its original state and functions manually just as in the 1960s. The guided tour on board offers an interesting view of the interior of the vessel, a great attraction itself. The crew is helpful and speak several languages, playing an important role in the making of experience.

In the wake of the success of Sampo the city council decided in 1994 to build the SnowCastle in the center of Kemi. This was also a subject that divided opinions. With the passing of years the SnowCastle became a permanent part of winter scenery in Kemi with its SnowHotel in the SnowCastle, SnowRestaurant and winter events. These two winter attractions, Sampo icebreaker and the SnowCastle combine well and offer a wide selection of snow- and ice-related experiences. They form together a strong marketable product that is more powerful than these two attractions would be separately and strengthen each other, and also significantly strengthen the regional and national tourism (Tomminen, 2011).

5.5.6 Sales

Sampo received a lot of interest and as a unique experience was easy to sell to domestic and foreign travel agents. But it represented a slight communication problem because there was nothing with which to compare it to form any expectations. Perhaps that partially explains its success. An icebreaker cruise was a new concept and its pricing was a challenge. Sampo woke interest among decision makers, but choice was difficult for the final customer beforehand. Icebreaker Ltd represented a big economic risk for the council of Kemi and the future was seen as quite risky (Ruuskanen, 2011).

The sales organization at Icebreaker Ltd did not sell directly abroad. Big travel agencies that sold Finland abroad (incoming agencies) acting as middlemen became an efficient sales organization. The agencies also had domestic clients and during the first years of Sampo Finnish business people were the largest group of visitors. Foreign travel agencies that bought directly represented about 10% of the sales (Ruuskanen, 2011).

The total number of visitors annually was between 1500 and 1700 persons in spite of the recession that started at the beginning of the 1990s. In winter 1992/1993 a steady growth took place with 50% annual increases in turnover, and this continued up to 7000–8000 visitors per year. It levelled there and after that there was only a small amount of growth. Targeted marketing efforts for incoming agencies resulted in increased numbers of visitors. Spain was targeted during 1992–1995 and Spanish demand produced the main market segment in the year 1996. It is still the biggest group with 30% of the total number of visitors (Ruuskanen, 2011; Tomminen, 2011).
5.5.7 International distribution

Incoming agencies started to specialize by choosing strong market areas and increasing their involvement in chosen countries. The marketing organization of Icebreaker Ltd cooperated closely with incoming agencies, Finnair and the Finnish Tourist Board. Icebreaker Ltd spent basically very little in marketing because the company received invitations to participate in travel fairs and workshops abroad. Marketing efforts represented then no risk for Icebreaker Ltd and it was cost-effective. The cooperation resulted in sponsorships and increased market value for the icebreaker cruise experience. Sampo became one of the leading tourist magnets in Finland that attracts tourists worldwide and is still the brand second only to Santa Claus. Marketing functioned this way during the first 10 years and Icebreaker Ltd did not undergo any strong internationalization phases after the tremendous start as satisfactory cooperation with local players became the ongoing concern (Ruuskanen, 2011; Tomminen, 2011).

5.5.8 Phases of operations in international markets since 1998

Tourism branches around the world underwent a big structural change at the end of the 1990s because of expanding Internet technology. In Finnish tourism it necessitated changes in structuring the distribution of power: SME tourist companies like safari-companies became incoming agencies and started selling directly abroad. International business contacts were within reach of everybody. A new reality arose when foreign agencies contacted Icebreaker Ltd directly and wanted to sign a contract and sell cruises to their customers without a go-between. Icebreaker Ltd lost its cooperation network and tens of new companies appeared wanting to sell cruises. Icebreaker Ltd was forced to learn international direct sales (Tomminen, 2011).

In order to maintain business relations with tourism companies around the world the marketing organization of Icebreaker Ltd started spending much more money and time in marketing efforts. In workshops there were many agencies that all sold the same products and one had to visit them all. The cost efficiency was gone along with the middlemen. Foreign travel agencies are today the biggest buyers and foreigners represent about 99% of the visitors (Tomminen, 2011).

The Internet also provided a possibility for individual travellers to buy direct. The amount of foreign individual sales increased in winter 2002/2003 and is still increasing. Unfortunately individual sales are not cost-effective because of the process being slow. Travel agencies are preferred because they do the job of informing the client in their own language. The language barrier that did not exist in the beginning became a severe challenge with direct sales. One can question if the product is still as good as it was with the middlemen (Ruuskanen, 2011; Tomminen, 2011).

Luckily for Icebreaker Ltd there was a well-known service experience in the cruise product that was tested by foreign customers, and was widely accepted, when the strong internationalization phase started. Sampo was already a brand and known around the world as an exclusive and reliable experience during the previous 10 years. The SnowCastle was in the same organization and close cooperation with local safari-companies was a fact. This added user-value brought in more profits. Icebreaker Ltd invested in the development of a wider selection of service products for groups and individuals with packages including activities for several days. New products were developed around Sampo and SnowCastle with overnight stays at SnowHotel and dinners at the SnowRestaurant (Tomminen, 2011).

5.5.9 Becoming an international destination

Icebreaker Ltd became an essential part of the tourism organization in Kemi. There were several organizational arrangement in the early
years of the decade that united *Sampo* and SnowCastle under the same company with the tourist office in charge of sales. They share the same office and booking system, which makes their work easier. *Sampo* is now self-sufficient, but SnowCastle receives funding from the city council. The SnowCastle concept sells well, but the season is too short, being only slightly over 2 months, to cover the operating costs and annual building costs (Tomminen, 2011).

*Sampo* Tours became the sales organization and it sells services also in other places outside Kemi. The individual traveller concept needs more attention as it is very costly, but it is the main trend that does not seem to diminish. *Sampo* increased the demand and growth for several other local tourist products and companies exactly as the former mayor Mr Leino had envisioned and planned for in 1986. It provides work indirectly to several other companies and people in the service branches. There were just over 300 overnight stays of foreign tourists at the hotels in Kemi 1987, and numbers have changed dramatically recently (Ruuskanen, 2011; Tomminen, 2011).

According to former mayor Mr Leino, the *Sampo* project rose from Kemi’s strengths, the environment, the arctic nature, ice conditions in the winter and other elements available in the environment. Kemi was a town of seafarers and had the most northern harbour that was kept open in the winter by the icebreakers. Also the economic situation in Finland was good even though the forest industry was losing jobs. This was a severe threat to Kemi. Falling employment was the push for the idea to come through. Publicly owned companies do not always survive, but in Kemi the city council backed up *Sampo* through the years and helped to maintain the icebreaker, in spite of hard winds and political speculations. Mr Leino argued for the need of the municipality to develop an innovative environment for new ventures and business activities. In his opinion this was seen a viable policy for any municipality (Kulju, n.d.; Simonen, 2007).

Luckily *Sampo* did not suffer badly during the recession in the 1990s even though there was not much growth in the beginning. But when steady growth started during 1992/1993 it had a snowball effect and the growth kept increasing. The profitability limit lies in 6000 visitors per annum, and after *Sampo* reached that, the amount of visitors has never decreased below the breakeven level. Globalization has been a great asset to *Sampo* together with technological development and the internet. Online booking is normal today and new banking services including credit card payments are helpful and in use. The present day challenges of marketing lie in enhanced use of social media and in identifying a network of new distributors, i.e. travel agents, when old contacts retire (Ruuskanen, 2011; Tomminen, 2011).

Further Reading


Web Resources

*Sampo* history: http://www.sampotours.com/media/sampo_history.pdf
http://www.tripadvisor.com/Attraction_Review-g189919-d523701-Reviews-Sampo_Icebreaker-Kemi_Lapland.html

Notes

1 This reminds the second author of her first day walking to work for the university in February 1999 in −48°C. Most memorable.
3 The name *Sampo* refers to the forging of Sampo, magical artifact of indeterminate type, in the Finnish national epic Kalevala. The forged *Sampo* is understood to refer to a self-made source of endless wealth.
6  Nautical Tourism Market Suppliers in Continental Europe and the Black Sea*

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The European continental market is as significant as the ‘maritime’ tourist market for tourist development and its economic significance. Developed tourism in all European countries is adapted to domestic tourists, and although receptive tourism economies consider it emitting, at the same time they are also receptive. Moreover, the standard concept of tourism, which has traditionally been mainly related to the summer season and warm coasts of the Mediterranean, is now gradually changing. Sometimes, standard receptive markets turn into emitting markets, and the populations from warm areas, particularly the Mediterranean, may enjoy spending summers away from the heat in more pleasant and cool summer temperatures in continental tourist destinations. Therefore, nautical tourism with its sub-industries is well developed in continental Europe: on 41 rivers and numerous canals, channels and lakes, where 45,000 km of waterways are navigable. Its development is very economically important, which is why it should be appreciated and researched.

6.1 Geo-hydrographical Features of Continental Europe

European rivers

The Danube is one of the most important European rivers and flows through 14 countries over its almost 3000 km length. Since the opening of the Rhine-Main-Danube canal it has been possible to navigate from the North Sea and the Baltic by river vessel across most of Europe down to the Mediterranean and the Black Sea. Other important navigable rivers in Western Europe are the rivers Elbe, Oder, Vistula, Seine, Loire, Rhone, Tagus and Thames. France alone has 8000 km of navigable waterways on rivers and canals, and the total length for Western Europe is about 45,000 km. Apart from the Danube, all the main northern and western European rivers are connected to the North Sea, the Baltic and the Atlantic. Most European rivers are of an estuarine type. In the northern countries they are frozen over for a significant part of the year, with flow patterns mostly determined by the ice melting. Thus the highest water
levels are in spring from melting ice and in autumn from high rainfall. In Western and Northern Europe there are many rivers on which it is not possible to navigate, but they are nevertheless important because of hydro-electric power and other economic uses.

Species

The European river richest in species is the Danube, with more than 5000 animal species, including about 300 species of birds. One of the reasons is that the Danube flows through several climatic zones. European countries have established about ten natural parks or other protected areas on the Danube. Some very rare water plants also exist in the Danube and other European rivers.

Ecology

The use of river water for drinking purposes is one reason for the many protection regulations. On most rivers there is constant monitoring to indicate the state of the water. Natura 2000 is particularly concerned with rivers, with the aim of conserving the quality of the monitored sections of the EU rivers. Although considerable impacts from drainage and dredging occur on all rivers, the influence is more marked on the navigable sections. The intention is also to ensure minimum river flow even during the dry part of the year. Natural and constructed wetlands and flood controls help to maintain the diversity of fauna.

Critical habitats and biodiversity

Until now a lot of work has been done on critical habitats on the Danube and other EU rivers. The LIFE programme as a financial instrument supports many nature conservation and ecological projects. Many of them are connected with river life. In some countries, like the UK, estuaries are recognized as important areas. The aim is to understand the importance of nature preservation, and identify future trends through research projects and to define aims and goals.

Bio-geographic importance

Implementation of the INSPIRE programme through a range of integrating applications promotes international standards for applying similar rules in all EU countries connected through a database. Included are natural data from river, river estuaries and surrounding areas. Together with the Habitats Directive, which lists the bio-geographical regions, it has recognized nine regions in EU countries. Regions are mapped according their potential natural vegetation. Common databases will help record any changes that might occur in some areas.

Fishing and aquaculture

Fishing on European rivers is economically of some importance as a specific attraction for a specialized kind of tourism. For a number of small rivers in many European countries information is available for tourists and fishing is organized as an attraction and source of income. Fish farming is in some places connected with fishing as an activity as well as the production of fish for the market.

Geology

Most of the EU rivers are connected with Alpine watersheds, which were formed during the Oligocene and Miocene epochs when strong pressure resulted in a high chain of mountains.

Temperature and climate

Local climates are partly affected by river temperatures. Because of intensive use of water for producing electricity in coal-fired or similar industrial plants, a trend towards rising temperatures in some rivers is being recorded. The ultimate result can be thermal pollution that influences not only life in the rivers, but also affects the surrounding areas. One solution is to rebuild such plants near the sea and decrease the intensity of river water use, but that is a very long-term plan.

Sources


6.2 The Main Features of Nautical Tourism in Continental Europe

Nautical tourism is developing in continental Europe through smaller nautical tourism subjects, and it is developed in all its sub-industries. One of its main characteristics is its close connection with other selective tourism categories and other industries. However, in terms of development, the destination is important, particularly high-quality destinations that are connected to freshwater rivers, lakes and canals. The attractions of water in tourism, mainly in the summer season, are crucial for all tourism industries especially for nautical tourism itself.

However, for the purpose of full-scale research, and starting from the available sources of information, the European continental market should be seen as dividing naturally into eastern and western parts. Both markets are developed, but unfortunately data from the eastern part are not available to us. This is why, at the moment, this part of continental Europe will not be studied.

Marina Industry. The marina industry on the European continent has developed, as a rule, through sports club marinas, important for yachtsmen as either permanent or transit marinas. Unlike the Mediterranean marinas, those on the continental market of European nautical tourism are rarely organized as private commercial marinas. In their tourist supply they are linked to the destination, and quite often to highly developed camping and other tourism facilities. Marinas are generally well equipped with essential facilities for the maintenance and accommodation of vessels.

Marinas in continental Europe, mainly of relatively small capacity, are well organized and equipped and they satisfy all the main needs of recreational boaters and their vessels. Marinas on rivers, canals and lakes, with a few exceptions, do not exceed 500 berths. Globally analysed, the development of marinas depends on the development of the destination and of the national economy.

Each river system is covered by its own set of regulations that control navigation, safety, ports and moorings. Generally European river systems are very well organized and adequately managed.

Charter Industry. The charter industry has developed in association with marinas in European fresh waters, and services are provided within marinas and ports.

Cruise Industry. The cruise industry is developing with typically large and medium-sized cruisers particularly adapted for navigation in fresh waters.

In regard to investment and cruiser management, the general practice is that investors (individual or groups) purchase one or more cruisers, and sign a contract with successful tourist agencies for multi-annual management of their cruisers. Such an investment system is common in continental Europe, mainly central and Western Europe. It is managed by a policy of acquisition of contracted profit above the statutory interest rate. TUI, a leading international travel group, and other tourist agencies have developed their experience in this field. They manage a considerable number of cruisers on the navigable European rivers. Sea and freshwater cruising generally crosses national boundaries, and the legislative procedures of European ports have adapted to this international characteristic. Contracts between investors and large tourist agencies which manage cruisers are usually signed for 10-year periods. This tourism business is successfully organized by specialized tourist agencies that have achieved some very good results both for themselves and their clients.

The average multi-day cruising price is around €140 full board (FB) per person per day. Interestingly, the total number of cruisers navigating on rivers is around 300, almost the same as those navigating on sea.

Viking River Cruises is a multi-continental global corporation that dominates river cruising on all continents, from China to Europe. It was founded by Scandinavian and Dutch investors in 1997, with a base in the USA. Their
19 large cruisers navigate the world. This company also purchases berths and has 3300 berths at its disposal, thus ensuring an advantageous position regarding locations. The capacity of its cruisers is 198 passengers. In Europe this corporation organizes the longest river tour, a 23-day cruising on the Rhine, the Main, the Danube, the Seine, the Saône, the Rhône and the Elbe rivers. At a later date, Viking Cruises extended their activities to the Volga, Svir and Dnieper, and then in China on the Yangtze. The Danube cruise alone is about 2400 km long; the river flows through Germany, Austria, Slovakia, Hungary, Croatia, Serbia, Romania, Moldavia, Bulgaria and the Ukraine and connects with the port of Sulina on the Black Sea. Traffic on the Danube is very heavy. There are 113 cruisers navigating only from Passau to Budapest (Fig. 6.1).

In this type of large river cruising the routes are generally adapted to the higher quality European destinations, and cruising ports have develop at convenient junctions where tourists can embark and disembark. Lake cruising has chiefly the characteristics of short trip excursions, often of only 1 day; there is often not the scope for longer excursions. In terms of destination use, the system of sustainable cruising development, assisted by a supra-national management, is exceptionally well developed in fresh waters. A particular example is Lake Bodensee, situated in the border region of three countries, Germany, Switzerland and Austria, where the supply of nautical tourism, cruising in particular, appears as a unique tourist supply of these three countries.

**SUPPORTING ACTIVITIES.** There are many sub-industries, such as camping, that function in association with nautical tourism, the quality of the destination always being key. It is the destination that, along with investors and local self-government, determines the nature and direction of development of the local economy, including nautical tourism. The system of investment, investment management, connections with local self-government and the framework of its competence/authority,
favour a dynamic investment and development in continental Europe. Simultaneously, the state is increasingly limiting its role to supporting local self-government and economic development, while offering some protection to investors by special measures at the state level (Luković, 2012). The fact that the more developed countries of Western and Central Europe are involved suggests some apparent similarities in the development of nautical tourism. There are, however, many differences that arise from the specific qualities of destinations, as well as from other factors of diversity between them.

It should be noted that this research is not able to cover certain countries for which there are no available data on nautical tourism. These are primarily the transitional countries of Eastern Europe, such as Hungary, Romania, Bulgaria and the eastern Balkans.

### 6.2.1 Austria

Austria, as a highly developed continental country in central Europe, has developed its national nautical tourism on rivers, lakes and canals. Having no sea coast, Austria is restricted to the development of joint venture investments with countries that are located on the coast. As a result its investments are increasingly directed towards Slovenia and Croatia where Austrian investors are showing considerable interest. There has so far been some investment in Croatian marinas, though a similar interest in wider aspects of nautical tourism is yet to come.

The River Danube and Lake Bodensee are two basic routes on which Austria is developing nautical tourism, although other destinations on smaller lakes are not unimportant. Vienna is an extremely valuable cruise destination and port that attracts a large number of cruise ship passengers. Apart from Vienna, other well-known destinations, such as Linz, are potentially interesting for boaters and cruise ship passengers.

### MARINA INDUSTRY

The marina industry in Austria has developed through 28 quality marinas equipped with all basic facilities for the accommodation of vessels and their maintenance. These are mostly marinas of lesser and medium capacity. Two of the smaller ones are situated on Lake Bodensee where Austria, together with Germany and Switzerland, is developing elite tourism. The remaining 26 marinas are situated on the River Danube, seven of them with 101–500 berths and the remaining 19 with less than 101 berths (Table 6.1).

| Basic data | Area (in 000 km²) | 83,878 |
| Population | 8,404,252 |
| River navigability total (in km) | 350 |

### CHARTER INDUSTRY

The charter industry in Austria, as in other developed countries in Europe, has developed in association with the marina and port supply at attractive tourist and urban destinations.

### CRUISE INDUSTRY

The cruise industry is difficult to analyse in terms of actual cruise ships, but in terms of ports with facilities for such ships there is clearly growing activity. Austrian investors are very active on the continental market of European nautical tourism and own well-equipped fleets of large and medium-sized cruisers sailing the major European navigable rivers.


| Marinas according to number of quality marinas per location (28) |
|-----------------------|-----------------|--------------|
| Lakes | Rivers | Total |
| 0–100 | 0 | 19 | 19 |
| 101–500 | 1 | 7 | 8 |
| 501–1,000 | 1 | 0 | 1 |
| 1,001–2,000 | 0 | 0 | 0 |
| 2,001–5,000 | 0 | 0 | 0 |
| >5,000 | 0 | 0 | 0 |
| Berths in total | 719 | 2,352 | 3,071 |

Average number of berths per marina = 109.68

*According to ADAC (2010) classification
6.2.2 France

Both at sea and on its inland waterways, France is developing nautical tourism in all sub-industries of nautical tourism.

MARINA INDUSTRY. The marina industry in France is equally developed on salt and fresh waters. Out of 406 marinas of all types, 200 are categorized as quality marinas of which 75 are on inland waterways (Table 6.2).

Marinas in inland France are mostly on rivers, the majority on the Seine. As in other European countries these are mostly club-type sports marinas of smaller and medium capacity. They cannot accommodate mega-yachts, which are nevertheless quite common on the river, the easy connection with the sea being an attraction.

CHARTER INDUSTRY. The charter industry is developed on rivers in association with marinas. Because of its mild climate, the season for both marinas and chartering is longer than in Northern European countries.

CRUISE INDUSTRY. The cruise industry has developed on rivers in a similar pattern to other countries of continental Europe, that is, river cruise routes based on attractive destinations. Paris is at the forefront, and there are a few smaller resorts that the cruising industry uses and supports their development. Cruisers operating on French rivers are mostly owned by French investors, in distinction from other countries of Northern and central Europe. Paris, as one of the most attractive world destinations, is linked to the sea by navigable rivers and thus made accessible to boaters.

SUPPORTING ACTIVITIES. Great emphasis is put on the construction of vessels and yachts of all sizes, French boat-builders such as the Beneteau Group, which owns Jeanneau and ACM Dufour Power, being well known throughout the world.

Many other industries are well connected with basic sub-industries of nautical tourism and developmentally encourage each other. This feature of all developed European countries has yet to be effectively followed by the transitional countries.

6.2.3 Italy

As already mentioned, Italy has been the leading country, in both Mediterranean and Europe generally, in the development level of nautical tourism, though now the Baltic countries do not lag far behind. In the area of nautical tourism freshwater development in Italy, of particular importance are lakes such as Garda, Como, Lugano and Maggiore, where nautical tourism is developed on these lakes in the form of all the three basic industries.

MARINA INDUSTRY. The marina industry is developed on the lakes through the organization of quality club-type marinas, which are affiliated with clubs of sailing enthusiasts; in some of these there are so-called Captain’s clubs that cater for the somewhat better off (Table 6.3).

In accordance with available statistics, this research mentions only Lake Garda, which covers an area of 370 km² with ten high-quality marinas with 976 berths on its shore. Yacht charter on the lake, of smaller and mid-size capacity, is developed and well

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<tr>
<td><strong>Basic data</strong></td>
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<tr>
<td>Area (in 000 km²)</td>
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<tr>
<td>Population</td>
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<tr>
<td>River navigability total (in km)</td>
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<tr>
<td>High quality river marinas</td>
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<tr>
<td>High quality sea and river marinas</td>
</tr>
<tr>
<td>Marinas according to number of quality marina berths (75)</td>
</tr>
<tr>
<td>0–100</td>
</tr>
<tr>
<td>101–500</td>
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<tr>
<td>501–1,000</td>
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<tr>
<td>1,001–2,000</td>
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<tr>
<td>2,001–5,000</td>
</tr>
<tr>
<td>&gt;5,000</td>
</tr>
<tr>
<td>Berths in total</td>
</tr>
<tr>
<td>Average number of berths per marina = 58.80</td>
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*aaccording to ADAC (2010) classification  
baccording http://www.portbooker.com
adapted to local conditions, and offers many possibilities for both independent and skippered chartering. There are in addition a total of 20 yacht sailing schools.

CRUISE INDUSTRY. The cruise industry on Italian lakes, Garda in particular, is developed in terms of transport between the many attractive towns through the 52 km length and maximum 16.7 km width of the lake. Such lake cruising is one ingredient in the abundant tourist activities on the lake. Cruising with small traditional cruise ships is less developed, though there are a number of classic tourist cruise ships, as on all European lakes.


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<tr>
<th>Basic data</th>
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<tbody>
<tr>
<td>Area (in 000 km²)</td>
<td>301,338</td>
</tr>
<tr>
<td>Population</td>
<td>60,340,328</td>
</tr>
<tr>
<td>River navigability total (in km)</td>
<td>158.4</td>
</tr>
</tbody>
</table>

| High quality lake marinas\(^a\)          | 10    |
| Sea and lake high quality marinas\(^b\)   | 158   |

<table>
<thead>
<tr>
<th>Marinas according to the number of berths in quality marinas (10)</th>
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<tbody>
<tr>
<td>0–100</td>
<td>6</td>
</tr>
<tr>
<td>101–500</td>
<td>4</td>
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<tr>
<td>501–1,000</td>
<td>0</td>
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<tr>
<td>1,001–2,000</td>
<td>0</td>
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<tr>
<td>2,001–5,000</td>
<td>0</td>
</tr>
<tr>
<td>&gt;5,000</td>
<td>0</td>
</tr>
<tr>
<td>Berths in total(^a)</td>
<td>976</td>
</tr>
</tbody>
</table>

Average number of berths per marina = 97.6

\(^a\)according to ADAC (2010) classification
\(^b\)according to http://www.portbooker.com

6.2.4 Germany

Tourism experts, especially those from the Mediterranean, consider Germany to be the largest European emitting tourist market; this view is particularly strongly held in the area of nautical tourism. From the perspective of the Mediterranean countries the German tourist market is emitting, though from a German perspective, and considering its tourism potential and annual turnover, Germany is also very much a receptive market. For example, in 2010, German tourism turnover was €232.6bn with 2.8 million visitors, amounting to 4.5% of GDP, which is an exceptionally high proportion for a receptive tourist market. This slightly distorted perspective also applies in nautical tourism; Germany, according to the ADAC classification, has the largest number of quality marinas and is a leader in European marina supply. The same situation applies in both the charter and cruising industries.

MARINA INDUSTRY. The marina industry in Germany (Fig. 6.2) is developing through 259 quality marinas of all types on the coasts of the Baltic and Atlantic, and with 420 more offering 33,474 berths on rivers, canals and lakes.

![Marina and cruising port in the tourist town of (a) Waren and (b) the lake marina at Röbel with an adjoining campsite (Germany) (source: T. Lukovic).](image)
Thus 71.6% of German marinas and 53.9% of quality marina berths in Germany are on inland waterways and lakes (Table 6.4).

Freshwater marinas are generally slightly smaller in capacity than on the coast, but are no less important. Their significance lies in the fact that they provide a foundation for the development of numerous rivers and lakes, thus assuming to some extent a similar role to Mediterranean marinas that encourage the development of a locality. The fact that marinas are, as a rule, of a club type does not affect their development since it does not prevent them from achieving high quality forms of cooperation and development with companies as well as with universities and other subjects. German development models remain at any rate an example for development for all others, especially for the countries in transition. For example, the Ramsberg marina on Lake Brombachsee is organized in association with the Erlangen-Nürnberg University and used as a part of maritime university programmes and a gathering place for students and teachers (Fig. 6.3).

Regattas and other competitions are often held in marinas, for example, in Ramsberg marina there is a sailing competition for staff and another between staff and students. Though some marinas are connected to large corporations, they all are effectively self-financing. Dry marinas are also frequent and are organized in the vicinity of tourist centres and situated close to rivers and lakes.

**CHARTER INDUSTRY.** The charter business involving the hire of vessels, yachts and skipper services is developed with smaller vessels and yachts in the first place, and is as usual linked with marina and port supply.

**CRUISE INDUSTRY.** The cruise industry in Germany cannot be treated as a national market since the developed countries of Europe operate very much an international type of cruising on the navigable waterways with the ships either owned by cruise companies or by families or groups of financiers from different countries. The EU as a unique market without borders is functioning well in inland cruising, and the usual cruise routes through European countries are, for example, from Germany (Regensburg–Straubing–Windorf–Passau) via Austria (Linz–Wachau–Vienna) to Hungary and further to Romania and the port of Sulina and the Danube estuary into the Black Sea. Cruising is organized as either 1-day or multi-day excursions, at an average price of €140 per person per day, including full board.

German river cruising is carried out on the European rivers with cruisers adapted for river navigation and with capacities of up to 2000 passengers. Every European river has a strict system of regulations administered by Harbour Master’s Offices similar to those of coastal ports.

The organization of river cruising businesses varies from independent companies specialized for river cruising and navigation (such as Donauschiffahrt WURM + KOCK, Swiss Viking River Cruises AG and Austrian River Shipping Co.) (Fig. 6.4) to large travel company operations, such as TUI (Fig. 6.5). Unlike large sea cruising where a tourist company never actually takes over the ships, this quite frequently happens on rivers. So, for example, the company TUI has signed 10-year contracts with a large number of

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<table>
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<th>Basic data</th>
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<tr>
<td>Area (in 000 km²)</td>
<td>357,111.91</td>
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<tr>
<td>Population</td>
<td>81,758,000</td>
</tr>
<tr>
<td>River navigability total (in km)</td>
<td>5,625</td>
</tr>
</tbody>
</table>

| Marinas according to the number of berths in quality marinas per location (320) |
|-----------------|---|---|---|
| Marinas total:  | Lakes | Rivers | Total |
| 0–100           | 121   | 299   | 420   |
| 101–500         | 19    | 35    | 54    |
| 501–1,000       | 0     | 1     | 1     |
| 1,001–2,000     | 0     | 1     | 1     |
| 2,001–5,000     | 0     | 0     | 0     |
| >5,000          | 0     | 0     | 0     |
| Berths in totala | 14,046 | 19,428 | 33,474 |

Average number of berths per marina = 79.70

*aaccording to ADAC (2010) classification*
River cruising is a highly developed form of tourism, and the cruiser companies and crew provide all the comfort and entertainment aboard the cruiser during the voyage and organize excursions to elite and high quality destinations. Many rivers are navigable and convenient for large cruising, but the largest navigable (over 400 km) and busiest rivers are the Danube, Elbe, Weser, Rhine and Main. Small cruising mainly occurs on lakes between local destinations and lakeside attractions. Such cruises are usually a part of an overall tourist supply for the destination.

Nautical tourism in Germany is intensively supported by various industries, such as shipbuilding and also the car industries that provide significant sponsorship for events.
The shipbuilding industry, as a support to nautical tourism, is involved in the production of yachts and large cruisers. In yacht production, the leading producer of sailing and motor yachts is Bavaria Yachtbau GmbH, Giebelstadt. It produces motor yachts of 28–46 feet in length and sailing yachts of 32–55 feet, all to its own standardized designs. The German shipbuilding industry also produces cruisers for seas and rivers in all sizes. The largest and world-renowned shipyard in Germany, specialized in the production of sea and river cruisers, is Meyer Werft, GmbH, Papenburg, founded in 1795, employing over 2500 workers.

As a support to nautical tourism in Germany, there is a network of small and large quality tourist agencies among which TUI stands out in particular. Many other industries are linked to nautical tourism, such as camping and other types of tourism, including other strong industries such as the car industry.

### 6.2.5 Poland

Nautical tourism on the rivers and lakes of Poland has developed in parallel with that of the coast. The current level of development corresponds to the development of the national economy, especially nautical tourism as a part of the overall tourist supply on the Baltic and inland waterways.

**Marina Industry.** The marina industry of inland Poland is currently developed through nine quality marinas situated in lakeside resorts as part of the overall tourist supply of the destination (Table 6.5). Apart from these lake marinas, there are several on rivers, particularly the Vltava, which links the coast with Warsaw and Krakov. The river Gdes flows through Wroclaw and is also very important for nautical tourism.

**Charter and Cruise Industries.** Chartering is developed within lake marinas and ports, mostly offering smaller vessels of all types. The cruise industry on the lakes is developed as short trip tourism that links tourist destinations on the lakes.


<table>
<thead>
<tr>
<th>Basic data</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (in 000 km²)</td>
<td>312,678</td>
</tr>
<tr>
<td>Population</td>
<td>38,186,860</td>
</tr>
<tr>
<td>River navigability total (in km)</td>
<td>440</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>High quality lakes marinas</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marinas according to the number of berths in quality marinas (9)</td>
<td></td>
</tr>
<tr>
<td>0–100</td>
<td>5</td>
</tr>
<tr>
<td>101–500</td>
<td>4</td>
</tr>
<tr>
<td>501–1,000</td>
<td>–</td>
</tr>
<tr>
<td>1,001–2,000</td>
<td>–</td>
</tr>
<tr>
<td>2,001–5,000</td>
<td>–</td>
</tr>
<tr>
<td>&gt;5,000</td>
<td>–</td>
</tr>
<tr>
<td>Berths in total</td>
<td>1,112</td>
</tr>
</tbody>
</table>

Average number of berths per marina = 123.56

*aaccording to ADAC (2010) classification*

### 6.2.6 Switzerland

Switzerland is a continental country without a coast yet it has many prestigious sea-related industries. It is, for example, a leading producer of diving equipment, and is also a world leader in the manufacture of specialized equipment for ships, vessels, submersibles and submarines. Nautical tourism in Switzerland has developed on its lakes as a part of an overall tourist supply. Of particular importance are the marinas on Lake Constance (Bodensee) that Switzerland shares with Germany and Austria (Table 6.6).
Apart from a few smaller club-type marinas on smaller lakes, the marina industry is developed through four quality marinas on Lake Constance. The marinas’ capacities range from 340 to 430 berths and their supply falls in the highest ranking of lake marinas in Europe.

CHARTER AND CRUISE INDUSTRIES. On the Swiss lakes, Lake Constance in particular, chartering of small vessels and yachts is developed. The cruise industry is developed on the lakes as trip cruising, linking attractive lake destinations. This especially relates to Lake Constance where attractive destinations of Switzerland, Austria and Germany are linked.

SUPPORTING ACTIVITIES. As a support to the development of nautical tourism in Switzerland, it is worth mentioning the diving equipment industry as well as other sea and water-related industries that are among the world’s best in terms of quality of technical manufacture.


<table>
<thead>
<tr>
<th>Basic data</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (in 000 km²)</td>
<td>41,285</td>
</tr>
<tr>
<td>Population</td>
<td>7,785,806</td>
</tr>
<tr>
<td>River navigability</td>
<td>65</td>
</tr>
<tr>
<td>total (in km)</td>
<td></td>
</tr>
<tr>
<td>High-quality lake marinas*</td>
<td>4</td>
</tr>
<tr>
<td>Marinas according to</td>
<td></td>
</tr>
<tr>
<td>the number of berths</td>
<td></td>
</tr>
<tr>
<td>in quality marinas (4)</td>
<td></td>
</tr>
<tr>
<td>0–100</td>
<td>–</td>
</tr>
<tr>
<td>101–500</td>
<td>4</td>
</tr>
<tr>
<td>501–1,000</td>
<td>–</td>
</tr>
<tr>
<td>1,001–2,000</td>
<td>–</td>
</tr>
<tr>
<td>2,001–5,000</td>
<td>–</td>
</tr>
<tr>
<td>&gt;5,000</td>
<td>–</td>
</tr>
<tr>
<td>Berths in total*</td>
<td>1,545</td>
</tr>
<tr>
<td>Average number of berths per marina</td>
<td>386.25</td>
</tr>
</tbody>
</table>

\*according to ADAC (2010) classification

6.3 The Main Features of European Continental Cruising Industry Ports

River cruise ships are generally smaller than those going to sea, with perhaps only 100–160 passengers. Typically a mooring will be in the centre of a destination, with easy access to the main attractions. This type of tourism has currently an annual growth rate of about 15% (Peisley, 2013). The Rhine, Rhone and Danube are the main rivers used for cruising in Europe, but some other rivers will also be mentioned and all have a rapidly increasing number of cruise tourists, the great majority of them visiting Europe.

While it is these main rivers that can take the larger vessels, and thus see most of the cruise tourist traffic, there is also an extensive network of canals that link the rivers and offers much potential for smaller vessels.

The longest of the European rivers, the Danube, has many interesting destinations along its course; it can be reached from the North Sea or the Baltic via the Rhine-Main-Danube canal and followed right through to the Black Sea.

6.3.1 Port management and ownership

The Port of Vienna is administered by the Wiener Hafen Port Authority, and is the most popular city in Austria, being its capital and its economic, political and cultural centre.

The Port of Enns (or Ennshafen), of medium size, lies on the Enns River at its junction with the Danube about 18 km south-east of Linz.

The Port of Krems, locally known as Mierka Donauhafen Krems, is administered by the port authority Gesellschaft m.b.H. and Co KG. The thousand-year-old City of Krems is located in north-east Austria about 80 km west of Vienna.

Linz was established by the Romans, and now has a population of 200,000. It is the third-largest city in Austria and the capital city of the state of Upper Austria. The harbour comes under the Linz Service GmbH port authority.

Web Resources

http://www.portbooker.com
### Table 6.7. Marinas on major river, lake and canal systems in European fresh waters

(source: T. Luković; ADAC, 2010).

<table>
<thead>
<tr>
<th>Montage</th>
<th>Mecklenburg-Vorpommern (Germany)</th>
<th>Elbe river (Germany)</th>
<th>Weser river (Germany)</th>
<th>Rhine, Neckar (Germany)</th>
<th>Main river (Germany)</th>
<th>Rhine–Main–Danube canal (Germany)</th>
<th>Danube river (Germany)</th>
<th>Lake Chiemsee (Bavaria, Germany)</th>
<th>Lake Constance (Germany)</th>
<th>Lake Constance (Austria)</th>
<th>Danube river (Austria)</th>
<th>Lakes in Poland</th>
<th>Rivers in France</th>
<th>Italy (Lago di Garda)</th>
<th>Total marinas and berths</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–100</td>
<td>102</td>
<td>39</td>
<td>37</td>
<td>132</td>
<td>28</td>
<td>17</td>
<td>7</td>
<td>3</td>
<td>4</td>
<td>19</td>
<td>4</td>
<td>66</td>
<td>6</td>
<td>465</td>
<td></td>
</tr>
<tr>
<td>101–500</td>
<td>19</td>
<td>7</td>
<td>6</td>
<td>21</td>
<td>–</td>
<td>–</td>
<td>1</td>
<td>16</td>
<td>4</td>
<td>1</td>
<td>7</td>
<td>5</td>
<td>9</td>
<td>4</td>
<td>101</td>
</tr>
<tr>
<td>501–1,000</td>
<td>–</td>
<td>1</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1</td>
<td>1</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>2</td>
</tr>
<tr>
<td>1,001–2,000</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2,001–5,000</td>
<td>–</td>
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<td>–</td>
<td>–</td>
</tr>
<tr>
<td>&gt;5,000</td>
<td>–</td>
<td>–</td>
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<td>–</td>
<td>–</td>
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<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Number of marinas</td>
<td>121</td>
<td>48</td>
<td>43</td>
<td>153</td>
<td>28</td>
<td>18</td>
<td>1</td>
<td>24</td>
<td>4</td>
<td>2</td>
<td>26</td>
<td>9</td>
<td>75</td>
<td>10</td>
<td>570</td>
</tr>
<tr>
<td>Berths in total</td>
<td>8,189</td>
<td>5,412</td>
<td>2,770</td>
<td>9,255</td>
<td>1,091</td>
<td>250</td>
<td>651</td>
<td>5,407</td>
<td>1,545</td>
<td>719</td>
<td>2,352</td>
<td>1,262</td>
<td>4,410</td>
<td>976</td>
<td>44,739</td>
</tr>
<tr>
<td>Average berths per marina</td>
<td>67.68</td>
<td>112.75</td>
<td>64.42</td>
<td>38.96</td>
<td>31.25</td>
<td>36.17</td>
<td>450</td>
<td>225.29</td>
<td>389.25</td>
<td>359.50</td>
<td>90.46</td>
<td>140.22</td>
<td>58.80</td>
<td>97.60</td>
<td>78.49</td>
</tr>
</tbody>
</table>

*Apart from these countries, no data on marinas and other types of tourism in other countries are available. This particularly refers to the countries of Central and Eastern Europe.*
The Swiss Rhine Harbours (SRH) authority is responsible for operations and maintenance of the Port of Basel. Management of the port is under the Rheinschiffahrtsdirektion Basel port authority.

German river cruises are connected with three main rivers, the Rhine, Elbe and Danube. The total length of inland waterways in Germany is about 7300 km, of which nearly 5000 km is of international importance. Together with high quality regulation of rivers, there is also more than 1600 km of canals such as the Dortmund-Ems, Mittelland, Elbe-Seiten and Main-Danube canals, all with an adequate infrastructure.

The Stuttgart port harbour authority belongs to the Hafen Stuttgart GmbH (HSG). It is a joint-venture company of the regional capital city of Stuttgart and has the legal status of a limited company. The port operates on the so-called ‘Heilbronnner System’, which includes responsibility for rail systems, waterways and development projects.

In France it is possible to take cruises on the rivers Rhone and Seine, on the smaller rivers of Gironde, the Garonne and Dordogne in the wine-growing region of Bordeaux or to take barge cruises on the canals that still function in many regions of France, linking the Seine and Rhone and connecting the Atlantic and Mediterranean via the Canal du Midi.

Le Havre-Paris, Dunkerque-Lille, Antwerp/Rotterdam-Strasbourg, and Marseille have been mentioned in the section on the Atlantic. Lyon, on the Rhone, is the third-largest city in France and an important port.

The Vistula, 1047 km long, and the Oder, 742 km long, in Poland are used for river cruising. The port of Torun on the Vistula is less used because of the occasionally unpredictable behaviour of the river. The Oder flows partly through Poland and partly the Czech Republic. The Oder and Vistula are connected by canal, as are several smaller rivers. Gdansk, Szczecin, Wroclaw, Bidgoszcz and Warsaw are some of the larger river ports accessible to cruise boats.

In Sweden inland waterway cruising is mostly on the 190 km long Gota Canal that connects Stockholm and Gothenburg. The canal is mostly 3 m deep and 14 m wide. The whole region has many canals accessible for small boats. Because Stockholm handles about 12 million passengers annually the new Stockholm-Nynashamm port is under construction.

6.3.2 Port infrastructure and superstructure

The Port of Vienna comprises several major areas: the ports of Freudenau, Albern, Lobau, the Viennamarina and the DDSG Port Vienna. In total it covers an area of 350 ha and contains 5000 m of quays.

The total area of Krems covers 48.35 ha, with two basins and a quay length of 1560 m and water depth of 8.00 m. In the winter there are 14 berths available in the harbour.

The Port of Linz covers area of 135 ha with six basins, 9304 m of quay and 35 berths.

Le Havre is the most used port in France and the fifth most used in Europe. A regular user of the port is the ferry service from Portsmouth. The project Port 2000 will allow the docking of all kinds of ships at all states of the tide. At present ships use the François I Lock (écluse François I), which is one of the largest locks in the world (length 400 m; width 67 m; depth 24 m). 250,000-ton ships can traverse through it to the non-tidal basins and canals, such as the Canal du Havre. The Port of Le Havre is managed by a state agency called Port Autonome du Havre (Port Authority of Le Havre).

The general intention of Italy is to restore its many old canal systems, for which it expects to spend around €1bn. The first canals were built in the 12th century, and they now require complete restoration. The city of Milan has around 500 km of such canals awaiting restoration. Venice could also be considered a port with inland connections. It handles a total of more than 1.5 million passengers per year. As a cruise terminal it can handle about ten ships in the same
time. Because of the ecological sensitivity of the area, there have been many projects directed towards minimizing pollution. Even so degradation of the lagoon persists, and according to some opinions is caused mostly by the large cruise ships.

The port of Magdeburg is the most important inland port and hub in central Germany, and comprises three port areas covering a total of 655 ha that are accessible to the industrial port for commercial and industrial operations.

### 6.3.3 Port operations

The Port of Vienna is a favourite tourist destination and receives over 4000 passengers ships carrying a total of over 300,000 passengers per year. The Vienna Marina is the centre for recreational and passenger boats and cruise agencies and offers many facilities, such as restaurants.

The First Danube Steamship Company (DDSG) was founded in 1829 running one of Europe’s largest inland fleets; it continued to be an important shipping interest on the Danube until World War II. Returned to Austrian ownership in 1955, it became a state-owned enterprise. In 1991, it was split into two bodies, one for freight and one for passengers. In 1995, the Port of Vienna and the Österreichisches Verkehrsburo tourist office formed the DDSG-Blue Danube, with five ships for excursions between Vienna and Wachau. The state-owned DDSG controls landing rights at about 50 landing stations. Other ports in Austria are at Enns, Krems and Linz.

In 2002 about 10,000 passengers travelled on Delta cruises, with a total of 119,000 recorded on cruise ships between Passau and Budapest. In 2003 these numbers rose to 45,000 and 130,000, respectively. Between January and October 2004 some 43,000 passengers called at Belgrade and 22,000 at Novi Sad. In 2004, over 90 cruise liners carrying around 150,000 passengers plied the Danube. In the 2005 season, 100 cruise ships sailed the river, with around 109 in 2006.

### Further Reading

*Encyclopaedia Universalis. Société d’édition Encyclopædia Universalis S.A.*

### Web Resources

- Croatian Centre for Inland Waterway Development Manual: [http://www.crup.hr/crup.hr/files/Prirucnik.pdf](http://www.crup.hr/crup.hr/files/Prirucnik.pdf)
- Cruiser Reviews: [http://www.cruisereviews.com](http://www.cruisereviews.com)
- Euro River Cruises: [http://www.eurorivercruises.com](http://www.eurorivercruises.com)
- Hamburg: [http://www.hafen-hamburg.de](http://www.hafen-hamburg.de)
- UN Economic Commission for Europe: [http://www.unecce.org](http://www.unecce.org)
- World Port Source: [http://www.worldportsource.com](http://www.worldportsource.com)

### 6.4 Nautical Tourism Market Suppliers on the Black Sea

As already mentioned, data on the nautical tourism market of Eastern Europe is currently inadequate. The same applies to the Black Sea, which is bordered by Ukraine, Turkey, Romania, Bulgaria and the Republic of Moldavia, and by Russia, Turkey and Georgia in the east. According to the data from the Internet, there are 13 marinas on the Black Sea, ten of which are Turkish, two are situated on the Russian coast and one on the coast of Georgia. These are mostly marinas with a small number of berths and are part of an overall tourist supply.

This market is sufficiently important to be worth considering, but must remain as a challenge for future research. The nautical tourism market of the Black Sea may be characterized as an old/new market, which, after political and economic changes in Europe, is re-emerging on the European tourist supply market.
Table 6.8. Marinas in European countries, review of four marketsa (source: T. Luković, according to ADAC, 2010).

<table>
<thead>
<tr>
<th>Marinas and berths</th>
<th>Austria</th>
<th>Belgium</th>
<th>Croatia</th>
<th>Denmark</th>
<th>Englandb</th>
<th>France</th>
<th>Germany</th>
<th>Greece</th>
<th>Italyc</th>
<th>Netherlands</th>
<th>Poland</th>
<th>Portugal</th>
<th>Spain</th>
<th>Sweden</th>
<th>Switzerland</th>
<th>Turkey</th>
<th>Other (Malta, Montenegro, Slovenia)</th>
<th>Europe total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–100</td>
<td>19</td>
<td>8</td>
<td>4</td>
<td>14</td>
<td>5</td>
<td>72</td>
<td>453</td>
<td>22</td>
<td>24</td>
<td>32</td>
<td>14</td>
<td>2</td>
<td>8</td>
<td>45</td>
<td>–</td>
<td>5</td>
<td>4</td>
<td>731</td>
</tr>
<tr>
<td>101–500</td>
<td>8</td>
<td>9</td>
<td>38</td>
<td>42</td>
<td>25</td>
<td>59</td>
<td>149</td>
<td>15</td>
<td>104</td>
<td>68</td>
<td>9</td>
<td>16</td>
<td>62</td>
<td>39</td>
<td>4</td>
<td>17</td>
<td>2</td>
<td>666</td>
</tr>
<tr>
<td>501–1,000</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>12</td>
<td>4</td>
<td>44</td>
<td>6</td>
<td>2</td>
<td>23</td>
<td>16</td>
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<td>3</td>
<td>31</td>
<td>5–</td>
<td>–</td>
<td>–</td>
<td>3</td>
<td>160</td>
</tr>
<tr>
<td>1,001–2,000</td>
<td>–</td>
<td>–</td>
<td>1</td>
<td>–</td>
<td>2</td>
<td>19</td>
<td>3</td>
<td>1</td>
<td>7</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>9</td>
<td>2–</td>
<td>–</td>
<td>1</td>
<td>0</td>
<td>47</td>
</tr>
<tr>
<td>2,001–5,000</td>
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<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>5</td>
<td>–</td>
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<td>1</td>
<td>–</td>
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<td>–</td>
<td>–</td>
<td>–</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Marinas</td>
<td>28</td>
<td>19</td>
<td>47</td>
<td>68</td>
<td>36</td>
<td>200</td>
<td>611</td>
<td>40</td>
<td>158</td>
<td>118</td>
<td>23</td>
<td>21</td>
<td>110</td>
<td>91</td>
<td>4</td>
<td>26</td>
<td>10</td>
<td>1,610</td>
</tr>
<tr>
<td>Berth totala</td>
<td>3,071</td>
<td>4,781</td>
<td>13,416</td>
<td>19,265</td>
<td>12,723</td>
<td>97,382</td>
<td>62,093</td>
<td>6,642</td>
<td>54,811</td>
<td>35,656</td>
<td>2,460</td>
<td>6,770</td>
<td>53,685</td>
<td>16,474</td>
<td>1,545</td>
<td>8,659</td>
<td>3,420</td>
<td>402,853</td>
</tr>
<tr>
<td>Average</td>
<td>109.68</td>
<td>251.63</td>
<td>285.45</td>
<td>283.31</td>
<td>353.42</td>
<td>486.91</td>
<td>101.63</td>
<td>166.05</td>
<td>346.91</td>
<td>302.17</td>
<td>106.96</td>
<td>322.38</td>
<td>488.05</td>
<td>181.03</td>
<td>386.25</td>
<td>332.04</td>
<td>342.00</td>
<td>250.22</td>
</tr>
</tbody>
</table>

aData relate to marinas in the Mediterranean, European Atlantic coast, Baltic and inland continental marinas. Data relating to the Black Sea market were not available.

bThe available data for England refer only to the south coast on the English Channel.

cExcluding the islands of Sicily and Sardinia, where there are 33 quality marinas.
Nautical tourism is clearly an activity that has developed to a significant degree throughout Europe. Its role in each country’s economy is basically similar, but there are also significant differences to be noted. Similarities can be seen in regional models of development, where destination management, sustainable development and the legislative framework play important roles. This is particularly the case for the marina and charter industries, which are very much determined by the characteristics of their location. The European model of regional and local development may be observed in these industries; but differences within this model are evident when comparing developed and transitional economies.

When analysing the main characteristics of nautical tourism, which are specific for each European country, it must be noted that the data relating to marinas were published in the ADAC publication that lists only the highest quality European marinas in accordance with their criteria. It is this source, which may be considered as both comprehensive and accurate, that has been used for this study.

Every European country develops nautical tourism in conformity to its own macro-development determinants and it is useful to point out the specific aspects of each country (Table 7.1).

Austria

Austria is of a relatively small area and not connected to the sea. It has, however, highly developed river cruising organized as a European international business.

Belgium

Belgium has a somewhat limited natural potential, but even so all types of nautical tourism are effectively developed.

Croatia

Croatia has the highest quality marinas in Europe, confirmed by the listing of all Croatian marinas in the ADAC study, which has not been the case for any other country. The development of nautical tourism, as for other transitional economies, is controlled by government policies and development plans. Croatia claims the best marina in the world, Marina Frapa. In the cruising sector, Dubrovnik has a distinguished position among cruising locations. Local and regional cruising is intensive, conducted on traditional vessels.
England

England has developed the most successful European model of international cooperation with marinas. English marinas are organized as business groups and intensively cooperate with marinas in other countries, especially in the market of the European Atlantic coast. Thus the system of English marinas provides the most comprehensive nautical supply in Europe.

France

France has the most saturated coast with marinas in the Mediterranean, including the largest marina in Europe, Marina Port Carmargue, with 5010 berths, which is rated as of the highest quality. The development of nautical tourism is related to tourism in general, so that France has one of the strongest sectors in Europe.

Germany

Germany is developing its nautical tourism and all related industries on free market principles and in accordance with the development of tourism in general. In terms of the number of marinas, Germany has the highest in Europe but the least number of berths per marina. Both river and sea cruising are well developed, as well as supporting industries. In river cruising management, TUI is the most famous German tourist agency that operates with a large number of river cruising companies.

Greece

Greece has perhaps the greatest development potential in European nautical tourism, due to its exceptional coast length, but has currently only a relatively low level of development.

Italy

Italy is very much oriented to the development of nautical tourism. With the highest number of marinas in the Mediterranean, its cruise companies Costa and MSC Cruises and a highly developed charter industry, it is the leading country in European nautical tourism. Shipbuilding of mega-yachts and cruisers and all supporting industries are well developed. Italy also has most liberal laws and executive authority in terms of nautical tourism investments, which means that it is exceptionally market-oriented.

The Netherlands

The Netherlands is a country of actively used inland waterways, and nautical tourism is closely linked to daily life and traffic. A vessel in the Netherlands often has the role of a car or a local bus. Marinas are a part of the entire

<table>
<thead>
<tr>
<th>Marinas and berths</th>
<th>Mediterranean (European part)</th>
<th>West Europe/Transatlantic (below the Arctic Circle)</th>
<th>Continental Europe (freshwater)</th>
<th>Total Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–100</td>
<td>59</td>
<td>102</td>
<td>105</td>
<td>465</td>
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<tr>
<td>101–500</td>
<td>236</td>
<td>237</td>
<td>92</td>
<td>101</td>
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<tr>
<td>501–1,000</td>
<td>78</td>
<td>75</td>
<td>5</td>
<td>2</td>
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<tr>
<td>1,001–2,000</td>
<td>24</td>
<td>20</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2,001–5,000</td>
<td>3</td>
<td>2</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>&gt;5,000</td>
<td>1</td>
<td>0</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Berth total</td>
<td>171,158</td>
<td>153,896</td>
<td>33,060</td>
<td>44,739</td>
</tr>
<tr>
<td>Number of marinas</td>
<td>401</td>
<td>436</td>
<td>203</td>
<td>570</td>
</tr>
<tr>
<td>Average number of berths per marina</td>
<td>426.83</td>
<td>352.97</td>
<td>162.86</td>
<td>78.49</td>
</tr>
</tbody>
</table>
system of life and traffic. Cruising is well developed, both on canals and on the sea, through the cruise company Holland America Line.

**Norway and Denmark**

Norway and Denmark are countries with a large number of islands, and their marinas are well adapted to living conditions. Despite the ice and low temperatures of the northern part, their potentials are well used in cruising with, for example the important cruise company NCL Norwegian Cruise Line. In the sector of supporting industries, building of cruisers and mega-yachts is very well developed.

**Poland**

Poland is a maritime country of rich tradition and its nautical tourism is rapidly developing. At present, marinas are not built by private investors, but they are built as city marinas and make part of the entire tourist supply. Development plans are ambitious and Poland boasts the longest wooden pier in Europe, which connects the marina in Sopot and the beach.

**Spain**

Spain has a high level of development of nautical tourism in the Mediterranean, especially in terms of marinas. Spain has one of the largest marinas in the Mediterranean, marina-town Empuriabrava, with 5010 berths. In terms of connections between the Atlantic and the Mediterranean, the geo-strategic position of Spain oriented Spanish marinas towards the capacities for accommodating mega-yachts that are increasingly visiting the Mediterranean. It has to be noted that Spain has developed the best model of sustainable development in marinas.

**Sweden and Finland**

Sweden and Finland are countries where nautical tourism is more oriented towards cruising than the marina business. This refers to Finland in particular. Sweden and Finland, as well as Norway and Denmark, have well-developed cruiser shipbuilding. In the sector of supporting industries, Finland is world known producer of pontoons and marina equipment.

**Switzerland**

Switzerland is the producer of high quality equipment for sea exploration, harbours and marinas. Its emphasis at present is on the development of international river cruising in Europe.

**Turkey**

Turkey is the dominant country in nautical tourism on the Black Sea, but its development is increasingly oriented towards the Mediterranean and is a strong investor in marinas and the supporting industries of nautical tourism. Its full development potential has yet to be realized.

**European markets**

When considering the five European markets, it can be concluded that each market has its specific features that conform to the economic and natural conditions of the environment.

In terms of the number of marinas, the European continental market, with its river, lake and canal marinas, is the leading market and comprises 35.4% of all quality marinas in Europe. According to the number of berths, the leading market is the Mediterranean, with 42.5% of quality berths, followed by western European and transatlantic marinas, with 27.1% of European quality marinas and 38.2% of berths. Mediterranean marinas are the largest in size, with an average of 426.83 berths per marina. The Baltic Sea market is relatively small and its climate is not suitable for a significant development of marinas. It is, therefore, more oriented towards the cruise industry and to the development of supporting industries of nautical tourism such as yacht construction, production of quality pontoons and other ancillary equipment industries. The Black Sea and Eastern European markets are still developing and their states and economies are in
transition. That is the reason why that fifth market has not been surveyed for the purpose of this book, but will be a challenge for future studies and future editions.

In line with the development of marinas, chartering is also developing as an associated supply. The coexistence of marinas and chartering has a market logic and justification, although chartering is a different type of nautical tourism and has a specific type of operation and development. The development of charter fleets is usually based on the leasing of vessels, which allows some adaptation of the fleet to impulsive fluctuations in demand. The dynamics and the change of demand, recognized in the studies as time regularity, are present in all markets and best observed in the Mediterranean and Western European markets.

The main characteristics of the European cruise industry indicate that its development level is close to the developed Pacific cruise (North and Central America), with a difference in seasonality that is still high in Europe and that can be realistically developed. It is almost impossible to observe large cruising at national and European levels since it has become a global business. However, Europe has large cruise companies that operate in the world market, Carnival UK being the leading cruise corporation. It is important to note that European cruising is based on elite historical and tourist destinations, which can be considered through specialized cruise ports that, in terms of number of passengers and ports of call, are at the world’s top level.

European development potential is in small cruising or local and regional cruising for 1-day or several-day cruises on small traditional vessels. Such a type of cruise tourism is found in all European markets and is a part of entrepreneurship and an important element of sustainable development of the destination. This type of cruising supports the development of the local economy in each part of Europe. However, it is not adequately organized. It has outstanding development possibilities, but they depend on organized development and linking at various levels, which has not been done so far.

When doing a contrastive analysis of European and Pacific nautical tourism characteristics in the domain of marina business operations, similar issues and characteristics may be observed. The capacities in the Pacific have full occupancy and ‘an extra berth’ is requested all the year round, the same as in Europe. In terms of business results and employment rate, the importance of marina business is similar in both markets and the development is continuous. The cruise industry in the Pacific is similarly developed as in Europe: its potentials are in developing new markets, but in Europe there are still possibilities for the development of sub-markets. It can be concluded that nautical tourism in Europe has similar characteristics to its Pacific counterpart, respecting the characteristics relating to way of life, economic development level, culture and climatic conditions.

Note

1 Frapa gained the Trade Leader’s Club best marina award in 2007.
Navigation is probably as old as human civilization. If we take a somewhat biased view of the topic, we might even imagine that floating on a tree trunk on the surface of the water primarily occurred out of a human desire for fun, only later to be seen as serving other needs. However, regardless of its origins, recreational navigation or navigation on vessels designed for entertainment developed only many centuries later. Some sources suggest that the first regattas took place on Dutch canals and then spread around the world. In the 17th to the 18th centuries, the British aristocracy had about 300 recreational vessels on the Thames, and first regattas held there were recorded in the 17th century (Dulčić, 2002). The small vessels involved were called *jacht* in Dutch and were originally used for bird hunting. Eventually, the whole industry of recreational navigation developed, and at the present time occurs in almost all suitable locations. In terms of economy, the industry has considerable importance. In the second half of the 20th century a new type of recreational navigation emerged as a result of the rise of civil aviation traffic and the increasing number of redundant passenger ships. A new purpose was created for such ships in the form of collective cruising. Such a type of travel saw an exceptionally rapid growth, with millions of passengers and hundreds of ships nowadays engaged. This chapter analyses these two types of recreational navigation, often referred to as *nautical tourism*.

The focus of interest here is the Republic of Croatia (Fig. 8.1). Although it gained its political independence about two decades ago, the development of tourism and nautical tourism began much earlier while it was still one of the republics of the former Yugoslavia. This development was greatly stimulated by the fact that Croatia has a highly indented coast: on a distance of about 500 km there are over 1100 islands and islets, around 50 of which are permanently or temporarily inhabited. The total length of the coast and islands is about 6000 km; the indentedness coefficient is about 11, which makes the Croatian coast one of the most indented in the world, having 12.2% of the Mediterranean mainland coastline and 33% of island coastline.

The Croatian part of the Adriatic has three national parks: the Brijuni archipelago and the Kornati archipelago with the surrounding sea area, and part of the island of Mljet and its lakes. The Krka national park is also accessible from the sea and the Paklenica National Park on
Velebit is also close to the coast. There are also several nature parks along the coast and on islands. One of the attractions of Croatia for yachting tourism is the exceptionally clean, clear and warm sea (12–26°C), with winds suitable for sailing and a series of picturesque towns and villages, rich in architectural and other cultural heritage. An additional factor is the vicinity of important European tourist-emitting countries with which Croatia is well connected by a modern road network and with air traffic through five international airports on the coast and two on the islands. As the River Danube, the longest European river (2850 km), flows through Croatia it also belongs to the Danube region and its two river harbours participate in international cruising along the Danube and one river harbour on the Drava river. The Danube flows through ten countries, 4.5% (137 km) of it passing through Croatia. Croatia uses only one bank of the river (as do Bulgaria, Moldavia and Ukraine), since the border issues with Serbia have not yet been resolved.

The Republic of Croatia has relatively adequate and complete statistical records on various economic and social phenomena, which allows some insight into the main supply and demand trends in nautical tourism to a degree not available in many other, well-developed countries. On the other hand, several primary and other studies in the field of nautical tourism have been conducted in the last decade, which provided different quantitative and qualitative data, forecasts and trends that allow an understanding of the characteristics of nautical tourism supply and demand in Croatia. Some comparisons with other countries were made on the basis of available data, which provide information on the competitiveness of Croatian nautical tourism.

Recreational navigation, although present for many years and studied in many scientific and expert researches, has not yet been uniformly defined. Various authors proposed definitions, but none is yet widely...
accepted. By contrast with rural, heritage or cultural tourism definitions, a definition of nautical tourism does not exist in the documents of the World Tourist Organization (WTO, 1995), Statistical Bureau of European Commission (EUROSTAT, 1998) or Encyclopedia of Tourism (Jafari, 2000). Hence the authors still define this type of tourism according to their own concepts or the purpose of their particular study. In this chapter, the concept of nautical tourism will be defined as a type of tourism in which the motive is navigation and related onboard and ashore experiences. This primarily relates to several-day stays aboard a vessel that allows for such a sojourn.1

According to the characteristics of the product, nautical tourism may be divided into two main subtypes: (i) yachting, relating to navigation and stay on boats and yachts regardless of the ownership of the vessel, on which navigation is usually done in a company of friends or family. They may decide on their itinerary or change it from day to day, and they manage the vessel either on their own, or assisted by a skipper or a professional crew in the case of a larger vessel; and (ii) cruising, which is in some ways a similar product, but performed on larger vessels – cruisers, with professional crew and passengers who have not met before. Usually such cruisers have a predetermined itinerary that includes visits to a number of destinations on land or on islands, and the shipping company may only occasionally decide on a change of the itinerary during voyage. Cruising can be international (visiting at least two countries during the cruise) or national (visiting only the ports of one country). In Croatian national cruising only smaller vessels are used, up to 50 cabin beds, while international cruising also includes ships with over 3500 cabin beds. Only foreign-flagged ships participate in Croatian international cruising while, at present, national cruising is done by national-flag ships.

After explaining briefly the methodology, the development of demand in Croatian nautical tourism will be discussed, including its qualitative and quantitative characteristics, since the supply has been studied in Chapter 6. Finally, a reference to the competitiveness of yachting tourism in Croatia will be presented, as well as a consideration of the future potential of Croatian yachting and cruising.

8.1 Research Methods

Since this work is based on regularly published data on nautical tourism in Croatia (Bureau of Statistics, Croatian Chamber of Commerce and other institutions) and on occasional primary studies dealing with the issue of Croatian nautical tourism in Croatia (period 2001–2010), what follows is a brief explanation of the applied methodology, the purpose and goals of the studies as listed below:2

- Primary research: attitudes and expenditures of nautical tourists in Croatia, (Institute for Tourism/TOMAS Nautika 2001, 2004, 2007);
- Primary research: attitudes and expenditures of passengers and crew in international cruising in Croatia (Institute for Tourism/TOMAS International Cruising Travels, 2006);
- Competitiveness of Croatian nautical tourism (Institute for Tourism, 2004);
- Study of sustainable development of cruising tourism in Croatia (Institute for Tourism, 2007);
- Study of development of nautical tourism in Croatia (Croatian Hydrographic Institute, 2006);
- Proposal of port tariff policies for ships in international cruising in Dubrovnik for the period 2012–2017 (Institute for Tourism, 2010).

8.1.1 TOMAS Nautika 2001–2007

The TOMAS Nautika survey is a continuous survey of yachting demand in Croatia. It has been conducted three times: in 2001, 2004 and 2007. The data are collected directly from yachting tourists. The respondents are all adult yachting tourists who have at least one overnight stay in a Croatian marina in
the period June–September, during the peak of yachting tourism traffic in Croatia. The main survey instrument is a structured questionnaire translated into several languages, using the method of personal interview.

Eleven countries of origin provided around 92% of the total number of overnights in nautical ports in Croatia in 2004 (Croatia, Germany, Austria, Italy, Slovenia, Great Britain, Czech Republic, Hungary, France, Poland and the Netherlands).

The method of stratified random sampling was applied. The strata are periods of survey (June–September), country of origin of yachting tourists (in 2007, the countries were Croatia, Italy, Germany, Austria, Slovenia, Hungary, Great Britain, Czech Republic, France, Poland, Slovakia and the Netherlands) and organization of travel (individual, i.e. navigation on a vessel owned by the user or by a relative, friend or acquaintance, and chartering, i.e. navigation of a hired vessel). In 2007, the sample size was 2000 respondents, and the survey was conducted in 20 marinas.

The content of the TOMAS Nautika survey includes five main groups of characteristics: (i) characteristics of the preparations and arrival at the departure port; (ii) characteristics of the voyage/navigation; (iii) expenditure on tourist travel; (iv) attitudes to the yachting supply and other tourist supply in Croatia and comparison with competing macro-destinations/countries; and (v) socio-demographic characteristics of yachting tourists. Although the content of the survey changed during the years, in accordance with changes in yachting demand, it allows for a comparison of yachting demand trends from 2001 to 2007. The results of each TOMAS Nautika survey are shown in the same reports published by the Institute (Institute for Tourism/TOMAS Nautika 2002, 2005, 2008).

8.1.2 TOMAS International Cruising 2006

The TOMAS International Cruising survey of 2006 was the first analysis in Croatia of the demand in international cruising that included Croatian ports or destinations. The population in the survey included all persons (passengers and crew) who, during their time aboard, leave the ship and visit the port/town of call. The survey included the four Croatian ports with the greatest traffic of international cruising: Dubrovnik, including the Port of Gruž and the City Port anchorage, Korčula, Split and Zadar. The data were collected through personal interviews with passengers and members of the crew when returning to the ship. The main instrument for collecting data was a questionnaire printed in five languages: English, German, Italian, French and Spanish. The survey was conducted between 1 June and 30 September 2006.

The content of the survey includes the following characteristics of the demand and consumption of cruise ship visitors and crew in international cruising:

- Main socio-demographic data about cruise ship visitors and crew members in cruising (country of residence, age and sex);
- Characteristics of the stay of cruise ship visitors and crew members in the destination of arrival/call and the surrounding area (frequency of arrival in Croatia or the port, activities in the town and its surroundings and duration of the stay in the destination, in hours);
- Expenditure in the destination during the time ashore and its structure, and the list of items purchased during the stay in the town and its surroundings;
- Attitudes to the tourism supply of the destination, including 14 different elements of the tourism supply of the town and its surroundings, rated between 1 (very bad) to 5 (excellent); and
- Rate of competitiveness of the destination’s supply with other visited destinations in the cruise.

Stratified random sampling was applied. The strata used were the ports of the survey, month of survey, size of the ship in number of passengers/capacity (<200 passengers, 200–499 passengers, 500–999 passengers, 1000–1999 passengers and over 2000 passengers per ship) and type of visitor (passenger or crew member). The surveyed ships were randomly selected within each stratum, in proportion to their capacity, taking into account the presence of various companies
and agents. The framework for the selection of ships was based on the schedules of visits to particular ports. On each ship, depending on its capacity, 5–20 passengers were questioned, of which 15–20% were crew members. In over 120 actions there were 1659 respondents, of which 1340 were passengers and 319 were crew members on 42 ships. The design and allocation of the sample ensured the representative quality of the survey results in terms of the port, type of visitors and the size of ship.

8.1.3 The study of sustainable development of cruising tourism in Croatia

The study of sustainable development of international cruising tourism in Croatia is the first and so far the only comprehensive study of the development of that type of tourism in Croatia. Its goals were:

- To study its development so far and the current state of international cruising in the Croatian part of the Adriatic;
- To study the effects of international cruising on the destinations of call in Croatia;
- To estimate trends in the global cruising market, especially in the Mediterranean and their potential effects on Croatia; and
- To propose, on the basis of the observed information, a development concept of international cruising in the Croatian part of the Adriatic, respecting the principles of sustainable development.

The approach to the study is based on a multidisciplinary approach, the analysis of the current sources of data on cruising tourism in the world, the Mediterranean and in Croatia, on conducting primary, field researches and on including a great number of interest groups and individuals and representatives of the local community.

Four field researches were conducted within the framework of the study:

- The study of the effects of cruising tourism to stationary visitors in the cruising destination;
- The study of the effects of cruising tourism on local inhabitants in the cruising destination;
- The study of the impressions and experiences of cruising passengers to their repetitive arrival at a Croatian tourist destination in capacity of stationary visitors; and
- The study of attitudes of the local community and interest groups to guidelines of the development of cruising tourism in Croatia.

In the first three studies, the method of survey on representative samples of tourists or local inhabitants was applied, while the study on attitudes to the development of cruising tourism was based on SWOT workshops, in-depth interviews and extended focus groups with representatives of local community and interest groups.

The study of sustainable development of cruising tourism in Croatia formed the basis for a vision and a mission statement for cruising tourism in Croatia, primarily on the principles of sustainable development. It led to a series of recommendations for orienting development in the field of organization, promotion, environment protection and legislation, promotion of the tourist product of cruising tourism, tariff policy, education of all parties to cruising tourism and continuous monitoring of the development effects.

8.1.4 Competitiveness of Croatian nautical tourism

The goal of the 2004 research was to determine the competitiveness of Croatian nautical (yachting) tourism in an international competitive context, starting from an estimated assessment of the position of the product in the market, with the aim of determining the potential to increase the market share of the product. One of the greatest challenges of the study was to determine the possible range of such an analysis in terms of available and attainable data sources.

The competition circle included the following countries: Spain, France, Italy, Slovenia, Montenegro, Greece and Turkey.
The following factors of competitiveness in yachting tourism were analysed:

- Nautical tourism supply and the number of marinas and berths;
- Pricing competitiveness; and
- Yachtsmen’s attitudes to 13 elements of nautical tourism supply and their perception of Croatian nautical tourism supply in relation to that of other countries.

Pricing competitiveness is based on the berthing prices of 37 Mediterranean marinas. The data were collected from the marinas’ web pages or by phone/fax directly from individual marinas. The prices of basic nautical tourism services (permanent and temporary berths and charter of vessels) were analysed. The analysis of the yachtsmen’s attitudes to the elements of yachting supply in Croatia and competitive countries was based on the survey TOMAS Nautika 2004.

The study also included an analysis of ship- and boat-building, the volume of the fleet in competing countries and the demand in Mediterranean yachting tourism. The content of the study included information on the change of the yachting demand structure in terms of a series of elements (the size of berth, type of propulsion, frequency of use of vessels on a permanent berth, frequency of hiring skipper’s services, the price of a permanent berth in a marina, yachtsmen’s consumption in marinas and requests for upgrading supply in marinas). The data were collected through a questionnaire sent by post to representatives of 13 marinas in eight Mediterranean countries.

8.1.5 The study of nautical tourism development in Croatia

At the time when the study was conducted, experts and other individuals who had some knowledge of nautical tourism were divided between: (i) those who thought that any significant increase of the number of vessels and commercial berths and marinas would decrease the attractiveness of navigation in Croatian waters, increase pollution of the sea and coast, all of which would have long-term negative impacts on the environment and nautical tourism economic outcomes; and (ii) those who thought that there is potential for further intensive construction of marinas on the coast and islands, since demand is increasing, environmental damage and profit losses occurred because ships cannot be berthed in marinas and other nautical tourism ports due to the scarcity of berths, and the capacity of the area is such that it can bear a significant increase of the number of vessels. All these considerations were examined by examples in other Mediterranean countries. The analysis of the situation and development plans for nautical tourism in neighbouring countries, the total increase rate of recreational vessel production, plans for the construction of new marinas and increase of the current capacities for vessel accommodation indicate that in practice there is no alternative for Croatia and that the number of berths in Croatia has to be increased as well. The question to be answered is that of degree, i.e. what is the acceptable limit to the growth of accommodation capacities of vessels for recreation, sport and entertainment, and how to provide mechanisms to remain at that limit when it is reached.

The main aim of this study is an evaluation of the natural, social and economic potentials for the development of nautical tourism in Croatia on the principles of sustainable development during a longer period. The study included the area of coastal Croatia and islands for the period to 2015.

The approach and the methodology of the study is based on the analysis of data from primary and secondary sources. The data from primary sources have been collected during field research and relate to the entire area of the study.

The field research included:

- Visiting marinas, nautical tourism ports and some water areas, interviews/focus groups/consultations/workshops with local and county stakeholders in tourism development and inhabitants; and
- Surveys on the attitudes of yachtsmen who are members of foreign yachting clubs.
The purpose of field visits is not only to know in detail the tourist resources and attractions and the problems that nautical tourism has in the area, but also the attitudes of local inhabitants and representatives of tourist and communal enterprises, local government and self-government, in order to assess their attitudes towards various options for the development of nautical tourism in their region. The analysis of secondary sources includes collecting data from other studies, development documents, legislation, statistics etc., both at national and international levels, especially in the Mediterranean countries.

8.1.6 Proposal for port tariff policy for international cruising ships in Dubrovnik for the period 2012–2017

In order to determine the proposal of a port tariff policy for the two ports of Dubrovnik an analysis of the competitiveness of Dubrovnik in the Mediterranean cruise market was made. This competitiveness analysis included an estimation on the relative attractiveness of ports and destinations, demand, costs of a call and the ‘value for money’ supply of the port/destination as a factor that includes the conformity of the supply of a port/destination and costs of call in the destination on the basis of relative pricing and qualitative position of the port among its competitors. Besides the two Dubrovnik ports, the supply and demand of 13 cruising ports/destinations in Italy, Greece, Turkey, Malta, Cyprus, Montenegro and Croatia were analysed.

In order to comprehend the volume and structure of the Mediterranean cruise market, the supply of the cruise itinerary was analysed and the related international Mediterranean cruising trips in 2010. The analysis included 1705 trips offered by the 25 largest cruise companies in the Mediterranean. The results of the analysis showed not only the position of Dubrovnik in the international cruise market but also its position in relation to individual itineraries, departure ports and companies.

8.2 Yachting Tourism

8.2.1 Demand

By 31 December 2010, there were 14,431 vessels at permanent berth in nautical tourism ports, which is 2.5% less than the previous year, and the occupancy rate of the total number of permanent sea berths and dry berths was over 85%. However, taking into account the fact that some nautical tourism ports do not provide permanent berthing services (as they operate seasonally) and that not all available berths are used for permanent berthing, the occupancy of berths in nautical tourism ports is almost 100%.

Sea berths were used by 12,661 vessels (88%) and dry berths were used by 1770 vessels (12%). In the period 2001–2010 the number of vessels at sea berths increased by 27% (6% in the second half of the decade) (Table 8.1), while transit sea berths recorded almost no growth in the second half of the decade. In 2010, the number of vessels at transit sea berths fell by 1% in comparison to the previous year.

The greatest number of vessels in Croatian nautical tourism ports is in the category of 10–12 m in length (34%), followed by those of 12–15 m in length (29%). Larger vessels predominate among transit vessels (Table 8.2).

Motor vessels (47%) and sailing vessels (48%) occupy most of the permanent sea berths, while the remaining 5% refers to other types of vessels. However, the number varies according to the flag: 70% of American flagged vessels and 60% of Austrian flagged vessels are motor-powered yachts, while 60% of UK flagged vessels and 57% of Slovenian flagged vessels are sailing yachts, etc. (Table 8.3). The majority of transit vessels (65%) are sailing yachts, almost double that of motor vessels (33%).

According to the flag of the vessels at permanent berths in nautical tourism ports in 2010, the majority of vessels were under the Croatian flag (36%), Austrian (18%), German (15%), US (7%), Slovenian (6%) and Italian (5%), making 90% of the total vessels at permanent berths.

<table>
<thead>
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<th>Permanent berths</th>
<th>Transit berths</th>
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<td>2005</td>
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<th>Structure (%)</th>
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<th>Transit berths</th>
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<tr>
<td>2001</td>
<td>100.0</td>
<td>5.8</td>
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<td>2005</td>
<td>100.0</td>
<td>5.7</td>
<td>94.3</td>
</tr>
<tr>
<td>2010</td>
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<th>Rate of change (%)</th>
<th>Total</th>
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<th>Transit berths</th>
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</thead>
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<td>126.5</td>
<td>123.3</td>
</tr>
<tr>
<td>2010/2005</td>
<td>100.7</td>
<td>105.9</td>
<td>100.3</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>According to length of vessel</th>
<th>Total</th>
<th>Up to 6 m</th>
<th>6–8 m</th>
<th>8–10 m</th>
<th>10–12 m</th>
<th>12–15 m</th>
<th>15–20 m</th>
<th>Over 20 m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of berths</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>211,649</td>
<td>5,803</td>
<td>17,054</td>
<td>35,148</td>
<td>71,573</td>
<td>62,972</td>
<td>15,378</td>
<td>3,721</td>
</tr>
<tr>
<td>Permanent berth</td>
<td>12,661</td>
<td>614</td>
<td>1,323</td>
<td>2,642</td>
<td>3,544</td>
<td>3,228</td>
<td>1,011</td>
<td>299</td>
</tr>
<tr>
<td>Transit berth</td>
<td>198,988</td>
<td>5,189</td>
<td>15,731</td>
<td>32,506</td>
<td>68,029</td>
<td>59,744</td>
<td>14,367</td>
<td>3,422</td>
</tr>
<tr>
<td>Structure (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>2.7</td>
<td>8.1</td>
<td>16.6</td>
<td>33.8</td>
<td>29.8</td>
<td>7.3</td>
<td>1.8</td>
</tr>
<tr>
<td>Permanent berth</td>
<td>100.0</td>
<td>4.8</td>
<td>10.4</td>
<td>20.9</td>
<td>28.0</td>
<td>25.5</td>
<td>8.0</td>
<td>2.4</td>
</tr>
<tr>
<td>Transit berth</td>
<td>100.0</td>
<td>2.6</td>
<td>7.9</td>
<td>16.3</td>
<td>34.2</td>
<td>30.0</td>
<td>7.2</td>
<td>1.7</td>
</tr>
</tbody>
</table>

In 2010, most transit vessels were under the Croatian flag (42%), followed by the Italian (23%), German (11%), Austrian (8%) and Slovenian (5%) and they comprised 88% of the traffic in transit berths. Croatian flagged vessels were mostly sailing vessels (82%).

Yachtsmen aboard charter vessels were mostly foreign, in particular Austrian, German, Czech and Slovene, with a significant increase of Swedish and Russian vessels, being relatively new charter markets in Croatia. In the period 2006–2010, the number of foreign yachtsmen in Croatia increased by over 20%, but in the last 3 years, probably due to the economic crisis in emitting markets, the growth has slowed down (Fig. 8.2). In spite of that, in the period 2008–2010 a growing demand was recorded in most of the foreign markets present in Croatia, while a decrease was recorded in the markets of Great Britain and Northern Ireland (−21% each), Hungary (−19%) and Slovenia (−9%) and insignificant change in Poland. In the same period, national demand for charter dropped by 11% (Table 8.4).

The data on the change of crew in chartering show that the highest number of vessels (47% in 2009) had between 11 and 20 changes of the crew (Table 8.5) with an average length of charter of 1 week, which is not sufficient for
Demand for Nautical Tourism in Europe

According to the usual profitability standards based on the number of weeks of charter, only 30% of the charter fleet is operating profitably.

According to the characteristics of demand in yachting tourism in Croatia (Institute for Tourism/TOMAS Nautika 2001, 2004, 2007), the average age of yachting tourists is 44 (45 years of age for tourists on their own or a friend’s/relative’s vessel, and 42 years of age of charter tourists). The largest group of yachting tourists is 30–39 years old (57%). Over 80% of yachting tourists have a college or university education (on average, they have a higher education than their counterparts staying in commercial accommodation object ashore). Charter tourists have a slightly higher education. About

<table>
<thead>
<tr>
<th>Vessels at permanent berth</th>
<th>Total</th>
<th>Motor yachts</th>
<th>Sailing yachts</th>
<th>Others</th>
<th>Ratio 2010/2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>14,431</td>
<td>7,252</td>
<td>6,375</td>
<td>804</td>
<td>97.5</td>
</tr>
<tr>
<td>Vessels using sea berths</td>
<td>12,661</td>
<td>5,910</td>
<td>6,064</td>
<td>687</td>
<td>98.3</td>
</tr>
<tr>
<td>According to flag</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Croatia</td>
<td>4,495</td>
<td>1,527</td>
<td>2,459</td>
<td>509</td>
<td>95.4</td>
</tr>
<tr>
<td>Austria</td>
<td>2,305</td>
<td>1,390</td>
<td>879</td>
<td>36</td>
<td>98.7</td>
</tr>
<tr>
<td>Germany</td>
<td>1,933</td>
<td>866</td>
<td>1,037</td>
<td>30</td>
<td>98.2</td>
</tr>
<tr>
<td>USA</td>
<td>839</td>
<td>588</td>
<td>233</td>
<td>18</td>
<td>102.9</td>
</tr>
<tr>
<td>Slovenia</td>
<td>761</td>
<td>291</td>
<td>433</td>
<td>37</td>
<td>102.4</td>
</tr>
<tr>
<td>Italy</td>
<td>669</td>
<td>393</td>
<td>246</td>
<td>30</td>
<td>104.4</td>
</tr>
<tr>
<td>UK</td>
<td>363</td>
<td>145</td>
<td>215</td>
<td>3</td>
<td>97.8</td>
</tr>
<tr>
<td>Hungary</td>
<td>234</td>
<td>155</td>
<td>77</td>
<td>2</td>
<td>90.3</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>183</td>
<td>115</td>
<td>66</td>
<td>2</td>
<td>95.8</td>
</tr>
<tr>
<td>Slovakia</td>
<td>117</td>
<td>79</td>
<td>34</td>
<td>4</td>
<td>94.4</td>
</tr>
<tr>
<td>France</td>
<td>113</td>
<td>24</td>
<td>84</td>
<td>5</td>
<td>100.0</td>
</tr>
<tr>
<td>Other European countries</td>
<td>538</td>
<td>269</td>
<td>262</td>
<td>7</td>
<td>94.2</td>
</tr>
<tr>
<td>Other non-European countr</td>
<td>111</td>
<td>68</td>
<td>39</td>
<td>4</td>
<td>90.2</td>
</tr>
</tbody>
</table>

![Number of charter tourists in Croatia (2006–2010)](image)

Fig. 8.2. Number of charter tourists in Croatia (2006–2010) (source: Mader, 2011).
80% of foreign yachting tourists had previously sailed in Croatia, while 49% of them had sailed in Croatia six or more times.

Yachting tourists were most frequently sailing with members of the family (46%) or with friends (34%), with an average number of five persons aboard, including a skipper or hired crew. About 22% of the vessels had a hired skipper. Yachting tourists usually sail from one port/marina to another (44%), while others usually make daily excursions from a port/marina (22%), stay overnight at an anchorage (13%) and one-fifth make equal overnight stays in ports/marinas and at anchorages.

Yachting tourists usually make 8–14 overnight stays (37%), followed by 4–7 (31%), 15–21 (18%) and 13% of them make 22 or more overnight stays during their trip. On average, yachting tourists make 14 overnight stays, nine of which are in marinas, two in local harbours and one or two on a mooring buoy or at anchor, out of local harbours and marinas.

Only 6% of yachting tourists have breakfast in restaurants, 23% have lunch and 52% have dinner in restaurants. Almost all use the services of smaller catering objects, restaurants or go shopping. About 84% of yachting tourists go on excursions ashore and 80% make walking and sightseeing tours and visit local attractions.

During their travel, yachting tourists participate in numerous activities related to navigation, most of which are performed ashore, and they declare a high level of satisfaction with personal safety, beauty of nature and landscape. A high level of satisfaction is also recorded with the hospitality of marina personnel, variety of gastronomic offers and accessibility of departure ports, while charter tourists are also satisfied with their accommodation in the departure marina. On the other hand, a low level of satisfaction has been recorded with diversity of cultural events, entertainment, sports facilities and shopping in marinas. None of the 24 elements of the supply was evaluated as highly unsatisfactory.

Average daily expenses of yachting tourists are much higher than those realized in stationary summer tourism (in 2007, the average daily expenses of charter tourists were €171.00; tourists sailing on their own vessels

---

### Table 8.4. Trends in the number of charter tourists as per countries (2008–2010) (source: Mađer, 2011).

<table>
<thead>
<tr>
<th>Country</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>48,222</td>
<td>51,277</td>
<td>53,489</td>
</tr>
<tr>
<td>Germany</td>
<td>42,903</td>
<td>44,740</td>
<td>47,092</td>
</tr>
<tr>
<td>Croatia</td>
<td>38,079</td>
<td>36,490</td>
<td>33,854</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>25,738</td>
<td>25,707</td>
<td>27,251</td>
</tr>
<tr>
<td>Slovenia</td>
<td>28,185</td>
<td>26,613</td>
<td>25,722</td>
</tr>
<tr>
<td>Poland</td>
<td>22,512</td>
<td>23,039</td>
<td>22,254</td>
</tr>
<tr>
<td>Italy</td>
<td>15,604</td>
<td>17,131</td>
<td>17,017</td>
</tr>
<tr>
<td>Hungary</td>
<td>16,152</td>
<td>14,950</td>
<td>13,160</td>
</tr>
<tr>
<td>Great Britain and Northern Ireland</td>
<td>14,201</td>
<td>10,960</td>
<td>11,279</td>
</tr>
<tr>
<td>Slovakia</td>
<td>8,801</td>
<td>9,432</td>
<td>9,837</td>
</tr>
<tr>
<td>France</td>
<td>8,399</td>
<td>7,710</td>
<td>8,853</td>
</tr>
<tr>
<td>Sweden</td>
<td>6,397</td>
<td>6,373</td>
<td>8,450</td>
</tr>
<tr>
<td>Russia</td>
<td>5,155</td>
<td>6,046</td>
<td>7,916</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>5,984</td>
<td>6,390</td>
<td>6,082</td>
</tr>
<tr>
<td>Others</td>
<td>31,953</td>
<td>30,430</td>
<td>35,120</td>
</tr>
<tr>
<td>TOTAL</td>
<td>318,285</td>
<td>317,288</td>
<td>327,376</td>
</tr>
</tbody>
</table>

### Table 8.5. Number of changes of crew in charter vessels in 2009 (source: Mađer, 2011).

<table>
<thead>
<tr>
<th>Number of changes of crew</th>
<th>1</th>
<th>2 to 5</th>
<th>6 to 10</th>
<th>11 to 20</th>
<th>21 to 30</th>
<th>31 or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of vessels</td>
<td>104</td>
<td>279</td>
<td>390</td>
<td>1597</td>
<td>953</td>
<td>64</td>
</tr>
</tbody>
</table>
vessels of friends or relatives spent €78.00; while the expenses of tourists staying on shore were on average €55.00/day). In the most recent (2007) research, the structure of the average daily expenses of yachting tourists shows that 58% of the expenditures related to the vessel and the rest was spent at destinations. The analysis of the expenditure in charters shows that 72% was related to the vessel (67% of which for renting the vessel) while for the daily expenses of tourists that own the vessel or do not pay for renting it, the vessel accounts for 48% of daily expenses. Consumption at destinations was the highest for catering services (44%) and for shopping (38%), with only insignificant differences between charter tourists and tourists sailing aboard their own vessel.

On the basis of the conducted research (2007), it is possible to compile a socio-economic profile of yachting tourists of several various nationalities in Croatia and present some characteristics of their demand realized in Croatia. Although the socio-economic characteristics and travelling habits of various nationalities may differ from those in the country where they are travelling, it may be assumed that such characteristics and their demand in yachting tourism are not significantly different from their counterparts travelling in other Mediterranean countries, especially in the eastern Mediterranean where yachting tourism products are similar to Croatia. Grounds for such an assumption may be found in the fact that many survey respondents in Croatia also frequently sail in other Mediterranean countries (49%) and a significant number of yachting tourists arrive in Croatia sailing aboard their own vessels, which implies that they have navigated in some other Mediterranean country as well. What follows are profiles of yachting tourists of the seven most represented foreign emitting yachting tourist markets in Croatia.

GERMAN YACHTING TOURISTS. German yachting tourists are on average 46 years old, and mostly are between 46 and 55 years of age (29%). About 54% have a university or higher education degree, and the same percentage of them have a monthly income above €3500. About 66% of German yachting tourists arrived in Croatia in their own car and over 15% arrive aboard their vessel, and have an average of five persons aboard. They made on average over 16 overnight stays, which is about four overnights lower than 3 years earlier (2004). About 40% of yachting tourists have between 8 and 14 overnight stays. Their average daily expenditure (‘pocket payment’) in Croatia was €98.00, which is more than double of what was spent in 2001. The proportion chartering was 35% in 2007 and was about 15% higher than in 2004. German yachting tourists predominantly sail in motor yachts, while other nationalities usually sail in sailing yachts or motor-sailers.

AUSTRIAN YACHTING TOURISTS. The average age of Austrian yachting tourists is 45, most of them (29%) being between 36 and 45 years of age. About 49% have a university or higher education degree and 53% have a monthly income above €3500. Almost 70% of Austrian yachting tourists arrived in Croatia in their own car and over 16% arrived aboard their vessel, and have an average of five persons aboard, most usually four or six persons (21%). They realized on average over 14 overnight stays (15 days), which is about 9% less than 3 years earlier (2004). About 40% of yachting tourists have between 8 and 14 overnight stays. Their average daily expenditure per person was €106.00 and is more than double of that of 2001. The proportion chartering was 43% in 2007 and was about 25% higher than in 2004.

ITALIAN YACHTING TOURISTS. The average age of Italian yachting tourists was 44 and one-third of them are between 36 and 45 years of age. About 44% have a university or higher education degree and 49% have a monthly income above €3500. Almost 50% of Italian yachting tourists arrived in Croatia aboard their own vessel, while the rest arrived in their own car (32%). The average number of persons aboard their vessel is five, predominantly four persons (25%). They made on average over 14 overnight stays (15 days), while about one-third of them made between 8 and 14 overnight stays. Their average daily expenditure per person was €99.00 and is almost double that of 7 years earlier (2001). The proportion chartering was 30% in 2007 and was about 15% lower than in 2004.
British Yachting Tourists. The average age of British yachting tourists is 43, equally distributed between the ages 26–35 and 46–55 (29% for each group). Approximately 66% of them have a university or higher education degree and 62% have a monthly income above €3500. Most of the British yachting tourists arrived in Croatia by plane (76%) and about 10% arrived aboard their vessel, with an average of five persons aboard, most frequently four or five persons (24%). They made on average over 13 overnight stays, which is four less than in 2004. This may be a direct consequence of the significant increase in the proportion chartering, which, in 2007, was 58% higher than 3 years earlier. The average daily expenditure of British yachting tourists was about €138.00 and is three times higher than in 2001.

Polish Yachting Tourists. The average age of Polish yachting tourists is 41, most of them (39%) being between 36 and 45 years of age. Over 50% have a university or higher education degree and 32% have a monthly income above €3500. About 65% of Polish yachting tourists arrived in Croatia in their own car, 21% by plane and nine aboard their own vessel. The average number of persons aboard is five, but contrary to other examples, their average was rounded to a lower figure (the real average was 5.4 persons) and it is 23% higher than 3 years earlier. Polish yachting tourists made on average 12 overnight stays and the figure has not changed since the 2004 survey. About 47% of yachting tourists made between 8 and 14 overnight stays. Their average daily expenditure was €119.00, which is 53% higher than in 2004. The proportion chartering was 62% in 2007 and was about 31% higher than in 2004.

French Yachting Tourists. The average age of French yachting tourists is 43, which is slightly lower than in the survey conducted 3 years earlier (46). Age groups 26–45 and 46–55 are equally distributed with 29%. French yachting tourists are the second highest educated group (after the British) and about 62% have a university or higher education degree. About 50% have a monthly income above €3500. About 25% of the French yachting tourists arrived in Croatia aboard their own vessel, 29% by plane and 44% in their own car. An average of five persons was on board, which is 12% higher than 3 years earlier. They made on average over 14 overnight stays, which is almost equal to the average in 2004. Their average daily expenditure was €112.00, which is 21% higher than in 2004. The proportion chartering was 47% in 2007 and did not significantly change in the last 3 years.

Czech Yachting Tourists. Yachting tourists from the Czech Republic are on average the youngest, their average age being 40, with the largest group between 25 and 35 years of age (35%). Some 50% have a university or higher education degree and 31% have a monthly income above €3500. About 75% of Czech yachting tourists arrived in Croatia in their own car and 7% arrived aboard their own vessel. The average number of persons aboard is five, but the number increased by 14% in relation to 2004. Czech yachting tourists made on average ten overnight stays, the shortest period of the analysed nations. Their average daily expenditure in 2007 was €111.00 and is 85% higher than in 2004. Unlike other groups, Czech yachting tourists almost doubled their expenditures at destinations, especially for culture, sports, entertainment, excursions etc. The proportion chartering in 2007 was about 14% higher than in 2004.

Croatia Yachting Tourists. In general, it can be concluded that there has been an increase of yachting tourists in Croatia, particularly among the younger and more educated, may be due to several factors, such as a tendency to use larger vessels and towards shorter stays. There has also been a trend towards increasing expenditure by visiting yachtsmen.

Earned income of yachting ports

In 2010, nautical tourism ports in Croatia earned an income of €76.5m (excluding VAT). The major part of the total income is earned through berth renting (76%), of which 78% relates to permanent berths (59% of the total income). The income earned from other services in nautical tourism ports (catering, services, commercial activities and concessions for such services) makes up 24% of the total income (Table 8.6).

<table>
<thead>
<tr>
<th></th>
<th>Berth rental</th>
<th></th>
<th></th>
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<th></th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>Total</td>
<td>Permanent berths</td>
<td>Transit berths</td>
<td>Services</td>
</tr>
<tr>
<td>Income in 000 HRK$^a$</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>543,376</td>
<td>405,690</td>
<td>322,034</td>
<td>83,656</td>
<td>46,533</td>
<td>91,153</td>
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<tr>
<td>Northern Adriatic$^b$</td>
<td>184,881</td>
<td>150,199</td>
<td>127,184</td>
<td>23,015</td>
<td>12,603</td>
<td>22,079</td>
</tr>
<tr>
<td>Southern Adriatic$^c$</td>
<td>358,495</td>
<td>255,491</td>
<td>194,850</td>
<td>60,641</td>
<td>33,930</td>
<td>69,074</td>
</tr>
<tr>
<td>2010</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>574,112</td>
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<td>339,288</td>
<td>96,621</td>
<td>49,949</td>
<td>88,254</td>
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<td>134,895</td>
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<td>11,912</td>
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<td>Southern Adriatic</td>
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<td>204,395</td>
<td>68,514</td>
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</table>

Structure (%)

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</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
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<td>59.1</td>
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</tr>
<tr>
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<td>67.9</td>
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</tr>
<tr>
<td></td>
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<td>100.0</td>
<td>72.7</td>
<td>54.4</td>
<td>18.2</td>
<td>10.1</td>
</tr>
</tbody>
</table>

Share of the region earned income (%)

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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Northern Adriatic</td>
<td>34.6</td>
<td>37.4</td>
<td>39.8</td>
<td>29.1</td>
<td>23.8</td>
</tr>
<tr>
<td></td>
<td>Southern Adriatic</td>
<td>65.4</td>
<td>62.6</td>
<td>60.2</td>
<td>70.9</td>
<td>76.2</td>
</tr>
</tbody>
</table>

Rate of change in %

<table>
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<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>105.7</td>
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<td>105.4</td>
<td>115.5</td>
<td>107.3</td>
</tr>
<tr>
<td></td>
<td>Northern Adriatic</td>
<td>107.4</td>
<td>108.5</td>
<td>106.1</td>
<td>122.1</td>
<td>94.5</td>
</tr>
<tr>
<td></td>
<td>Southern Adriatic</td>
<td>104.8</td>
<td>106.8</td>
<td>104.9</td>
<td>113.0</td>
<td>112.1</td>
</tr>
</tbody>
</table>

$^a$1€ = 7.5 HRK

$^b$Northern Adriatic includes the three northernmost coastal counties (see Fig. 8.5)

$^c$Southern Adriatic includes the four southernmost coastal counties (see Fig. 8.5)
In 2010, the total income through nautical tourism increased by 6% over the previous year, and the largest increase in income was recorded in transit berth renting (16%). Income from permanent berth rental increased by 5%, while other incomes (apart from services) decreased slightly (3%). Hence, berth rental share in the total income increased in comparison to the previous year.

The highest increase in income was recorded in transit berth renting (22% in the northern Adriatic and 13% in the southern Adriatic). Since there was a decreased demand for permanent berths and no change in the demand for transit berths in 2010 compared to 2009, it is obvious that the increased income is based on the increased service prices.

The income of nautical tourism ports makes up a part of the total income earned in yachting tourism in Croatia, since the expenditure of yachting tourists in Croatia is also realized through other services and products (fuel, road tolls and charges, aeroplane tickets if purchased at Croatian airlines, restaurant and bar services, food provisions, souvenirs, clothes, tickets for cultural events and attractions, organized excursions, registration and insurance of vessels in Croatia, and occasionally income earned for the construction and sale of vessels, etc.).

Although relevant estimates of the total income earned from yachting tourism in Croatia have not yet been made, the development of a Tourism Satellite Account for the year 2007 (Institute for Tourism, 2010) provided the prerequisites for a more precise estimate of that value, which gives hope that in the near future such information will be available.

**Earned income from charter activity**

The latest published official data of the Bureau of Statistics of the Republic of Croatia on income from the rental of yachts (and boats up to 12 m in length) are for the year 2006. At that time an income of about HRK348m (about €47m) was earned from that type of activity. Considering the total number of crew changes recorded in 2006 and 2007, which, in fact, show the data on vessel renting cycles, and the increase of the service prices estimated as a minimum of 10%, and with the assumption that the average period of vessel renting did not significantly change, it may be calculated that the total income from charter activity in 2010 might reach HRK380–390m (€51–53m).

Considering such assumptions, the total income from charter activities and marinas in Croatia would reach almost HRK1bn (about €130m) in 2010. According to some estimates, that is much less than the real income earned from yachting tourism, which includes a number of other opportunities for the yachting tourists’ consumption.

### 8.2.2 Competitiveness of the product

A comparison of available capacities of yachting tourism supply in Croatia with its competing countries cannot be easily made, due to incompatible data originating from various sources and concepts/definitions of yachting harbours in national statistics and other studies. According to a study conducted in 2004 (Institute for Tourism, 2004), Croatia had 6% of marina berths among the surrounding competing countries (Table 8.7). France had the largest share of berths (48%), followed by Spain (23%).

According to the number of berths in marinas per kilometre of coast, Croatia, with its 2.6 berths/km, is at the same level as Turkey, Greece and Italy, but has a significantly lower number of berths in comparison with France and Spain.

An estimate of the competitiveness of the entire Croatian yachting product has been obtained on the basis of the opinion of yachting tourists sailing in Croatia in 2004 and 2007, either aboard their own or a rented vessel (Institute for Tourism/TOMAS Nautika 2004, 2007). The estimate is based on a comparison between the Croatian yachting supply and other yachting destinations previously visited. On the scale ‘Better’, ‘Same’ and ‘Worse’, tourists evaluated five groups of supply elements, including general elements of Croatian tourist supply and specific elements of the yachting supply:

- Social elements: image of the country, security, hospitality;
- Nature and preservation: climate, beauty of landscape, environment preservation, clean sea, clean places;
- Catering services;
<table>
<thead>
<tr>
<th>Country</th>
<th>GDP per capita (US$)</th>
<th>Mediterranean coast length (km)</th>
<th>Number of Mediterranean(^4) marinas</th>
<th>Number of berths in Mediterranean marinas</th>
<th>Number of berths per km of the Mediterranean coast</th>
<th>Share of the total number of berths on the Mediterranean (%)</th>
<th>Share of the coast on the Mediterranean (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Croatia</td>
<td>10,700</td>
<td>5,835</td>
<td>41</td>
<td>15,303</td>
<td>2.6</td>
<td>6.0</td>
<td>15.8</td>
</tr>
<tr>
<td>Slovenia</td>
<td>18,300</td>
<td>32</td>
<td>3</td>
<td>1,820</td>
<td>56.9</td>
<td>0.7</td>
<td>0.1</td>
</tr>
<tr>
<td>Italy</td>
<td>26,800</td>
<td>7,600</td>
<td>104</td>
<td>23,500</td>
<td>3.1</td>
<td>10.3</td>
<td>20.6</td>
</tr>
<tr>
<td>France</td>
<td>27,500</td>
<td>1,703</td>
<td>250</td>
<td>109,000</td>
<td>64.0</td>
<td>47.5</td>
<td>4.6</td>
</tr>
<tr>
<td>Spain</td>
<td>22,000</td>
<td>2,580</td>
<td>187</td>
<td>52,080</td>
<td>20.2</td>
<td>22.7</td>
<td>7.0</td>
</tr>
<tr>
<td>Montenegro</td>
<td>2,300</td>
<td>274</td>
<td>3</td>
<td>1,740</td>
<td>6.4</td>
<td>0.8</td>
<td>0.7</td>
</tr>
<tr>
<td>Turkey</td>
<td>6,700</td>
<td>5,191</td>
<td>31</td>
<td>11,360</td>
<td>2.2</td>
<td>4.9</td>
<td>14.1</td>
</tr>
<tr>
<td>Greece</td>
<td>19,900</td>
<td>13,676</td>
<td>51</td>
<td>14,661</td>
<td>1.1</td>
<td>6.4</td>
<td>37.1</td>
</tr>
<tr>
<td>Total</td>
<td>19,117</td>
<td>36,891</td>
<td>670</td>
<td>229,544</td>
<td>6.2</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

\(^4\)Refers only to marinas with sea berths
Specific yachting supply: marina capacity, marina equipment, marina distribution;

‘Value for money’ of the overall yachting supply.

Competing countries are surrounding countries that offer yachting products: Spain, France, Italy, Greece and Turkey.

During the entire observation period, Croatian yachting supply was evaluated by yachting tourists as competitive in terms of its main resource – beauty and preservation of the nature, clean sea – but also in terms of security and hospitality as social values. Croatia is perceived as competitive in terms of physical distribution of marinas. Catering services and ‘value for money’ were rated at the same level as in competitive countries, while in the segments of marina services (capacity and equipment) and the image of the country Croatia did not obtain primacy in relation to its main competitors.

Competitive advantages of Croatia compared with Italy are its natural elements (climate, beauty and preservation of nature, clean sea), clean coastal places, social values (security and hospitality) and ‘value for money’ of yachting supply. Catering services and physical distribution of marinas are at the same level as those in Italy, while the specific yachting supply in Croatia (capacity and equipment of marinas) and the country’s image were rated lower than the Italian counterparts.

In relation to France and Spain, Croatian competitive advantages are nature (climate and beautiful and preserved nature) and social values (security and hospitality), while other elements of yachting supply, including marina supply and services, country’s image, catering services and ‘value for money’ were rated lower in Croatia.

Croatian yachting supply has been rated competitive compared with those of Greece and Turkey. Almost all elements of the supply have been rated better in Croatian yachting supply, with the exception of the Greek image, which was assessed as better than that of Croatia.

8.2.3 View to the future

There is a concern in Croatia that uncontrolled development of yachting might jeopardize other types of tourism, primarily static tourism. There is also the fear that yachting might have a negative impact on the environment, particularly on the sea. Currently the demand in yachting is greater during the 2 summer months (July and August) and the possible negative impact to the environment is not significant. Sea currents, starting from the Otranto Straits and following the eastern Adriatic coast, keep the Croatian Adriatic coast relatively clean and no significant consequences of possible pollution caused by this type of tourism are felt. However, due to unrestricted navigation, most of the places along the coast and islands suitable for swimming are visited by yachting tourists, thus to some extent blocking the view for other visitors of the open sea and potentially polluting the sea with waste waters and sewage. On the other hand, the more advanced development of marinas (or nautical tourism ports as regulated by Croatian laws) changes the coast, since they are built in the maritime domain area and occupy relatively large water and land areas. Therefore any new construction of a marina arouses numerous controversial opinions at the local level. It has been especially evident with the most recent physical plans of the coastal counties, which included numerous locations suitable for marina construction, to which the general public expressed negative reactions.

Therefore the Ministry of Maritime Affairs, Transport and Development of the Republic of Croatia initiated a study of sustainable development of Croatian nautical tourism (referring in fact to yachting tourism), in which the construction of only 15,000 new berths for yachts and boats was planned for the period 2007–2017, which is less than a half of what was previously included in physical plans of coastal areas. The new berths would be in equal number built as sea berths in new marinas and in existing nautical ports, and as dry berths. Such a development plan was accepted both by the public and by experts. In particular, in all Croatian tourism development plans, yachting tourism is specified as a product for which Croatia indeed has numerous comparative advantages in relation to most of the adjacent competing countries, but they have not been adequately
exploited. However, due to numerous admin-
istrative issues related to the construction of
marinas and to economic recession, yachting
tourism capacities in Croatia have not been
increased, although the study was adopted
several years ago.

In the meantime, certain aspects of the
demand structure changed and, as elsewhere
in the Mediterranean, the average size of
yachts has increased and hence a correspond-
ing rise in interest in berths for yachts exceed-
ing 24 m in length.

Despite the evident development, yacht-
ing tourism in Croatia is considered as a pro-
spective type of tourism, which, if supported
by adequate development planning, protec-
tion of natural resources through legislative
and control measures, infrastructure and
organizational measures in nautical tourism
ports, could significantly contribute to local
and regional development, but also to improv-
ing the competitiveness of Croatia in emitting
markets.

8.3 Cruise Tourism

There are two types of cruise tourism in
Croatia: international and national. Interna-
tional cruise tourism takes place on the Adriatic Sea
and on the Danube river. Due to differences in the
characteristics of international and national
cruising, they will be dealt with separately.

In Croatia, international sea cruising has
been present to a large extent since the begin-
ing of this century and has developed in sev-
eral ports along the central and southern
Adriatic. International river cruising in Croatia
mostly takes place on the Danube, but also
along the Drava, 20 km from its junction with
the Danube to Osijek. Tourist ships depart
from Passau in Germany or from Budapest,
and during 1-week or 2-week cruises call at
Vukovar and Ilok in Croatia. Osijek became
the third river port of call in Croatia in 2009,
when the first modern river cruiser carrying
150 passengers from America sailed along the
Drava and called at Osijek.

Although national cruising has been
present in Croatian territorial and inland
waters for over two decades, it is only recently
that it has become a distinct and popular
tourist product. From its initial form, which
included the carrying of passengers from one
port to another without any organized stay
on land, and with perhaps a break for swim-
mimg or food, the product has now diversi-
fied, offering a combination of cruising and
cycling tours around islands, gourmet or
adventure tours etc. This type of tourism usu-
ally involves ships with up to 50 beds, mostly
modified fishing boats, which during weekly
itineraries visit the most attractive coastal and
island destinations located on certain parts of
the Croatian Adriatic.

Tourism statistics for Croatia do not
record the activities of national cruise excursions
and there are no official data relating to
traffic in terms of the number of arrivals and
overnight stays, nor data about the financial
profits from such cruising services. The data
shown in this study are the result of research
conducted by the Institute for Tourism in
Zagreb under the title ‘Tourist revenue from
national cruise travel in the Republic of
Croatia in 2007’ for the project ‘Experimental
TSA 2007’ (Institute for Tourism, 2010).

National cruising services are provided
by business enterprises registered for mari-
time and coastal transportation – transport of
passengers on passenger ships and yachts
with professional crew – for several-day
cruising or single-day excursions.

8.3.1 Demand

International cruising

Due to the aggression towards Croatia during
the Croatian War of Independence in the early
1990s, Croatia was excluded from interna-
tional cruise tourism development for the
whole decade. In the early 2000s, international
cruise ships increasingly called at a few
Croatian ports, the most important of which is
Dubrovnik. The development was so rapid
that the ports and tourist destinations were
not fully prepared and solutions to the prob-
lems arising from this demand were often
only palliative. Today, with this form of tour-
ism present in Croatia for years and with a
completed study of sustainable cruise tourism
in Croatia (Institute for Tourism, 2007), a more systematic approach to this development has been generally adopted.

In 2010 Croatia was visited by 1.1 million passengers on international cruise ships (the data refer only to the first port of call in Croatia), which is almost five times more than in 2002, and almost twice the number of passengers in 2005. In 2006, ten ports recorded 1200 calls by cruise ships with about 729,000 passengers. Compared to the year 2000, the number of passengers in 2006 increased nearly seven times, at an average annual growth rate of 23.4%. Following this sudden growth in the first few years of the analysed period and the relatively high traffic levels that were achieved, growth in the recent few years has begun to slow. Thus for example, the average annual growth rate in passenger numbers in the period between 2005 and 2009 was 13.5%. In 2009, as a result of the global economic crisis, the number of cruises declined by about 8% compared to 2008, but despite the crisis, the number of passengers grew by about 5%. However, in the same period the number of cruise ships calling at the port of Zadar, for example, fell by 35%, and the number of passengers was almost halved. Then again in 2010, a substantial demand increase was recorded: 11% in the numbers of cruise ships and 7.5% in the number of passengers on such ships (Fig. 8.3).

The most intensive traffic in terms of the number of both ships and passengers on international cruising ships was realized in the two ports of Dubrovnik (the port of Gruž and the port of Gradска luka). In 2010 the ports of Dubrovnik were visited by 705 cruise ships (12% more than the year before) with 916,089 passengers (8% more than the year before). In 2009, 658 cruise ships called at Dubrovnik in their international cruise with 846,200 passengers. This accounted for 86% of all international cruise visits in Croatia and 83% of the number of passengers on cruise ships in Croatia.

The most visited sea ports, apart from Dubrovnik, in international cruising in Croatia in 2010 were: Split with 257 calls and 172,378 passengers, Korčula with 212 calls and 73,421 passengers and Zadar with 80 calls and 17,157 passengers. Compared to 2009, the port of Split had an increase in the number of calls in 2010 by about 11% and in the number of passengers by about 31%, like the port of Zadar; the port of Korčula had an increase in the number of calls by about 17% and in the number of passengers by about 32%. These figures include not only large cruise ships; in 2010 for example, the port of Split was visited

Fig. 8.3. International demand for sea cruises in Croatia (2002–2010) (source: Croatian Bureau of Statistics, 2010). Note: The data refer to the ports of first call in Croatian territorial waters.
In international cruise tourism in Croatia, seasonality in demand is much less pronounced than for static tourism (Fig. 8.4), and increasingly extends both before and after the main season.

For example, in 2010 83% of tourist staying on the coast and islands in commercial accommodation came in the 4 summer months, but only 53% of cruise ship passengers.

International cruise tourism on the Danube in Croatia started in April 2004 when the first cruise ship called at Vukovar. That year 6704 passengers visited east Slavonia on a half-day basis. Then in 2005 there were 9700 visitors, in 2006 there were 11,300 visitors, in 2007 the number was 15,000 and in 2008 it was 17,135. They were mainly demanding tourists of high purchasing power, who were paying around €500/person/day for a river cruise.

In 2011, the port of Vukovar on the Danube was visited by 186 cruise ships with more than 23,000 passengers on international cruising trips. In 2010 the port of Ilok was visited by six cruise ships with 535 passengers on international cruising trips and a year later, in 2011, there were 14 calls by cruise ships with 1589 passengers.

In 2009 the port of Osijek was visited by a total of four cruise ships with 475 passengers. In 2010 there were three cruise ships on international trips with about 280 passengers and in 2011 there were only two with 145 passengers.

The qualitative characteristics of the demand in international cruise tourism in Croatia were assessed through an extensive survey on attitudes and expenditures of cruise ship passengers on international cruises in Croatia in 2006. According to the survey, Italians (27%) were the most frequent visitors to Croatian destinations in international cruising, followed by Americans (20%) and Spaniards (17%). Crew members were mostly from non-European countries (29%). Passengers’ average age was 43. There were 78% of passengers who visited Croatia for the first time and 90% of passengers who were in a cruise destination in Croatia for the first time. As for crew members, 89% of them had visited Croatia three or more times.

Fig. 8.4. Demand seasonality in cruise and stationary tourism in Croatia, 2010. Stationary tourism includes the number of international tourist arrivals and the number of overnight stays of foreign tourists in commercial accommodation facilities in seven coastal counties over 12 months (source: Croatian Bureau of Statistics, 2010).
In Croatian destinations of call, almost one-third of passengers spent fewer than 3 h and half of them spent 3–6 h. Large ships spent a shorter time at a destination and their passengers spent on average less money at a destination. Passengers on their first visit stayed longer than those who had already visited the destination of call, and spent more money on average.

In the destinations of call, passengers mostly visited restaurants (81% consumed drinks, 48% consumed food), shops (82%) and went sightseeing on their own (69%). Almost half the passengers (45%) went on an organized trip close to the destination and/or for organized sightseeing, about 36% of passengers visited a museum or an exhibition. Visitors from cruise ships expressed high levels of overall satisfaction with their visits to Croatian destinations, trip and sightseeing organization, with what restaurants and shops offered and with personal safety. Visitors were not satisfied with the availability of information/brochures and organization of transport at destinations.

According to the 2006 research results, visitors from cruise ships on international trips spent €39.00/person in Croatian destinations of call (passengers €41, crew members €29.00), of which €19.00 (49%) were on shopping, €10.00 (26%) on food and drink in restaurants, €7.00 (18%) on an organized trip/sightseeing and €0.5 (1%) for other costs. The average spending per cruise ship passenger was inversely proportional to the size of ship (Table 8.8) and proportional to the length of stay at a destination. This is logical due to the fact that large ships as a rule stay a shorter time at a destination of call.

Analysis of average expenditure indicated significant differences in spending between passengers on the same size ships, which was partly caused by the different nationality distribution of passengers on each ship. Thus the average spending at a destination of a passenger on Costa Victoria and Costa Mediterranea ships with about 2000 passengers was about €23.00 and €31.00, respectively, and on MSC Armonia and MSC Musica about €28.00 and €30.00, respectively, while the guests on Splendour of the Seas and Carnival Liberty ships of the same size as Costa and MSC ships spent on average about €43 and €46, respectively, which is almost double compared to a passenger on some other ships of the same size.

The destinations at which cruise ship guests spent the shortest time on average, Dubrovnik and Korčula, recorded the lowest consumption and spending by their visitors. A cruise ship guest in Korčula spent the least, €34.00/person on average, and a guest in Dubrovnik about €37.00/person on average. Guests in Split spent significantly more (€71.00 on average) and in Zadar (€82.00 on average). The structure of spending also differed between Dubrovnik and Korčula on the one hand and Split and Zadar on the other. In Dubrovnik about 21% of average spending went for organized sightseeing or a trip near the destination, which is the highest, while shopping expenditure was relatively low (45%) there. However, in Split and Zadar spending on organized trips and sightseeing is almost negligible (0.5 and 1.5% of average spending per person in Split and Zadar, respectively), and shopping expenditure was 60% in Split and 73% in Zadar.

In international cruise ship voyages in Croatia Italians dominated (27%), followed by Americans (20%) and Spaniards (17%). Their brief socio-economic profiles and some characteristics of demand are given below.

### Table 8.8

<table>
<thead>
<tr>
<th>Size of ship measured by the number of passengers</th>
<th>Total</th>
<th>&lt; 200</th>
<th>200–499</th>
<th>500–999</th>
<th>1000–1999</th>
<th>2000 (plus)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Euros</td>
<td>39.48</td>
<td>63.53</td>
<td>53.28</td>
<td>46.45</td>
<td>40.91</td>
<td>33.73</td>
</tr>
</tbody>
</table>

*Costs for organized trip/sightseeing reduced by the estimated commission of the shipping company to 40% of the total amount.
ITALIAN CRUISE VISITORS. The average age of Italians on cruise ships on international cruise trips in Croatia was 41. Most of them were between 36 and 45 years of age (33%). Age groups between 26 and 55 made up 79% of population on such journeys. They mostly travelled on ships carrying between 500 and 1000 passengers and on those with over 2000 passengers (71%). At destinations of call they mostly stayed less than 3 h (55%). Italians in 96% of cases stayed at destinations up to 6 h. Approximately 40% of Italians went on organized trips or sightseeing at destinations. Italians’ average spending at destinations of call in Croatia was about €31, not including the 40% commission taken by the shipping company, for organized trips and sightseeing on land.

AMERICAN CRUISE VISITORS. The average age of American tourists on such ships was 45. Most Americans were between 56 and 65 years of age (22%), and in the age group between 36 and 45 there were slightly fewer. Americans mostly travelled on ships carrying less than 200 passengers (38%), followed by those with 2000-plus passengers (22%). At destinations they mainly stayed between 3 and 6 h (49%). Americans in 87% of cases stayed at destinations between 3 and 9 h. A great number of Americans went on organized trips and sightseeing at destinations (56%) and an even greater number chose trips near the destination of call. Average spending of Americans at destinations in Croatia was about €49, not including the 40% commission taken by the shipping company for organized excursions. US guests spent relatively the most on organized sightseeing or an organized trip near the destination (about €13.00, i.e. 27% of average spending).

SPANISH CRUISE VISITORS. The average age of Spanish tourists on international cruise ships in Croatia was 40. Most of them belonged to the age group between 26 and 35 years of age (30%) and only 7% were above 55. They travelled on ships with between 1000 and 2000 passengers (31%). Only a few Spaniards travelled on ships carrying fewer than 200 passengers (3%) and on those carrying up to 500 passengers (2%). Most Spaniards spent between 3 and 6 h (56%) and 78% stayed up to 6 h at destinations of call. Approximately 45% of Spaniards went on organized trips or sightseeing at the destination, most of whom went sightseeing, and just a small number went on half-day trips near the destination (3%). Spaniards’ average spending at destinations of call in Croatia was about €38.00 for organized trips and sightseeing, not including the 40% commission taken by the shipping company.

There is no qualitative data for international river cruising in Croatia except that participants are mainly Americans, followed by Germans, Danes, Canadians and a few other nationalities.

National cruising

In 2009, a total of 1465 multi-day cruise journeys were realized in national cruising, with almost 30,000 passengers/tourists, or an average of 20 passengers per cruise. On these trips 207,000 overnight stays were made, which is an average of 141 night stays per journey. Boats that took part in national cruising realized between 1 and 28 journeys in 2009, with most (63%) making from 10 to 19 trips (Institute for Tourism, 2010). The most important generating area of national cruising in 2009 were tourists from Great Britain who made up almost half of all passengers on these trips, and the second greatest number was from Germany (17%), followed by Austria (15%), Switzerland (4%) and Sweden (4%). Approximately 76% of the passengers were under the age of 45 with 43% of them between 25 and 34, and 58% of tourists were in Croatia for the first time (mainly the result of the high proportion of British in the survey). Away from the boat, tourists visited restaurants (79% had dinner in restaurants), went to beaches, went shopping and went sightseeing on their own. They were generally not interested in visiting cultural or sports events or hiring a vehicle. Passengers were highly satisfied with the experience of their summer holidays as a whole in Croatia. They expressed a lower level of satisfaction with their personal safety, value for money of the whole trip, the cleanliness and landscaping of destinations, variety of facilities, quality of
food and drink and supply of souvenirs. They were least satisfied about availability of informative brochures. The average expenditure of tourists on national cruise ships in Croatia in 2009 was €956 per journey, of which €685 (72%) was spent on the package tour and €270.00 (28%) of other expenditure.8

**TOTAL INCOME FROM CRUISING TOURISM.** Total income from international cruise tourism by sea in Croatia in 2006 was estimated to be in the range of €29m to €32m:

- Income from port visits by cruise ships is €2.6m/year, estimated on the basis of the port authorities’ income per transit passenger of from €1.6 to €1.8 and the average prices for other services per ship (pilotage services, mooring and unmooring, agency fee and other charges).
- Income from fees for maintenance of navigable waterways is €161,000, estimated on data supplied by Plovput (http://www.plovput.hr), a government enterprise whose basic activity is related to the safety of navigation.

The range of estimated spending was €25m to €28m, depending on the estimate of the number of passengers who spent time ashore at a destination.

Assuming that the expenditure of visitors from cruise ships on their international journeys had not changed in Croatian destinations of call since 2006, the total income from this kind of tourism in 2010 could have reached the amount of about €50m.

Total tourists’ expenditure during national cruising in Croatia in 2009 was €28.3m, calculated on the basis of the total estimated number of tourists included in national cruise in 2009 and the estimated average spending per tourist.

Therefore in total there is about €80m of annual income from both international and national cruise in Croatia for the year 2009 and 2010. The income from international cruising on the rivers of Croatia is unknown due to the low traffic volume but would not significantly affect the estimates.

### 8.3.2 Product competitiveness

The number of ports/destinations included in international cruise tourism is greater for smaller ships. Thus the largest cruise ships, with more than 3000 passengers, in the Mediterranean visited 42 ports, and ships of smaller capacity, less than 1000 passengers, visited 122 ports. In Croatia the main ports for larger ships were Dubrovnik, Split and Korčula, while the ports of Šibenik, Zadar, Rovinj, Hvar, Pula, Opatija and Trogir were visited by cruise ships with less than 2000 passengers.

Measured by the number of cruise passengers, Dubrovnik as the most important Croatian cruise destination was in 2010 the seventh port in the Mediterranean, after Barcelona, Rome, Athens, Venice, Naples and Palma de Mallorca. With the exception of Naples, these ports are also the major cruise departure ports in the Mediterranean. Dubrovnik is mostly a part of itineraries with Venice as a starting port.

According to the 2010 survey in terms of criteria for selection of destinations a review of the competitiveness of 14 principal Mediterranean ports showed the following:

- For quality of ports and port services the port of Gruž was above average, and the ports of Split and the Gradska luka Dubrovnik (i.e. the anchorage off the Old Town of Dubrovnik) were below average; Athens and Dubrovnik were ranked highest for their attractiveness to visitors; Athens, Kusadasi (Turkey) and Rhodes (Greece) were ranked highest for their attractiveness to cruise companies; Gruž and Dubrovnik were ranked above average.

These survey results show that Croatian cruise destinations have undoubted attractions for tourists but are still considered by cruise companies to have some disadvantages in terms of some supply elements. Dubrovnik is rated above average due to its wide international recognition and favourable geographical position.

The competitiveness of the national cruise product on the international market has not been the subject of previous research.
and therefore there is no publicly available data. However, some indication of the competitiveness of Croatian national cruising is a ranking list of the most desirable travel destinations published in the *National Geographic Society Traveller* magazine, which included this type of product in the 50 most desirable travel destinations in the world in 2012.

### 8.3.3 View to the future

Although the professional literature offers various opinions on the impact of international cruising on the destinations of call, ranging from positive to absolutely negative ones, in Croatia now the prevailing attitude is that international cruise tourism is welcome, especially in the periods outside the main tourist season (the peak months of July and August). However, the development of international cruising on the Croatian coast should not be conducted as it is now in an unorganized way, in accordance with shipping companies’ wishes. It should rather be based on the following principles of development:

- Cruise industry development in accordance with the principles of sustainable development;
- Planning and management of cruising in such a way that negative effects on other types of tourism in destinations are absolutely minimized and overall positive effects on the destinations are maximized; and
- Continuous work with both the local population and the passengers on cruise ships in order to better understand cruise tourism and the ‘spirit’ of the destinations.

Sustainability criteria make it possible to define a manageable volume of ship and passenger traffic in a destination from the point of view of its impact on the environment and community life. Each tourist attraction, each tourist resort and tourist destination as a whole has its spatial limits for the reception of visitors. The capacity of a destination to receive guests is limited, and a number of visitors higher than the maximum capacity makes the destination less attractive for all visitors, and in the long run this may have negative economic, ecological and social effects. Large cruise ships, with even a few thousand passengers and crew members, have a strong effect on international cruising, and they have the most visible impact on a destination. In determining the suitability of a destination to receive guests from cruise ships, its ability to receive existing guests and visitors plus the addition of cruise ship passengers must be taken into account. All this should not essentially harm the quality of life for static tourists, the local population and other visitors. Only in this way is it possible to maintain a sustainable development of cruising from the standpoint of the social impact on the local community and on other guests in the destination.

When estimating the maximum sustainable number of visitors from cruise ships who could visit a destination at the same time, the following was taken into account:

- That only a proportion of the capacity of the tourist attractions of an area is available for the guests from cruise ships because there are also stationary tourists, excursionists and hikers and the local population to consider;
- That the sustainable maximum of a particular destination must be assessed for the peak tourist season; out of peak season the capacity is larger due to the decreased number of static guests and other one-day excursionists and hikers in a destination;
- Allowance should be made for the fact that most cruise visitors stay for only half a day so that more than the apparent maximum could be accommodated over a full day.

Applying the _criteria of tourist attractiveness_ of a destination for visitors from cruise ships, and the _maritime-traffic criteria_ in assessment of ports as tourist resorts, it is assessed that 17 destinations on the Croatian coast and islands satisfy the highest conditions to be listed as the most attractive tourist supply for the development of international cruise (Fig. 8.5). All the selected cruise destinations can accommodate ships and passengers on international cruises. However, they differ
significantly in their capacities in both their present condition and the plans for their development in the near future.

The cruise destinations of Pula, Rijeka, Zadar, Split and Dubrovnik have a relatively large cultural and historical core, the major attractive factor for cruise ship visitors, and the necessary tourist superstructure and functional environment. All destinations have an attractive environment, suitable for organized trips, and relatively large ports so, with the exception of Pula, they have a greater capacity of their ports and anchorages than the assessed sustainable carrying capacity in their associated towns.

The forecasts of demand for 2017 for the number of passengers on international cruise ships in Croatia is around 2 million passengers, suggesting an average growth rate of 10% per year. The actual scope of demand in real time can be affected by many factors, so the demand may actually be greater if Croatia significantly adjusts to the requirements of the shipping companies by improving port infrastructure and related port services. Other factors might be: the development of Croatian ports as ports of departure; any deterioration in terms of security of any established Mediterranean cruising area; changes in pricing policy and passenger acceptance criteria by the shipping companies; accession of Croatia to the EU; and the introduction of new cruising itineraries, for example to include more of northern and central Dalmatian ports.

Demand might be reduced if some of the rapidly growing markets, such as India or China (i.e. the Asian markets), attract shipping
companies because of higher earnings, and certain smaller markets begin to leave because of the lack of capacity, or if the stability in the region deteriorates, if the economic stability of some generating markets is disrupted, etc.

Although the estimated demand growth is evident and brings many benefits to the ports of call, the coastal regions and to Croatia as a whole, the question is raised whether such growth is realistically sustainable. Were growth to be spread over the number of ports that could potentially be involved in international cruise tourism, it definitely is. Growth, however, is not estimated as being balanced according to available ports. It is far more likely that the greater part of growth in demand will be directed towards Dubrovnik, which, taking into consideration the current organization for accommodation of ships and visitors on international cruises, and their arrival dynamics during the year, will not be able support such growth.

The city and port of Split might take the ‘excess demand’ of Dubrovnik as an alternative, being also a quality destination with its Diocletian palace in the city and other attractions in the town and its surroundings. Such a scenario has already begun; according to demand estimates Split will be the busiest port of call in 2017, immediately after Dubrovnik, with approximately 155,000 visitors from cruise ships, which is considerably below the sustainable acceptance capacity of Split. Just like Dubrovnik, that city could accept the increased traffic without any special difficulties, and because of its tourist attractions, geographic position, port and city development plans, it could become the second most significant cruise destination in Croatia.

The estimated annual sustainable capacity of Dubrovnik is approximately 1.1 million cruiser visitors and that number is likely to be reached in the next few years. There is, of course, space for further increase of sustainable demand, but mostly in the low season period, and especially in those 100 days during the year when there is hardly any cruise traffic. During those days it is possible to accept even a larger number of visitors than the maximum sustainable number during the high season since the number of other visitors to the destination is lower.

The total estimated demand in international cruise ships in Croatia in 2017 is considered sustainable, as it makes about 30% of the estimated sustainable demand for 17 leading Croatian ports in international cruise tourism. A somewhat larger share of passengers is expected in large ships and an increase in arrivals of smaller ships that will call at more Croatian destinations.

Currently, international river cruise tourism in Croatia has no development strategy. Thus solutions are adopted on the spot, depending on the current demand. The result is a decrease of traffic at two river ports (Osijek and Ilok), while the port of Vukovar registers an increase as it is better adapted to the demand, although not to the extent that it might. Activities directed towards improved accommodation conditions for river cruisers have been undertaken in all three ports, but without an adequate supply on land. Owing to the attractions of the region, the development of international river cruise tourism in that part of Croatia could be much faster and have higher positive effects on the destinations than it is today.

As far as national cruise tourism is concerned, there are projections for growth in demand, but on the basis of an analysis of the current development of this tourist product, it can be concluded that its potential has not been fully engaged. A greater adaptability to market niches, which has already begun, the adequate education of service providers on such boats and cooperation with service providers in the destinations of call could make this product exceptionally attractive. Currently, national cruising can be carried out only by boats under the Croatian flag, while from 2015 ships under other EU national flags will be allowed, which, supposedly, will increase the supply and competitiveness, with positive effects on the quality of services in national cruise tourism.

8.4 Conclusion

Nautical tourism is the most important type of tourism in Croatia after stationary tourism attracted by the sun and the sea. All Croatian
development documents relating to coastal and island tourism have concluded that nautical tourism has not been sufficiently exploited in view of natural and infrastructure potentials, and that it is nautical tourism that ensures significant comparative advantages to Croatia over most of its competitors in the Mediterranean. However, there are certain current problems present in nautical tourism.

Croatia has a competitive product in yachting tourism, but its potentials have not been sufficiently exploited. The present development strategy is not being implemented nor is it supported by new laws. Therefore, no new capacities have been planned and the current concessionaires of the maritime domain are concerned about the expiry of their concession contracts and their undefined status when applying for the continuation of the concession grant (compensation for non-amortized property or priority). Also, almost 50% of marinas are state owned, which, despite the proclamations, does not give ground for real competition with other marinas. However, due to the expected admission of Croatia to the EU (in 2013), the vicinity of emitting markets, very good traffic infrastructure in Croatia, the expected end of recession in European countries and natural and security conditions in Croatia for the development of such type of tourism, a more significant growth of yachting tourism demand may be expected in future.

On the other hand, the number of cruise tourism visitors to some Croatian destinations and seasons is approaching their maximum accommodation capacity or is even exceeding it, while the port ship accommodation capacity has not been fully reached. In such a situation, there is a possibility of a conflict of cruising tourism with the interests of other segments of tourist demand, primarily with stationary tourism and with domiciled inhabitants. Also, during the periods of high intensity of cruiser traffic there is a distinct presence of negative effects of cruise tourism on the environment. At present, there is no systematic observation of the effects of cruise tourism on tourism sustainability in Croatian tourist destinations or a standardized sustainable management of cruise tourism at national level.

Ports oriented towards international cruise tourism in Croatia are managed by government administration or county port authorities. Operation of such ports is currently marked by a series of questions, especially those related to pricing policy, cooperation of key parties, investments and sustainable development.

In terms of pricing policy and cooperation of key parties, the issue arises relating to standardizing the tariff policy in ports, examining port fees and creating a uniform supply of international cruise and joint approach to shipping companies.

The investments have been characterized by numerous development plans of ports aimed at improving accommodation of cruisers and passengers (including the construction of quays and passenger buildings with all ancillary equipment) and at fulfilling prerequisites for providing departure ports. Since the interest of cruise companies in visiting Croatian destinations, with the exception of Dubrovnik, is still limited, the issue of economic justification of some investment projects and the need to harmonize development plans of state owned ports will arise.

Since the international cruise product is permanently and successfully adapting to market demands, it is realistic to expect further growth in the demand for new destinations of call and the growing demand in the existing ones. Some of them will not be capable of meeting such an increased demand and, should the structure and the dynamics of the demand not change, Dubrovnik may face such a situation soon.

International cruising on the Danube and the Drava, although in its initial stage and of rather small volume, is steadily developing. Ships in such cruise travels will more frequently visit Croatian destinations if they develop their supply and increase competitiveness, for which prerequisites exist owing to a series of attractions in Vukovar, Ilok and Osijek and their surrounding areas.

As for national cruising, it seems that there are good development prospects. Possibilities are great, not only because of the extent and attractiveness of the water, mainland and coastal area, but also because of the existing infrastructure that relates to
development and because of possibilities to design a series of specific tourist products that have not yet been fully recognized by shipping companies and other creators of that type of tourist product supply. The problems mainly relate to the fuel price for ships performing such activity, as they do not pay the same price as fishing vessels (as in Italy, for instance), to providing berths in local harbours where they usually land and also to all financial dues that are too high for a short season. However, these problems can be solved and it is realistic to expect a significant expansion of this tourist product in Croatia in near future. The fact that shipping companies from EU countries will soon be allowed to perform such activity in Croatia thus strengthening the competitiveness of national shipping companies and improving the quality and diversity of the product will probably contribute to it.

Notes

1 In Croatia it is not uncommon to classify other types of tourism under nautical tourism. For instance, when referring to small shipping companies, offering national cruising and renting yachts with professional crew, which is defined as nautical tourism, they also offer single-day ship excursions, normally classified as excursion tourism. Consequently, visitors to, for instance, the Kornati National Park are not nautical tourists since the vessel is not used for staying aboard but for transport only.

2 The author of this paper was at the time the manager of all listed studies and projects except the study of the development of nautical tourism in Croatia, where he was the leader of one of the three institutional teams engaged in the study.

3 Only ‘out of pocket expenses’ that relate to one trip. Fixed costs for the vessel (annual berthing fee, insurance etc.) have not been taken into account.

4 According to the estimates made by I. Soža for 2003 (HGK – Association of marinas), the income from Croatian yachting tourism reached about €707m.

5 Only their Mediterranean coast.

6 However, the 2011 analysis of the sea quality and suitability for swimming showed that out of 906 analysed samples taken at the most renowned beaches along the Croatian coast only four of them were not suitable for swimming, eight were rated as satisfactory, 29 as good, while 861 samples were rated as excellent (EU Directive-Annual assessment, 2011; http://www.izor.hr/bathing/bathing.html).

7 Unpublished statistics of individual port authorities.

8 Results of research into satisfaction and passenger’s expenditure on national cruise journeys conducted by the Faculty of Economics University of Split and the Institute for Tourism in 2010 (Institute for Tourism, 2007).

9 According to the opinion of a number of stakeholders in Croatian yachting tourism stated in public meetings, focus groups and workshops and in media, as well as according to the estimates given in the previously mentioned Study of the Development of Croatian Nautical Tourism.

Web Resources

http://www.izor.hr/kakvoca/kakvoca.html
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9 Nautical Tourism in the Pacific

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School of Business and Centre for Innovative Practice, Edith Cowan University, Western Australia

9.1 Marine Tourism

Marine tourism in the South Pacific is undergoing rapid growth. In 2011 the cruise industry grew by 6% in the USA and UK, 19% on ships based in Germany, but 27% in Australia. Although this growth is off a much smaller base than that of the USA or the UK, nevertheless the growth of cruising down under is making the industry sit up and take notice and, as a consequence, more ships are being positioned in the South Pacific region, especially in Australia and New Zealand during the southern summer season. Little research has been undertaken in regard to the growth and the data that are available are largely confined to industry reports. This chapter summarizes the current information and highlights the growth of this niche form of tourism and includes information on the growth of marinas in Australia.

9.2 Marinas in Australia, a Case Study

Another key aspect of nautical tourism in Australia is the rapid growth in the number of yachts and marinas. Marinas in Australia are defined by the Marina Industries Association of Australia (MIAA) from a business perspective, that is, having at least one fulltime equivalent marina position and generally at least 20 on-water boat storage spaces. MIAA is the peak industry body for marina owners and operators of berthing, mooring, storage and slipway/workshop facilities connected to sailing, cruising and general boating. There are 356 marinas, including 61 club and 295 non-club marinas in Australia. They offer approximately 75,000 boat storage spaces for boaters, including berths/pens, moorings, drystack and hard stand. More than half of the marinas provide storage space to both commercial and recreational boats.

In 2011 a comprehensive survey of the economic, social and environmental performance of Australian marinas was conducted and is the basis of the following information (Mahoney et al., 2012). According to the author, Dr Ed Mahoney, Director of the Recreational Marine Research Centre, Michigan State University ‘this is the most comprehensive marina study ever conducted anywhere’ (MIAA, 2012). The report found that the demand for space at many marinas exceeds current capacity, and in different areas of Australia there is a need for additional storage spaces. The average occupancy across all

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marinas was 83%, and a quarter of marinas reported over 95% occupancy rates. More than half (52%) of marinas had waiting lists for boat storage spaces during part or all of summer 2010/2011 and over a third (39%) had waiting lists during non-peak seasons. Of the club marinas, 87% had waiting lists for boat storage spaces during part or all of summer 2010/2011 and 83% were unable to meet the demand for boat storage spaces outside the summer peak period (Mahoney et al., 2012). The state of New South Wales has 40% of Australian marinas and the highest level of boat occupancy (63%) while Queensland had more tenants operating at marinas (939 businesses). Western Australia (WA) had the largest average number of boat storage spaces per marina (310).

The report also found that marinas are important business ‘hubs’ contributing to economic development through direct employment, leasing space to other businesses, providing business opportunities to many private contractors, and payments to government in the form of taxes and lease fees. In 2011 Australian marinas generated AU$761m in gross revenues, paid around AU$109m in taxes and employed 15,900 people with a payroll of around AU$146m.

It was also found that many marinas are directing greater resources and significant effort toward protecting and enhancing their local environments. A large percentage are participating in structured programmes that focus on environmental management and improvement, such as Clean Marinas, and approximately 89% provided boating clients with guidelines and information about environmentally responsible boating practices and 92% practised recycling. The Clean Marina programme is an international voluntary accreditation system for marinas, yacht clubs, boat clubs, slips, boatyards and associated industry operators, which has been developed to support marine industries in their endeavours to protect coastal and inland waterways (Marketing Weekly News, 2011). Other developments in marinas in Australia include the Gold Coast City Marina, which has floating marina berths for boats up to 50 m in length and an undercover dry boat storage facility with 250 racks for boats up to 10 m in length (http://www.gccm.com.au).

Marina development in the South Pacific is not just confined to Australia, with many other countries also home to an array of marinas. For example, of the 650 yachts that visit Fiji annually, 40 to 50 are super-yachts worth over AU$10m each. The services for these yachts have risen in recent times with improved repair and maintenance facilities at the Vuda marina and Savusavu and the recent AU$10m investment in the Port Denarau Marina has allowed it to cater for yachts up to 75 m long (Fiji Times, 2010).

### 9.3 Cruising

The cruise industry is undergoing a period of rapid growth and remarkable change. In 2009, 20 million people undertook cruising (Ward, 2013, Table 9.1). The industry is being driven by an insatiable demand and the cruise lines are responding by building larger and larger ships (Dowling, 2006). The largest cruise liners in the world are Royal Caribbean International’s two ‘Oasis class’ 225, 282 t ships, *Oasis of the Seas* (built in 2009) and *Allure of the Seas* (2010). These ships are far larger than their nearest competitors, the RCI ‘Freedom class’ 154,407 t sister ships *Freedom of the Seas* (2006), *Liberty of the Seas* (2007) and *Independence of the Seas* (2008).

Allied to the growth in cruise ships is the emergence of new trends in cruising. These include: an increased number of large resort ships, which include greater

<table>
<thead>
<tr>
<th>Region</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>13,500,000</td>
</tr>
<tr>
<td>Europe (excluding UK)</td>
<td>3,900,000</td>
</tr>
<tr>
<td>UK</td>
<td>1,600,000</td>
</tr>
<tr>
<td>Brazil</td>
<td>800,000</td>
</tr>
<tr>
<td>Canada</td>
<td>770,000</td>
</tr>
<tr>
<td>Asia (excluding Japan)</td>
<td>600,000</td>
</tr>
<tr>
<td>Australia and New Zealand</td>
<td>330,000</td>
</tr>
<tr>
<td>Scandinavia</td>
<td>200,000</td>
</tr>
<tr>
<td>Japan</td>
<td>180,000</td>
</tr>
<tr>
<td>Cyprus</td>
<td>50,000</td>
</tr>
<tr>
<td>Cargo ship passengers</td>
<td>3,000</td>
</tr>
<tr>
<td>Total</td>
<td>21,213,000</td>
</tr>
</tbody>
</table>
multi-generational cruising; the rise of smaller luxury and/or expedition ships; the growth of shopping malls on board; and increased demand for active adventures onshore (after Ward, 2010). It is estimated that cruise lines currently visit around 2000 destinations (Ward, 2011), the main destinations being the Caribbean, the Mediterranean, Alaska and the Bahamas. However, the growth of cruising has now led to a greater demand for ‘newer’, exotic and more remote destinations. One emerging destination is Australia and New Zealand, which is experiencing rapid growth in both demand (passengers) and supply (infrastructure and destination development).

### 9.4 Cruising in the South Pacific, a Case Study

Cruising in the South Pacific has a long history (Douglas and Douglas, 1996, 2006). Traditional cruising grounds in the South Pacific include Australia, New Zealand and Norfolk Island as well as the Pacific island groups of Melanesia, Micronesia and Polynesia. Melanesian cruise destinations have traditionally included Fiji, New Caledonia and Vanuatu with more recent destinations being Papua New Guinea and the Solomon Islands. The small islands of Micronesia are host to a small but growing number of cruise ships, whereas several of the countries of Polynesia have been longstanding cruise destinations (McGonigal, 2010). These include the Cook Islands, French Polynesia, Samoa and Tonga. Overall there is a large range of destinations in the South Pacific and the region is currently undergoing increased interest and demand by both cruisers and cruise companies (Macpherson, 2008). Recent studies have been made on the economics of cruising in New Caledonia (ISEE, 2009) and a cruise strategy has been undertaken by the National Tourism Development Office of Vanuatu (NTDO, 2009). New Caledonia recorded 210,919 cruise passengers in 2011, an increase of 3.5% compared to 2010, at one of the four ports on the archipelago, Nouméa, Isle of Pines, Ouvea and Lifou. Recently Port Tadine on Maré Island welcomed its first cruise liner, opening up a fifth port of call for the island. Cruise tourism has more than doubled in the past 5 years with the number of cruise liner passengers expected to reach 500,000 by the year 2020 (CDU News, 2012).

#### 9.4.1 Cruising in Vanuatu

Vanuatu is a unique and new cruise ship destination. It comprises a number of islands each of which conveys a cultural feeling and offers a different experience. Since independence in 1980, the country has developed tourism in order to diversify its income generation. Cruise tourism is a growing market and it now attracts a number of mainstream cruisers including P&O Cruises, Holland America and Princess Cruises. The itineraries offered by P&O Cruises Australia tend to be 7 to 12 nights in duration and depart from Sydney and Brisbane. They travel to New Caledonia, and sometimes Fiji and Samoa, in conjunction with Vanuatu.

The company operates a number of ships to Vanuatu including the Pacific Dawn, Pacific Sun and Pacific Jewel. They visit many ports of call in Vanuatu including Port Vila, Champagne Bay, Wala, Mystery Island as well as several other destinations. The passing of cruise ships through the 83 islands has consequent impacts and the waste from the cruise ships is a topic of concern. This negative impact is balanced by the economic significance cruising provides for the nation. The tourists brought to the ports of call by the cruise ships spend a lot on shore tours and locally made goods, which injects money into the local Vanuatu communities. However, the largest growth is taking place in the ‘anchor’ destinations of Australia and New Zealand. Here growth has been phenomenal over recent years with cruising in Australasia undergoing extensive growth far outstripping the increases in the USA or UK.

#### 9.4.2 Cruising in Micronesia

Micronesia comprises five distinct political regions: Guam (a US territory), the Marianas
to the north, and Palau, the Federated States of Micronesia (FSM) and the Marshall Islands to the south. Cruise ships visit the region on an ad hoc basis with Cunard, Princess, Hapag-Lloyd and Japanese lines making around six visits annually (Eime, 2012). With this emerging cruise industry the Micronesian Cruise Association (MCA) was founded in 2011 and they have been promoting the region to cruise companies with some success leading to a visit by the QM2 in 2012. The region is well placed to accept low impact visits by vessels from the world’s growing fleet of adventure and expedition vessels (Eime, 2012). Hapag-Lloyd’s fleet of luxury expedition vessels regularly visit the region with Orion Expeditions visiting for the first time in 2012. Attractions in the island region focus on its outstanding coral dive sites with World War II shipwrecks.

### 9.4.3 Cruising in Australia

Relatively little is known about cruising in Australia. Some research has, however, been undertaken in relation to its economic impacts (Dwyer and Forsyth, 1996), cruise passengers (Douglas and Douglas, 2004; Fanning and James, 2006), expedition ships (Ellis and Kriwoken, 2006; Walker and Moscardo, 2006; Scherrer et al., 2008, 2011) and policy issues (Dobson and Gill, 2006). The main cruise industry organizations in Australia are the International Cruise Council of Australasia (ICCA, http://www.cruising.org.au) and Cruise Down Under (CDU, http://www.cruisedownunder.com). The former is essentially a marketing body with the latter involved in development issues. According to the ICCA (2012) the main cruising destinations for Australians were to the South Pacific (230,321 passengers or 37% of Australia’s cruise market), Australia (120,380 passengers, 19%) and New Zealand (84,013, 13%). The average length of cruise was 8–14 days (52%), 5–7 days (24%) and 15–21 days (11%, ICCA, 2012).

Each year CDU and the Commonwealth Government’s Tourism Australia undertake an economic impact assessment of the cruise shipping industry in the country. This has been conducted now for 5 consecutive years by the economic consultancy the AECgroup. The reports are carried out to gain an understanding of the size, growth and economic significance of the industry to the Australian economy as well as to assist with future planning and strategy. Much of the following information has been adapted from their most recent report (AEC, 2010) supplemented by a report for Carnival Australia (Access Economics, 2009 and Deloitte Access Economics, 2012), as well as the Annual Report of Cruise Down Under (CDU, 2010).

The majority of indicators show a growth in the industry across a range of criteria during the period 1 July 2009 to 30 June 2010 (Table 9.3). During that period 34 cruise ships visited Australian ports, an increase of nine (36%) in the last 4 years. Ten ships were home ported in Australia for at least part of the cruise season (traditionally October–March), an increase of 43% over the previous year.
The ships are much larger and their passenger capacities are higher. In the 2009/2010 year 15 cruise ships visiting Australian ports had passenger capacities of more than 1000 with the largest ship, Queen Mary 2, having a capacity of 3090 passengers (Fig. 9.1). In addition 13 cruise ships from 12 cruise lines visited Australia in the 2009/2010 year that did not visit the previous year.

In 2009/2010, 38 cruise ships visited Australia, visiting 28 ports and making a total of 583 port visits (Table 9.4). A total of 366,000 Australians took cruises and the industry contributed AUS$1.281m to the economy, spreading the income across both urban and regional Australia. While a decade ago there were few home-ported ships in Australia, in the 2009/2010 season there were ten ships from six cruise lines, based out of seven ports: Adelaide, Brisbane, Cairns, Darwin, Melbourne, Perth and Sydney (AEC, 2010). Some ships were ported in more than one domestic port in the year for different cruises (Table 9.5).

Overall, there were 583 cruise ship visits to Australian ports in 2009/2010, an increase of 79%, from the 2004 total of 325. Sydney, Brisbane and Melbourne are the most visited ports, with Sydney (214 ship visits in 2012) recording the most visits due to its position as Australia’s marquee port and the ‘cruise hub of Australia’.

Table 9.3. Australian cruise ship industry demand indicators (AEC Group, 2010).

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Number</th>
<th>Percentage increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visiting cruise ships</td>
<td>38</td>
<td>11.8</td>
</tr>
<tr>
<td>Cruise passenger capacity</td>
<td>42,291</td>
<td>10.9</td>
</tr>
<tr>
<td>Crew number</td>
<td>19,513</td>
<td>9.8</td>
</tr>
<tr>
<td>Australian ports visited by cruise ships</td>
<td>28</td>
<td>7.7</td>
</tr>
<tr>
<td>Total number of cruise ship visits to</td>
<td>521</td>
<td>6.8</td>
</tr>
<tr>
<td>Australian ports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total passenger days at ports</td>
<td>863,351</td>
<td>34.3</td>
</tr>
</tbody>
</table>

Fig. 9.1. Cunard’s flagship Queen Mary 2 leaving the Port of Fremantle, Western Australia after her maiden voyage to Australia in March 2010 (source: Wings Aerial Photographics for Fremantle Ports).
It is predicted that this trend will continue with 279 vessels to call in 2013, 322 (2020) and 600 (2040) with passenger numbers set to triple during this time from 215,000 to 1.3 million (Cruise Weekly, 2012a). It is also estimated that the associated AU$400m cruise industry spend (including crew, passenger and ship operator spending) will grow AU$1.3bn by 2020. In February 2012 alone 33 cruise vessels visited the city in 1 month and the New South Wales government committed AU$87m to improving port facilities at the new White Bay cruise passenger terminal (Cruise Weekly, 2012b).

Other ports to report strong growth were Port Douglas, Queensland (15 more visits than 2008/2009), Geraldton, WA (14) and Fremantle, WA (11). New ports visited by cruise ships included Eden (New South Wales), Hamilton Island (Queensland), Norfolk Island (Pacific Ocean) and Christmas Island (Indian Ocean) (AEC, 2010). The total passenger days at port was 1,072,239, an increase of 20% over the previous year. Tasmania recorded 70 port calls around the island in 2011 and Tourism Tasmania has recently developed a cruise tourism strategy.

During recent years there has been a parallel increase in the number of cruise lines that have support operations located in Australia, including corporate offices, advertising and marketing operations and logistics operations. These include Carnival Australia, Royal Caribbean and Silversea Cruises (Fig. 9.2). Royal Caribbean completed its third and most successful Australian cruising season on record in April 2010 with a total of 30,000 passengers carried on 15 cruises, all of which sailed full. In early 2012 six senior members of Carnival Cruise Line’s senior sales team toured Australia to help train 1000 cruise travel agents in seven cities ahead of the Carnival Spirit being based in Australia later in the year (Cruise Weekly, 2012c). Recently it was suggested that the Norwegian Cruise Line may base a ship in Australia in 2014 after it launches its new ships Breakaway and Getaway (Cruise Weekly, 2012d).

### 9.4.4 Economic growth

As a consequence of the growth in the number of cruise ships visiting Australia and the ports visited, there is an allied growth in the passenger capacities of the ships, the number of cruise passengers visiting Australia and their total expenditure whilst in the country. In the 5-year period between 2005 and 2009 the passenger capacity of cruise ships grew from 21,500 to 41,803, an increase of 94%. Overall the proportion of Australians taking a cruise holiday has risen from 0.6% of the population in 2002 to 1.7% in 2009, overtaking many European markets and comparing favourably with the penetration of more mature cruise markets such as the UK (2.5%) and North America (2.9%; Treacy, 2010).

The total passenger days at port was 1,072,239 and the total passenger expenditure...
was AU$263m, an increase of 99% (from AU$132m) over the past 5 years. Total crew expenditure was AU$38m and port-related expenditure was AU$361m. In 2010/2011 the cruise sector contributed AU$830m in value added to the Australian economy, an increase of 44% in the previous 3 years (Deloitte Access Economics, 2012). Another contribution is the direct employment of 7220 full time equivalent positions (FTEs). The average annual passenger growth is currently 32% with forward bookings from 2014–2020 projected to still be a solid 7%. By 2020 Deloitte estimate that the value to the Australian economy will be AU$2.28bn. Further evidence of the rapid growth of Australian cruising is that there has been significant growth in the deployment of ships based in Australia. Princess Cruises is now operating three ships in Australia year round, offering destinations such as the Far East, Africa and Europe. Carnival Cruise Lines has recently announced its first year-round deployment of a ship outside the USA with the deployment of Carnival Spirit out of Sydney. Royal Caribbean has recently doubled its seasonal deployment from Australia with Radiance of the Seas and Celebrity Cruises have their first seasonal deployment in 2012. Carnival Australia’s Princess Cruises’ Sea Princess as well as Cunard’s Queen Mary 2 were part of nine ships based in Australian waters over the 2011/2012 summer. The 77,000 t Sea Princess was home ported in Sydney from October 2011 to March 2012.

Between P&O Cruises and Princess Cruises, Australian based cruises to New Zealand have risen from 11 in 2009, 17 (2010), 31 (2011) to 38 (2012). Royal Caribbean International will home-port two superliners in Sydney from October 2011, the Rhapsody of the Seas, which has completed three summer seasons, along with the Radiance of the Seas, the first 21st-century ship to be based in Australia and the newest, largest and most modern ship to be home ported in Sydney. RCL’s 2011 season will feature 29 sailings, comprising 13 itineraries calling at 50 ports in nine countries. Gavin Smith, Managing Director, Royal Caribbean Cruises Australia says ‘The move is a demonstration of the strength of the local cruise market, and is in response to demand from American, European and Asian visitors to experience Australia and our region onboard our cruise ships’ (Ryan, 2010).
9.4.5 Western Australia

In recent years Western Australia (WA) has undergone sustained growth in cruising. The state’s ports had 106 cruise ship visits in 2009/2010, an increase from 74 the previous year. The state’s capital city port of Fremantle had 39 ship visits in the 2009/2010 season with 90,000 passengers, making it the busiest season since the early 1970s (CDU, 2010). This included maiden visits by the Queen Mary 2 and Queen Victoria. The growing number of cruise ship visits to Fremantle and other regional ports is injecting millions of dollars into the local economy. In Fremantle alone the industry generated AU$95m, an increase of 61% (from AU$59m) the previous year. The Passenger Terminal recently underwent a major refurbishment at a cost of AU$2.4m. Other regions in WA also benefited from the increase in cruise tourism (Table 9.6). In the southern part of the state the port of Albany hosted 13 ship visits, which contributed AU$2m to the region. Overall, cruising in WA is growing largely based on the back of sustained growth on the east coast.

In recent years ‘micro cruising’ has grown in the state’s far north Kimberley region. This small scale expedition cruise industry has grown rapidly as the area’s tourism popularity increased and demand has grown. The remote Kimberley coast with its geological wonders and indigenous history are the main attractions (Scherrer et al., 2008). The cruise industry was established in the 1980s and has grown rapidly in both the number and size of vessels. In 2006, a total of 30 vessels by 28 companies operated multi-day tours. They include fishing vessels, sailing vessels and motor cruise vessels with the number of passengers ranging from a maximum capacity of four up to 106 (Fig. 9.3). The length of tour ranges from 3 to 18 days with the most common being 7 days.

9.4.6 New Zealand

The New Zealand cruise industry has also recorded remarkable growth in recent years, with a total of 31,633 New Zealanders (0.7% of the total population) cruising in the 2009/2010 season, an increase of 19% since 2006 (ICCA, 2011). The most popular destinations for New Zealand cruisers are the South Pacific, which attracted 12,149 passengers (38% of the total cruise market), Europe (5602 passengers, 18%) and Australia (3123 passengers, 10%). In addition, river cruising increased in popularity with a 37% increase in 2009 to 2290 passengers. Other areas of growth were for world voyage cruises (1377 passengers, a 185% increase over the previous year) and other markets including Antarctica, Africa and the Transatlantic (1032 passengers, 166% increase).

Cruises of between 8 and 14 days are the most popular and form 60% of the market share. Cruises between 15 and 21 days experienced the largest growth, rising from 4% of the market in 2008 to 18% in 2009/2010. Significant growth was also experienced in cruises longer than 22 days, accounting for 8% of the market in 2009 compared with 3.5% in 2008.

In the 2011/2012 season Cruise New Zealand anticipates that the number of cruise passengers will be approximately 200,000, an increase of 82% on the 2009/2010 figures (Market Economics, 2010). The industry is projected to become the country’s third largest inbound tourism market, provide 5606 jobs and be worth NZ$346m (AU$280).

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<tbody>
<tr>
<td>Region</td>
<td>Port</td>
<td>FTEs</td>
<td>Wages (AU$m)</td>
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<td>Exmouth Geraldton</td>
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<tr>
<td>South West</td>
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<td>South Eastern</td>
<td>Esperance</td>
<td>3</td>
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9.4.7 Discussion

The rapid rise in cruising in Australia and New Zealand comes with attendant opportunities and issues. A major issue is that the cruise sector is not well understood. A critical question for economic analysis in relation to the industry in Australia is whether cruising attracts new visitors to destinations or merely redirects visitors from other tourism styles (Dwyer and Forsyth, 1996). The official government statistical agencies are not actively involved in collecting data on cruising (Access Economics, 2008). The increase in the number of cruise ships visiting the region has led to increased visitors to the region, but lower yields (CDU, 2010). Other issues relate to port infrastructure, which is of a variable quality across Australia.

The port of Fremantle has recently refurbished their terminal building and both Brisbane and Darwin have built new terminals. There are also plans to build a cruise terminal on the Gold Coast with cruise companies keen to have this destination opened up to them (Cruise Weekly, 2012e). Cairns has a new cruise terminal and the port has been enlarged to allow it to accommodate two large cruise ships at a time and its waterways are to be dredged as a cost of AU$40m to allow larger ships to visit the port (Cruise Weekly, 2012f). The waterfront is undergoing an AU$23m transformation to open it up to the public and complement the city’s cruise facilities, which are the busiest in regional Australia (TTNQ, 2012). According to the report Cairns continues to attract a growing cruise market, which injects in excess of AU$12m to the local economy each year (TTNQ, 2012, p. 4).

A dedicated cruise ship terminal is currently being developed in Hobart and its design will incorporate the historic foundations of the original wharf shed. It is expected to be completed by the second half of the 2012/2013 cruise ship season (Cruise Weekly, 2012g). In addition, the city of Geelong, Victoria, has announced plans to construct a new pier along its foreshore, as well as to invest in more infrastructure to facilitate future cruise calls (Cruise Weekly, 2012g).

Likewise, in New Zealand, Auckland’s Princes Wharf is no longer adequate to accommodate the growing number of larger ships visiting the city and the inadequate infrastructure is inhibiting the growth of the industry (Market Economics, 2010).
Access Economics (2009) nominate a number of issues that are posing constraints to the industry. The first is the importance of Sydney as being central to the growth of the cruise sector. Many new ships are not able to pass under the Sydney Harbour Bridge and there is no central booking coordination for Australian ports. Recently the head of Holland America Line and Seabourn Stein Kruse suggested that Sydney’s poor infrastructure was seriously damaging future opportunities for cruise passengers. He stated that ‘the Australian market is “finite” and its gateway city’s berthing facilities are “antiquated and insufficient” ’ (Cruise Weekly, 2012h, p.2).

Australia has a number of ‘proclaimed ports’, which are designated embarkation ports. This is inflexible and needs to be addressed so that most if not all ports can become points of embarkation. In WA strict state gaming controls mean that ships are not allowed to open their casinos while in WA state waters. This is due to a monopoly situation being granted to the sole shore-based casino.

A key issue is the remoteness of the region from the world’s major cruise markets. The tyranny of distance from the northern hemisphere centres of population is often cited as a major reason for potential cruisers not visiting the region. Also, Australia’s large land mass and dispersed population makes it difficult to offer packages with frequent port visits as usually occurs in other major cruising destinations (Access Economics, 2009).

In WA the growth of cruising has resulted in an increase in frequency of visits and the number of visitors to sites along the coast. This has led to a number of associated environmental and cultural impacts especially at sites of Aboriginal significance (Scherrer et al., 2008). A major impact is the lack of consultation with traditional owners, permission not being sought for access and cultural protocols not being followed resulting in a perceived lack of respect for traditional custodians. The Kimberley findings illustrate that there are a range of governance, management, environmental and cultural issues generated by the industry. This has led to calls for the appointment of a body to oversee cruising development in the region (Scherrer et al., 2011).

### 9.4.8 Conclusions

The data presented in this article indicate that both cruising and yacht marinas are a growth phenomenon in the South Pacific. The projected growth for the industry is that in the cruise ship sector the annual passenger growth will be 32% over the next year. An endorsement of this growth is a number of new ships that will visit Australia for the first time over coming seasons.

Australia has a long term tourism development policy, but it has not had a dedicated national cruise strategy for almost 20 years (Commonwealth DoT, 1995). However, Australian Customs recently established a National Sea Passenger Facilitation Committee similar to the existing Aviation Committee. The committee brings together key border agencies and other departments with an interest in the cruise shipping industry and provides a forum where the cruise industry and supporting industries can raise issues directly with relevant areas of the Australian Government (CDU, 2010).

Finally, central to the future of cruising in the region is the need to address capacity issues of ports generally, but specifically the marquee ports of Sydney and Auckland. The constraints include the number of ship berths, passenger exchange handling, port facilities, coach and transport links, air travel facilities and tourist activities (Market Economics, 2010). Until this is addressed, the growth of cruising in Australia and New Zealand will be further constrained having flow-on adverse impacts for cruising in the South Pacific region.

### Web Resources

- CDU: [http://www.cruisedownunder.com](http://www.cruisedownunder.com)
Part 4

Development Opportunities for Nautical Tourism
10 Opportunities for Market Development of Nautical Tourism in Europe*


1 School of Social Work, Memorial University of Newfoundland in St Johns, Newfoundland; 2 University of Split, Maritime Faculty, Croatia; 3 School of Business and Centre for Innovative Practice, Edith Cowan University, Western Australia; 4 School of Tourism and Hospitality, Plymouth University Business School, UK; 5 Hydrographic Institute of The Republic of Croatia, Split, Croatia; 6 University of Lapland, Rovaniemi, Finland; 7 Croatian Institute for Tourism, Zagreb, Croatia; 8 Department of Nautical Tourism, University of Dubrovnik, Croatia; 9 Bremerhaven University of Applied Science, Bremerhaven, Germany

10.1 Corporate Imperialism: The North American Takeover of Cruising in Europe

Three corporations dominate cruise tourism today, each of which is centred in North America. Carnival Corporation, which operates ten cruise brands, is the largest, comprising approximately 50% of berths under the umbrella of the Cruise Lines International Association (CLIA); only six of Carnival Corporation’s cruise lines are members of CLIA. Royal Caribbean Cruises Limited (RCCL) is the second largest, representing 27% of berths; RCCL operates five brand names, three of which are CLIA members. Prestige Cruise Holdings, a company established by venture capitalist Leon Black, operates three cruise lines representing 10% of CLIA member lines’ berths. Prestige Cruise Holdings co-owns Norwegian Cruise Lines (NCL) with Genting Hong Kong (which owns Star Cruises) and two smaller companies: Oceania Cruises and Regent Seven Seas Cruises.

A cursory review of the companies operated by these companies suggests European roots. Carnival Corporation operates Holland America Line, P&O Cruises, Cunard Line, Aida Cruises, Costa Cruises and Ibero Cruceros; each of these companies has historical roots in Europe. The companies owned by RCCL similarly have roots in Europe. Royal Caribbean International was originally owned by Norwegian investors; Celebrity Cruises was formed through the merger of cruise lines owned by Greek shipping magnates Anthony and Dimitri Chandris; and more recently the corporation has acquired Pullmantur Cruises and Croisieres de France. In December 2007, Royal Caribbean announced further expansion in Europe through a joint venture with Germany-based TUI. The joint venture

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established TUI Cruises and focuses on the German cruise market. TUI is already involved in the UK cruise industry through its ownership of Thomson Holidays (operator of Thomson Cruises) and its merger in 2007 with First Choice Holidays. Prestige Cruise Holdings’ NCL was started in 1966 by Norwegian businessman Knut Kloster, who subsequently also operated Royal Cruise Line and purchased Royal Viking Line in 1986.

Takeovers and mergers dominate the history of the cruise industry. This has meant the transition from cruise lines that were originally based in Europe and were branded based on their national identity (e.g. Swedish American Line, Holland America Line, UK-based Cunard Line, Greek Line, Italian Line – acquired by CP Ships in 2002, which in turn was acquired by TUI AG in 2005 and merged with Hapag-Lloyd in 2006). Many of these cruise lines were focused on ocean travel from Europe to North America, however with jet air travel passenger shipping as transportation became relatively obsolete.

This shift from passenger shipping as transportation to leisure/vacation travel and the changing complexion of the cruise industry is the focus of this chapter. It will look first at the development of the modern cruise industry, mainly focusing on mergers and acquisitions. It will then assess the current state of the cruise industry and the implications for European passengers.

10.1.1 Leisure cruising lines in North America

In the days before air travel, passenger ships were the primary means for trans-oceanic transport. Companies such as Cunard Line, Holland America Line and Swedish American Line established their reputation and produced an image for cruise ship travel that included opulence and luxury. They provided transportation in style, for those who could afford to travel in first class. Some ships were based in North America. Canadian Pacific operated cruise ships from Canada to Europe and to China. Matson Lines in the USA provided transportation between the US west coast and Hawaii, as well as trans-Pacific voyages to Australia and the South Pacific. Several companies provided a transatlantic service, including American Export Lines, Moore McCormack Line and Grace Line. Because the focus was on transportation, port calls were few. The cruise experience was onboard the ship.

Trans-ocean travel hit its peak in 1957 and began to decline in 1958 when Pan American Airways (Pan Am) introduced non-stop air travel between New York and Europe. Transatlantic boardings steadily declined through the early 1960s and brought with it the demise of companies such as Canadian Pacific, United States Lines, Hamburg-America Line and Swedish American Line. Many of the ships idled were subsequently taken over by new companies that focused on the passenger vessel as a vehicle for leisure travel.

**Princess Cruises – 1965**

Princess Cruises, established in 1965 by Stanley B. McDonald, was the first of today’s modern cruise lines to focus on the leisure travel market. McDonald began the cruise line by chartering Canadian Pacific’s 6000 ton *Princess Patricia* during the off-season of its cruises from Vancouver to Alaska’s Inside Passage. Keeping with the ship’s name (and avoiding the need to unnecessarily paint the ship), McDonald named his company Princess Cruises and provided cruises to Mexico’s west coast. After 2 years with demand exceeding capacity, Princess Cruises added a second ship – it chartered the newly completed Italian ship MS *Italia* (operated by Costa Cruises) and renamed her *Princess Italia*, also for use on its Mexican cruises from Los Angeles. A third vessel – Costa Line’s *Carla C* – was chartered in November 1968. The ship’s charter was cancelled in 1970 after Costa lost one of its other ships.

Despite its success, Princess Cruises was negatively impacted by the Arab oil embargo in 1973 and the recession that followed. In 1974 it was taken over by London-based Peninsular & Oriental Steam Navigation Company (P&O). P&O replaced the ships on charter with newer vessels – three were added...
in 1974: Island Princess and Pacific Princess, originally built in 1971 as Sea Venture and Island Venture for Norway-based Flagship Cruises, and Sun Princess. Princess introduced the Sea Princess in 1979 – the ship had previously sailed as Swedish America Line’s Kungsholm – and 5 years later its first purpose-built cruise ship, Royal Princess. The company expanded further in 1988 when P&O purchased Italian-based Sitmar cruises, which operated four ships and had three on order.

**Norwegian Cruise Line – 1966**

A year after Princess Cruises initiated cruises from Los Angeles, Norwegian Caribbean Line (NCL) began sailing from Miami on 19 December 1966. The cruise line was a marriage of convenience between Israeli Ted Arison and Knut Kloster. Arison had reservations for cruises and no ships; those he had chartered were repossessed by the Israeli government when the ships’ owner went bankrupt. Kloster in contrast had a ship but no passengers after plans for his brand-new ship, Sunward, were cancelled. Arison approached Kloster and ‘suggested that if Kloster would send the Sunward to Miami they could both make some money’ (Dickinson and Vladimir, 1997: 24). Thus began NCL. A second ship, Starward, was added in 1968, followed by Skyward in 1969 and Southward in 1971. With four ships, NCL had more than 3000 berths to fill every week.

The partnership continued until the summer of 1971 when Kloster notified Arison he was terminating their 10-year contract effective 31 December 1971. The termination was predicated on a contract clause that guaranteed Kloster at least US$1.5m/year – if he failed to make US$1.5m for 2 years in a row, he had the option to cancel the contract. And that is what he did.

The break up between Arison and Kloster was less than amicable. Some suggest there was increasing jealousy between Kloster’s Norwegian employees and Arison’s Americans. According to Ted’s son, Micky Arison, even though the Norwegian company was very profitable they felt their American partners were making too much. So, it was alleged, the Norwegians decided to sabotage Arison’s profits by purchasing needed equipment such as deck chairs and engine parts and then throwing them overboard. This ensured that the inventory would not exist on the ship, throwing a shadow on Arison’s integrity and guaranteeing that he would not be able to deliver the agreed-on profit because the nonexistent inventory would not show up on the balance sheet (Dickinson and Vladimir, 1997: 30).

Arison responded by seizing all advance moneys for future NCL cruises. He believed Kloster’s cancellation of the contract was not valid; at the very least he was entitled to his commission of 18% of the gross revenue. A lawsuit ensued and was settled out of court. Arison agreed to return half of the money he seized. He retained the other half, which amounted to US$1m.

**Royal Caribbean Cruise Lines – 1970**

The idea for Royal Caribbean Cruise Lines (RCCL) germinated in 1967, but it was 1970 before the company began cruise operations. The primary mover was Edwin Stephan. He had begun his career in the hotel industry and in the 1960s had served first as General Manager for Yarmouth Cruise Lines (operator of the Yarmouth and Yarmouth Castle) and later as General Manager of Commodore Cruise Lines. Stephan’s views about the direction for the new cruise line were based in large part on his earlier experiences. He began with a number of assumptions: that old ocean-going vessels were not able to make the transition from transportation with different classes of passengers to modern day one-class cruising, so they were not a viable option; that passengers wanted ships that were new and safe; that ships should be purpose-built and designed for tropical waters; and that economies of scale in marketing and purchasing dictated a fleet of ships (Mathisen, 1995: 24).

Stephan was connected to shipping circles in Oslo and initially met with three brothers – Sigurd, Brynjulf and Morits Skaugen – of I.M. Skaugen. Eventually a partnership was formed including I.M. Skaugen and Anders Wilhelmsen & Co. Another Norwegian company, Gotaas Larsen, later joined the partnership. They ordered three new ships from Wartsila of Helsinki, the
world leader in modern cruise ship design at the time. The first ship, *Song of Norway*, began operations in 1970. A year later, its sister *Nordic Prince* entered service and in 1972 *Sun Viking* was delivered. The ships incorporated Edwin Stephan designs including an observation lounge located on the ship’s funnel well above the highest deck; it was inspired by the Space Needle built for the 1962 World’s Fair in Seattle.

RCCL was a success from the start. This is due in part to the fact that it was marketing its ships before they were even delivered. As well, the cruise line introduced ‘air-sea’ packages from Los Angeles and San Francisco – the two cities accounted for 35–40% of their passenger load. RCCL chartered aircraft and kept them full. The planes took new passengers to the ship and flew disembarking passengers back home. With such efficient use of the aircraft, RCCL provided the transcontinental airfare and a quick sightseeing tour of Miami for less than US$60. A 1-week cruise on the *Song of Norway*, including airfare, port charges and transfers could be had for as little as US$368 per person.

RCCL continued to be profitable and slowly expanded its capacity. It ‘stretched’ *Song of Norway* and added 300 additional beds in 1978, did the same to the *Nordic Prince* in 1980 and in 1982 took delivery of the *Song of America*, its first new ship in 10 years. Like RCCL’s first three ships, *Song of America* was built by Wartsila, but it was larger: 37,584 gross tons and accommodation for up to 1575 passengers, and pioneered a layout where cabin decks were stacked at the front of the ship, furthest from the engines, with public rooms further aft. Although common on large car ferries, this layout had not been repeated much on cruise ships. The trademark Sky Lounge was even more prominent than before, completely encircling the funnel. *Song of America* was sold to Greek Sun Cruises in 1999 and named *Sunbird*. Unlike previous sales to Sun Cruises, the Sky Lounge was not removed.

Carnival Cruise Lines – 1972

Following the breakdown of the partnership between Ted Arison and Knut Kloster, Arison sought to start his own cruise line. He initially attempted to reach an agreement with Cunard, which had two ships retired from service and laid up in England. After that failed he learned that Canadian Pacific’s *Empress of Canada* was laid up and after viewing the ship put together plans for its purchase. But he lacked the money to purchase the ship on his own.

Arison turned to an old friend, Meshulam Riklis, for assistance. Riklis was a successful entrepreneur and had become a master at corporate takeovers, often involving leveraged buyouts. He was at the time the principal shareholder in American International Travel Service (AITS) in Boston, which operated group and individual tours around the world under the name Carnival. Arison convinced Riklis to set up a subsidiary of AITS, to be named Carnival Cruise Lines. Riklis purchased the *Empress of Canada* for US$7m and keeping with the Carnival theme was named *Mardi Gras*. The ship entered service on 7 March 1972. After 2 years of losing money, Riklis severed his association with Carnival and gave the *Mardi Gras* (and its US$5m mortgage) to Arison for one dollar. Arison slashed prices, opened casinos and discos onboard, and devised new ways to generate onboard revenue. The company finally turned a profit in 1975. According to Micky Arison, this was the beginning of the ‘Fun Ship’ concept. It wasn’t so much a grand plan as an immediate strategy to generate enough income to meet the weekly payroll (Kissell, 2000).

With his profit, Arison bought *Empress of Britain* and renamed her *Carnivale*. The ship entered service on 7 February 1976 and turned a profit its first year. In 1977, Arison bought his third ship, sight unseen. The SA *Vaal* (launched in 1961 as *Transvaal Castle* by Union-Castle Line) entered the Carnival fleet in 1978 as *Festivale* after undergoing a major refit in Japan, which added extra decks and almost doubled the passenger capacity. The refit was a major learning experience for Arison and Carnival Cruise Lines. Arison had negotiated a price for the refit in yen, but with currency fluctuations the cost in dollars almost doubled. Plans for another building project in Japan were cancelled. Carnival’s first purpose-built cruise ship, *Tropicale*, joined the fleet in 1982.

A key ingredient in Carnival’s marketing was its label as the ‘Fun Ships’. The label
is attributed to Bob Dickinson who joined the company in 1973. According to Dickinson, he gathered all the cruise brochures then on the market and was struck by Commodore Cruise Line’s designation of the _Boheme_ as the ‘Happy Ship’.

This idea appealed to Dickinson because the cruise slogan applied to a specific ship and not the company. After all, the ship, not the company, is what people buy. ‘Happy’ was taken and it sounded kind of ‘wussy’ anyhow! What is the one universal question – the one ingredient everyone wants in their vacation, FUN! (Dickinson and Vladimir, 1997: 32–33)

Dickinson went with the ‘Fun Ship’ idea. He was apparently unaware _Yarmouth Castle_ was often referred to as the ‘Fun Ship’ even though that was not part of the ship’s marketing. The ship sank in 1965.

_Industry Growth and Consolidation_

There were obviously other players but these four are among the few that have survived over the years. Many cruise lines have come and gone, and many have been swallowed by the major players in the cruise industry.

The 1970s and 1980s were a period of moderate growth in the cruise industry. Cunard entered the cruise business in 1970 with the introduction of two 600-passenger vessels – _Adventurer_ and _Ambassador_. Within a couple of years other cruise lines appeared, including Royal Cruise Line, Royal Viking Line and Italian-owned Sitmar Cruises. They catered to more affluent passengers than the mainstream product offered by the mass market operators. Additional lines appeared in the 1980s: Premier Cruises in 1982, Regency Cruises and Sea Goddess Cruises in 1984, Windstar in 1986, Renaissance Cruises in 1988 and Seabourn in 1988. The industry’s growth is reflected in the number of people who took a cruise: roughly a half million passengers in 1970, 1.4 million passengers in 1980 and 3.6 million passengers in 1990 (CLIA, 2011).

New lines continued to spring up in the 1990s: Crystal Cruises and Celebrity Cruises in 1990; Crown Cruise Line, Majesty Cruise Line, Seawind Cruise Line, Seven Seas Cruise Line and Star Clippers Cruises in 1991; Radisson Cruise Line in 1992; Silversea Cruises, Orient Lines and Star Cruises in 1993; and Disney Cruise Line in 1998. By 2000, the number of North Americans taking a cruise had increased to 6.9 million – almost double the number 10 years earlier. Much of this expansion came with new ship construction.

The industry’s growth is not a straight line. There were failed attempts to begin new cruise lines. Both American Family Cruises started by Costa Cruises in 1992 and Fiesta Marina Cruises, a Spanish-speaking cruise line started by Carnival Cruise Line in 1993, folded within a year. There were also bankruptcies, mergers and consolidations. Renaissance Cruises went bankrupt in 1991 and again in 2001, Regency Cruises ceased operations in 1996, and more than a dozen cruise lines went under between 2000 and 2004.1 Had it not been for mergers and takeovers, it is likely more cruise lines would have gone out of business. These mergers and takeovers are discussed next.

10.1.2 Mergers and takeovers

Although many cruise lines have taken an initiative to take over its competitors, Carnival Cruise Lines (later Carnival Corporation) has been the most predatory and determined. As we look at the transformation from an industry with many players to one dominated by a couple of key players, it is useful to look through a lens from the perspective of Carnival Corporation.

Carnival Cruise Lines has been an innovator and industry leader in turning water into money. One element has been a pack-'em-in approach. ‘By equipping cabins with fold-down bunk beds on which parents can stash kids, Carnival can squeeze four guests to a room. Passengers pay less per person, but Carnival gets more bodies that will spend money once on board’ (Bornstein, 2003). Another element in Carnival’s success is keeping costs tightly under control. It saves on ship design and construction by standardizing its fleet and the furnishings on its ships. And it saves by avoiding costly additions such as rock-climbing walls and by resisting unnecessary expenditures. Until 1999, Bob
Dickinson, President of Carnival Cruise Line, ‘refused to put shampoo or conditioner in the cabins because he calculated it would cost the company $2 million to $3 million a year’ (Bornstein, 2003). He relented and stocked the amenities when they were provided free by Procter and Gamble and Unilever. With growth in size, Carnival has achieved even greater savings through economies of scale. Its takeover of P&O Princess in 2003 yielded synergistic savings that exceeded initial projections of US$100m/year (Joshi, 2003).

Carnival’s success is reflected in its growth. Carnival Cruise Lines progressively grew in the 1970s and 1980s; Carnival Corporation began expanding through acquisitions in the late 1980s and early 1990s. In 1987, Carnival began an initial public offering of 23.6 million common shares. Proceeds were used to pay debt incurred in construction of the two newest ships and to finance construction of the Crystal Palace Resort and Casino in Nassau, Bahamas (Wall Street Journal, 1987), which opened in 1988. Carnival also continued to expand its cruise operations: three Fantasy-class ships were ordered in 1987, the first for delivery in 1990, and it looked at other cruise lines. Micky Arison bought Pacific Interstate Airlines and started Carnival Airlines in 1988.

These forays outside the cruise industry generally failed – Crystal Palace Resort and Casino cost hundreds of millions of dollars before being sold at a loss, Carnival’s investment in banks lost tens of millions of dollars, and its merger of Carnival Airlines with Pan American Airlines cost the company millions before Pan American filed for bankruptcy protection in February 1998; Carnival Airlines terminated operations in April 1998. The nature and pattern of growth over the past 15 to 20 years (Table 10.1) provides insight into the cruise industry, and its way of doing business.

Table 10.1. Growing a conglomerate: Carnival’s acquisition successes and failures.

<table>
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<tr>
<th>Cruise Line</th>
<th>Year</th>
<th>Cost</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Royal Caribbean Cruise Line</td>
<td>1988</td>
<td>$550m</td>
<td>Carnival's offer for 70% falls through when A. Wilhemsen exercises right of first refusal.</td>
</tr>
<tr>
<td>Holland America Line</td>
<td>1989</td>
<td>$625m</td>
<td>Purchase includes Holland America Line, Windstar Cruises and Westours.</td>
</tr>
<tr>
<td>Premier Cruises</td>
<td>1991</td>
<td>$372m</td>
<td>Carnival withdrew offer.</td>
</tr>
<tr>
<td>Seabourn Cruise Line</td>
<td>1992</td>
<td>–</td>
<td>Carnival acquired 25% in return for sales and marketing support, an additional 25% by converting a loan to equity, and in 1998 took full control as part of the deal to purchase Cunard.</td>
</tr>
<tr>
<td>Epirotiki Lines</td>
<td>1993</td>
<td>Ship</td>
<td>Traded Mardi Gras for 16.6% equity interest; increased to 43% with transfer of Carnival; to 49% after restructuring. Sold interest in 1995 for $25m.</td>
</tr>
<tr>
<td>NCL</td>
<td>1995</td>
<td>–</td>
<td>Bought $850m in NCL debt in November 1995; sold NCL option to buy back $1.01bn in debt in February 1996.</td>
</tr>
<tr>
<td>British Airtours</td>
<td>1996</td>
<td>$307m</td>
<td>Took 29.5% interest. Sold in 2001 for $492m.</td>
</tr>
<tr>
<td>Hyundai Joint Venture</td>
<td>1996</td>
<td>4.8m</td>
<td>Partnership for Asian-based cruise line dissolved after several months because of irreconcilable differences.</td>
</tr>
<tr>
<td>Costa Cruises</td>
<td>1997</td>
<td>$300m</td>
<td>The Carnival/Airtours partnership bought 100% of Costa. Carnival bought Airtours' interest in 2000 for $510m.</td>
</tr>
<tr>
<td>Celebrity Cruises</td>
<td>1997</td>
<td>$525m</td>
<td>Offered a spoiler bid in RCCL's takeover of Celebrity. Unsuccessful.</td>
</tr>
<tr>
<td>Cunard Line</td>
<td>1998</td>
<td>$500m</td>
<td>With partners, bought 100% of Cunard Line. Bought partners' 32% interest in 1999 for $203.5m.</td>
</tr>
<tr>
<td>NCL</td>
<td>1999</td>
<td>$2.1bn</td>
<td>Out-maneuouved by Star Cruises.</td>
</tr>
<tr>
<td>Princess Cruises</td>
<td>2002</td>
<td>$5bn+</td>
<td>Out-maneuouved RCCL.</td>
</tr>
</tbody>
</table>
Opportunities for Market Development

Royal Caribbean Cruise Line – 1988

Carnival’s first takeover target was Royal Caribbean Cruise Line (RCCL) in 1988. P&O’s Princess Cruises had just merged with Sitmar Cruises. Its 11,202 berths were more than Carnival or any other cruise ship operator. Carnival had 8448 berths, but would soon be put into third place when Royal Caribbean and Admiral Cruise Lines merged – the new company would have 9034 berths. As noted already, Royal Caribbean had been established as a partnership involving three Norwegian companies: I.M. Skaugen, Anders Wilhelmsen & Co. and Gotaas-Larsen. Gotaas-Larsen also owned Admiral Cruises, which was created in 1986 by merging the operations of Eastern Cruise Line in Miami, Western Cruise Line operating out of Los Angeles and Stardancer Cruises, operator of the car-carrying Stardancer (later becoming RCCL’s Viking Serenade and in 2002 transferred to Island Cruises in the UK, a joint venture of RCCL and First Choice Holidays) sailing to Alaska and Mexico.

Plans were made in 1988 to merge Gotaas Larsen’s three-vessel Admiral Cruises with Royal Caribbean’s four vessels, which included newly built Sovereign of the Seas. Before the merger could be completed, Carnival announced that it had agreed in principle to pay Gotaas-Larsen Shipping Corporation US$275m for its 36% stake in Royal Caribbean and Admiral Cruise Lines – US$15m more than offered 2 weeks earlier (Allen, 1988a: 1). Carnival also agreed to purchase the 34% share held by I.M. Skaujen and its partners for an additional US$275m. Under the terms of the agreements, Anders Wilhelmsen, who held a 28% stake, was given 40 days to match Carnival’s bid.

With 5 days to spare, Wilemsen announced formation of a joint venture with the Pritzker family. The Pritzkers, based in Chicago, controlled the Hyatt Hotel Chain, the Marmon Group, an international association of 150 autonomous manufacturing and service companies, and had extensive other investments. The deal was negotiated by Jay Pritzker who ran the family’s investments outside the Hyatt chain (Allen, 1988b: 1). A third partner in the deal was Sammy Ofer, who was said to be very close to Jay Pritzker. Royal Caribbean is Carnival’s most ardent competitor. Their 2002/2003 fight for ownership of P&O Princess was not the first time they butted heads. Royal Caribbean shared Carnival’s desire to take over Costa Cruises, and Carnival drove up the price to RCCL when it took over Celebrity Cruises in 1997.

Holland America Line – 1989

Less than 2 months after its unsuccessful takeover of Royal Caribbean, Carnival announced it was acquiring the travel and tourism businesses of Holland America Line for US$625m. The acquisition boosted Carnival’s number of berths by 50%. Holland America Line had four ships and Windstar Cruises had three. The acquisition also included Westours.

Holland America Line had made its name in transatlantic passenger service since 1873. After 100 years it suspended transatlantic service, sold its cargo shipping service and turned to cruises. The transition was not smooth. In 1973, it introduced its first purpose-built vessel, the 8346-ton 452-passenger Prinsendam and two second-hand vessels: Brasil and Argentina purchased from Moore McCormack and renamed the Volendam and Veendam. Prinsendam sank in the Gulf of Alaska in 1980 (Herman, 1980), Statendam was sold in 1982 because of reliability problems and Volendam and Veendam were sold in 1983.

As part of its shifting business plan, Holland America had taken over Westours in February 1971. Founded by Chuck West, the tour company was the largest and oldest cruise and tour operator in Alaska and Canada’s Yukon and it relied on ships from other cruise lines for its summer operations in Alaska (see Mathisen, 1993: 25–32). West was forced to sell the company after over-extending financially. Holland America was a willing buyer given that it had ships, the expertise for running them and only needed a region to deploy them. Westours and Holland America were consolidated into a single company in 1983 and Kirk Lanterman, who had joined Westours as Controller in 1970 and was its current president, became president of the
newly combined cruise and tour company, Holland America Line – Westours.

Holland America Line began a period of renewal in 1983. It added the newly built *Nieuw Amsterdam* to the 1959-built *Rotterdam*, and a year later its sister *Noordam*. Holland America became profitable and in 1987 purchased 50% of Windstar Cruises – it purchased the other half a year later – which operated three ships. In 1988, it also purchased the two-ship fleet of Home Lines. It sold one – *Atlantic* – to Premier Cruises. The other – the 1986-built *Homerich* – was renamed *Westerdam*. At the *Westerdam’s* introductory events in November 1988, Holland America Line Chairman Nico van der Vorm was approached by Ted Arison about selling Holland America to Carnival. Holland America was a perfect alternative to Carnival’s plans to establish an up-market operation of its own, called Project Tiffany (Mott, 1993: 5). The deal between Carnival and Holland America was finalized within weeks (Morgenthaler, 1988: 1).

Holland America has grown considerably under Carnival’s ownership. The four ships inherited by Carnival when it took over Holland America Line have all been sold or retired. In their place have been added 12 new ships, and the former Royal Viking *Sun*, renamed *Prinsendam*. The ship was acquired by Carnival Corporation when it subsequently took over Cunard Line.

Through Westours, Holland America also owns and operates: 14 Westmark Hotels in Alaska and the Canadian Yukon; more than 30 different tour programmes to destinations in Alaska, the Canadian Yukon and Washington; two luxury dayboats offering tours to the glaciers of Alaska and the Yukon River; a fleet of over 300 motor coaches under the name ‘Gray Line’ in Alaska, Washington, British Columbia, Canada and the Canadian Yukon (including an express motor coach service between downtown Seattle and the Seattle-Tacoma International Airport); and 13 private, domed rail cars, which are called ‘McKinley Explorers’ and run on the Alaska Railroad between Anchorage and Fairbanks, stopping at Denali National Park. Holland America is a big player in Alaska. Its largest competitor is Princess Tours, Princess Cruises’ equivalent to Westours.

Premier Cruises – 1991

Carnival again looked to expand in 1991. It had just sold its 11% interest in Finnish shipbuilder Masa Yards to Kvaener Industries of Oslo, acquired in October 1989 when it came up with US$10m to help Masa Yards take over the operations of the bankrupt Wartsila Marine Industries to be sure the ships it ordered would be delivered. Carnival got its money from Masa Yards in March 1991. In April it announced plans to acquire Premier Cruises for US$372m.

Premier Cruises began in 1984 and was owned by Dial Corporation. Dial also owned Greyhound Leisure Services, which ran shops on cruise ships, provided airport meet and greet for cruise passengers and other services to cruise lines. Premier had three ships with a total capacity of almost 3000 berths. However, Premier’s attractiveness to Carnival was not its ships. Premier was the official carrier to Disney World and the only cruise line permitted to offer cruise packages that included the theme park. A high percentage of its business was derived from this association.

Carnival’s deal with Premier was called off 7 weeks later. Dial Corporation said negotiations had broken down because of disagreement over future earnings in the wake of the Gulf War. Earnings had also been hit by recession. From Carnival’s perspective, taking over Premier at the time would dilute its earnings (Mott, 1991). A couple of months later, Carnival announced that it was negotiating a 50% stake in luxury vessel operator Seabourn Cruise Line (Lamb, 1991).

Seabourn Cruises – 1992

Seabourn Cruise Line was founded in 1987 by Norwegian industrialist Atle Brynestad. It operated two 200-passenger cruise ships catering to the ultra-luxury sector of the cruise market, the first entering service in 1988 and the other following in 1989. Although the company had performed relatively well, bookings were hit by the Gulf War. Though it believed it was rebounding, Seabourn saw an association with Carnival infusing cash and allowing for expansion of its fleet. For Carnival, it would give coverage across the
full spectrum: from mass market Carnival to premium Holland America, to Windstar with its tall-masted sailing ships, to ultra-luxury Seabourn. They could target every segment of cruise consumer, and could encourage customers of one line to ‘graduate’ to another.

Carnival’s takeover of Seabourn began in February 1992. In return for sales and marketing support, Carnival took a 25% equity interest. Carnival also provided two secured 10-year loans of US$15m and US$10m. It could convert the US$10m note into an additional 25% stake at any time prior to maturity, which it did in December 1995. In January 1996, Seabourn acquired Queen Odyssey from Royal Cruise Line and renamed her Seabourn Legend. The ship is a near-identical sister to the other two Seabourn ships. Carnival took full control of Seabourn when it bought Cunard in April 1998.

**Epirotiki – 1993**

Carnival put up cash when it took over Holland America. It secured Seabourn through loans. In September 1993 it acquired a 16.6% equity interest in Epirotiki Lines in exchange for the 1961-built Mardi Gras.

Epirotiki was a Greece-based operator of eight cruise ships with aggregate capacity of 5200 passengers. It had recently experienced hard luck. After years without an accident, in October 1988 Jupiter collided with a car carrier and within 45 minutes sank. Two crew and two passengers lost their lives. In June 1991, Pegasus burned out after a fire broke out at her berth in Venice – the vessel was the youngest in the Epirotiki fleet at 16 years old. Two months later Oceanos lost power and sank off a remote part of South Africa. No passengers or crew lost their lives, but the incident received international attention because senior crew members allegedly abandoned ship and left entertainment staff to play a major role in the evacuation (Lowry, 1994: 5).

Carnival’s stake increased to 43% in March 1994 when the former Carnivale was transferred to Epirotiki. Epirotiki’s Pallas Athena had recently been destroyed by fire. Howard Frank, Carnival’s chief financial officer, said Epirotiki needed Carnival for its expertise and modern management techniques; Carnival needed Epirotiki as a platform for it to expand into Europe at very low cost (Lloyd’s List, 1994: 2).

Pamela Conover, head of cruise shipping at Citibank, was brought in to manage Epirotiki. Carnival expanded its ownership to 49% when Epirotiki was restructured in February 1995. Under the new shareholder agreement the Potamianos family, traditional owners of Epirotiki, retained 20% of the company. All remaining stock was held in name by Paris Katsoufis who also owned Dolphin Cruise Line. Katsoufis’ participation allowed Epirotiki to claim it remained under Greek ownership, a prerequisite for its Greek flag cruise operation in the Aegean (Lowry, 1995a: 10).

Carnival’s relationship with Epirotiki collapsed in April when George and Andreas Potamianos paid US$25m for Carnival’s shares and those held by Paris Kotsoufis, an amount roughly equal to the combined value of the two ships Carnival gave to Epirotiki. Carnival had hoped to radically shake up Epirotiki’s management practices and the company’s fleet, but the Potamianos brothers reportedly felt they had relinquished power under duress and held decision making in the company to a practical standstill (Lowry, 1995b: 1). Carnival’s involvement with Epirotiki gave it useful knowledge and experience with the European market. It also divested itself of two older vessels.

Following its association with Carnival, Epirotiki merged with Sun Line Cruises in August 1995 to form Royal Olympic Cruises. The new company had five ships: three from Epirotiki and two from Sun Line (Lowry, 1995c: 3). In 1998 it raised US$81m in an initial public offering, largely to fuel expansion and growth, but the company was hit particularly hard by cancellations after the September 11 terrorist attacks. Compared to a slight profit in 2000, Royal Olympic posted a US$25.5m loss for 2001 and US$26.7m for 2002. It filed for bankruptcy in early 2004 following the seizure of seven of its other ships.

**Norwegian Cruise Line – 1995**

Carnival was talking with British Airtours in 1995, but its plans for expanding into Europe were briefly sidetracked by its near takeover of Kloster Cruises in late 1995. Kloster Cruises owned Norwegian Cruise Line and despite

By early November 1995, Carnival had bought one-third of the bonds representing NCL’s debt, in most cases paying between 70 and 75% of their par value (Mott, 1995: 1). Kloster’s parent company Vard said it was in talks with Carnival that could lead to joint ownership of NCL with Carnival taking a majority stake, but nothing materialized. Carnival kept NCL afloat by purchasing the remainder of its debt, offering close to 85% of par trading value, but it never entered into a shareholder agreement.

In February 1996 Carnival sold NCL an option to buy back US$1.01bn worth of its bonds, and made a small profit on the sale. Analysts at the time suggested Carnival was not really interested in owning NCL, operator of eight mostly modern cruise ships, given its large debt. Instead, Carnival wanted to prevent the consumer backlash if NCL went out of business. The cruise industry was still struggling to fully rebound from the Gulf War and was working to cultivate consumer confidence, particularly as several companies were struggling. Carnival’s assistance of NCL came a week before Regency Cruises announced bankruptcy.

By preventing the bankruptcy of NCL, Carnival avoided a major blow to the cruise industry, which relies to a large extent on public confidence to promote demand. A year later, NCL was in vastly better financial condition and had announced plans for a public stock offering. It was soon talking of expansion through new ship construction.

**British Airtours – 1996**

Less than a year after collapse of its joint venture with Epirotiki, Carnival acquired a 29.5% equity interest in British Airtours in April 1996 for approximately US$307m. Airtours provided Carnival an immediate foothold in Europe and an opportunity to globalize its cruise business. Airtours was among the UK holiday industry’s ‘big three’ controlling 70% of the travel market. It owned 770 retail travel agency locations in the UK and Scandinavia, a charter air fleet of 32 planes, 41 hotels in the Mediterranean and two cruise ships.

During its association with Carnival, Airtours added two ships to its cruise line and bought Florida-based Travel Services International, a major distributor of leisure travel products (i.e. cruises, auto rental, alumni holidays and hotel bookings) in the USA. By 2000 the company was losing money and despite restructuring its North American operations the losses were significant. Carnival’s share was US$43m in 2001 and US$41m in 2000. It sold its interest on 1 June 2001 for US$492m and claimed a net gain of US$101m. By this time it had established its presence in Europe through Costa and Cunard (both discussed below) and no longer needed Airtours. Airtours’ financial woes subsequently deteriorated further. Subsequently known as MyTravel, the company offloaded its cruise business in 2004 and continued on the financial brink (Clark, 2004: 17).

**Hyundai Merchant Marine – 1996**

Carnival’s expansion plans included Asia. In September 1996 it signed an agreement with Hyundai Merchant Marine to form a 50/50 joint venture to target the Asian cruise vacation market. Carnival and Hyundai each contributed US$4.8m and in November 1996 the joint venture bought Carnival Cruise Lines’ Tropicale for US$95.5m cash. The vessel was chartered back to Carnival until it would be needed for cruise operations in the Asian market, probably the spring of 1998.

Carnival claimed irreconcilable differences and dissolved the joint venture a year later. According to Howard Frank, Carnival’s Vice Chairman, Carnival didn’t share the same view with Hyundai of the Asian cruise market and the two ‘had very different views as to how the joint venture should be managed and the strategic direction it should take’ (Cruise News Daily, 1997). Carnival repurchased the Tropicale for US$93m and turned its focus back to Europe.

**Costa Cruises – 1996**

Rumours circulated in January 1996 that Royal Caribbean was close to taking over
Costa. The Italian cruise group was valued at US$350m (Bray, 1996: 1). But this never came to fruition; instead, Carnival and Airtours signed a letter of intent in December 1996 to acquire Costa Cruises for approximately US$300m; Carnival and Airtours each contributed half. Costa sorely needed capital to expand so it could retain market share (70% of the Italian market, 55% in France and a 20% share of the Spanish market) and compete with the North American lines increasingly present in the Mediterranean.

The takeover was completed in June 1997 and cost Carnival US$141m. Costa at the time operated eight ships – five it owned and three it had on lease or charter – with aggregate capacity of about 8500 passengers. The company had net profit of US$31m in 1995 and US$50m in 1996.

Because Carnival’s headquarters are in the USA, Costa had to divest holdings in Cuba. It operated two cruise ships under the Pacquet brand and owned 50% of Silares Terminales Caribe, a joint venture with the Cuban government to operate three cruise ship terminals. Silares had just invested US$5.8m in a new terminal in Havana.

On 29 September 2000 Carnival gained full control over Costa when it paid Airtours US$510m for its share. Micky Arison termed Carnival’s purchase of Airtours’ 50% as a strategic move. ‘Costa is the largest and most successful cruise operator in Europe and will serve as Carnival’s primary platform for expanding our presence in this increasingly important market’ (Reuters, 2000). Costa expanded under Carnival’s ownership, including new ships and older ships transferred from the Carnival Cruise Lines fleet. Between 1997 and 2006, Costa increased its number of berths by 137% (Klein, 2005).

Celebrity Cruises – 1996

Some questioned whether Carnival was sincere. Royal Caribbean just announced it was purchasing Celebrity Cruises for US$500m and assumption of US$800m in debt. Then in June 1997 Carnival offered US$510m, a couple of days later US$525m, and gave Celebrity’s owners a choice between cash or stock – Royal Caribbean had offered a mix of cash and stock. Princess Cruises was rumoured to also be preparing an offer.

Celebrity Cruises was started in 1990 by John Chandris. Chandris partnered with Overseas Shipping Group (OSG) in 1992 in order to capitalize and expand the company. OSG was a bulk shipping company that a year earlier had talked with Knut Kloster about a similar investment in NCL. OSG received 49% of Celebrity Cruises for its US$220m investment (Mott, 1992: 1).

By 1997, Celebrity had renewed its fleet. The aging Meridian had been replaced with the third in a series of new ships and there were now five ships with 7800 berths, all built since 1990. It was viewed as a nice fit by Royal Caribbean. Celebrity offered an upscale product, which Royal Caribbean could use for its repeat passengers to graduate to, and the merger would produce savings from economies of scale.

Celebrity also fed into Royal Caribbean’s need to compete with Carnival. Carnival Corporation had 35 ships with 42,325 lower berths and 11 ships on order with an additional 20,484 berths. Royal Caribbean had ten ships with 19,550 berths and seven ships on order with an additional 15,600 berths. Royal Caribbean was losing ground.


Cunard Line – 1996

Cunard Line was Carnival’s next target. Cunard had been losing money and was purchased in May 1996 by Norwegian conglomerate Kvaerner/ASA. The plan was to reposition the company, return it to profitability and then sell it for a profit. Cunard’s Sagafjord was chartered to Transocean Cruises and later sold to Saga Holidays, Cunard Countess was sold to Awani Cruises of Indonesia, and the charter agreement for Cunard Dynasty was not renewed.
and transferred to NCL. This left a five vessel fleet: QE2, Vistafjord, Royal Viking Sun, Sea Goddess I and Sea Goddess II.

Rumours circulated that Cunard was for sale as early as November 1996. Kvaener was reportedly asking US$600m for the company, including US$325m for the fleet, a premium for the brand name and a US$240–250m commitment to build a new ship at Kvaener’s shipyard in Finland. By November 1997, Cunard was enjoying occupancy in the range of 90% compared to 60 or 70% a year earlier. It also had a serious suitor. Prudential Corporation had shown interest, but Kvaener’s desire to retain a minority interest in the company was a sticking point. Others were also interested in Cunard, but no deals were made.

On 3 April 1998, Carnival Corporation announced it was partnering with a group of Norwegian investors led by Chistiania Markets and acquiring Cunard Line for US$500m. It also agreed to develop a new class of ships for Carnival Cruises Line that would be built at the Kvaener Masa Yards in Finland. Simultaneous with the acquisition, Seabourn Cruise Line Limited, in which Carnival already had a 50% interest, was combined with Cunard. Seabourn’s founder and previous owner, Atle Brynestad, became a significant shareholder in the new company and served as the company’s chairman of the board. Carnival owned approximately two-thirds of the combined entity.

Eighteen months later, in October 1999, Carnival acquired the remainder of Cunard from its minority partners for US$203.5m. According to Micky Arison, as reported in a Carnival Corporation Press Release on 19 October 1999, ‘Considering the strength of the Cunard brand and its plans to build the largest ocean liner in the world to complement the Queen Elizabeth 2, it simply makes sense for Carnival to own 100 percent of Cunard.’

Cunard carried more than 100,000 passengers on its five ships in 1998.

Plans were well underway for Queen Mary 2 when Carnival bought the remaining shares in Cunard. There were other changes. Cunard was left with two ships, the 1969-built QE 2 and 1973-built Vistafjord, now named Caronia. Queen Mary 2 would be delivered in December 2003 and Queen Victoria in March 2005. The three other Cunard ships, Sea Goddesses I, Sea Goddess II and Royal Viking Sun were initially transferred to Seabourn. Sea Goddess I and II were subsequently sold to a partnership including Atle Byrnestad and Larry Pimentel, Seabourn’s previous owner and its CEO respectively, and sail as Seadream Yacht Club. Royal Viking Sun was transferred to Holland America Line and renamed Prinsendam.

Norwegian Cruise Line – 1999

Less than 2 months after taking over Cunard, Carnival offered US$1.7bn for NCL. Officials at NCL said Carnival’s offer of 30 Norwegian crowns (NOK) a share and to assume US$800m in debt was inadequate. It was rejected on 2 December 1999. NCL announced several days later that it was in talks with Star Cruises. NCL believed Star and Carnival would engage in a bidding war and drive up NCL’s value to its current owners.

On 15 December NCL’s Board formally rejected Carnival’s offer and a merger approach by Premier Cruises. Star announced the next day that it held 39.3% of NCL’s stock, but had no intention of making a takeover bid. But a day later Star said its holdings were 50.2% of NCL and made a mandatory offer for all NCL shares at NOK35 per share.

Trygve Hegnar, a major shareholder in NCL who had been told that Star did not want to buy the company, characterized Star’s tactic as a diversion tactic to keep the share price down (Reuters, 1999). Star said it was moving to take over NCL because talks had failed: ‘Proposals were made by NCL, which
Star did not feel were acceptable to it or provided a basis on which future discussions on intended cooperation were likely to succeed’ (Associated Press, 1999).

The bidding war for NCL renewed late January after NCL converted some debt to equity and reduced Star’s holdings to about 47%. Carnival took advantage of the opportunity and on 27 January offered NOK40 per share (US$1.3bn) in NCL. This exceeded Star’s offer by US$200m.

NCL’s Board recommended against Star’s bid, but withheld advice on Carnival’s offer. They disliked Star’s offer, saying Star misled NCL by buying up shares when it said it would not. And they were irritated by Star’s proclamation that Colin Veitch, a vice president with Princess Cruises, would be NCL’s incoming chief executive. They went as far as to attempt to deny votes to Star Cruises at the upcoming shareholders’ meeting because under Norwegian law Star was required to notify the Industry Ministry when its stake in NCL passed one-third of the stock. Star claimed NCL was a shipping firm and therefore exempted from the notification requirement.

A decision on the matter was to be made by the Oslo bourse (stock exchange) before the shareholders’ meeting. But central people with NCL criticized Ole Lund’s impartiality, chairman of Oslo’s bourse, and called for his resignation after it was learned he had been proposed by Star as Chairman of NCL. Lund was a lawyer and also chairman of Norway’s state oil firm Statoil. In the midst of this, Star claimed it was supported by key stakeholders and institutions and had more than 50% of the votes it needed for the shareholders’ meeting.

Star announced 2 days before the shareholder’s meeting on 2 February that Carnival was withdrawing its bid. The two would enter a 60/40 partnership with Star in the majority. If the two were successful in acquiring 100% of NCL, the cost to Carnival would be approximately US$470m. Star took control of NCL at the shareholder meeting on 4 February 2000 and appointed Ole Lund chair of the board. Six weeks later it cancelled its joint venture agreement with Carnival saying it was not prepared to give more control to Carnival on NCL’s future direction (Dhaliwall, 2000). In 2007, Star Cruise sold a 50% stake in NCL to Leon Black’s Apollo Management for US$1bn. Apollo Management purchased Oceania Cruises earlier in the year, and subsequently in 2008 purchased Radisson Seven Seas Cruises (renaming it Regent Seven Seas). Apollo management then created Prestige Cruise Holdings to manage all three investments; it also sold 12.5% of its stake in NCL to TGP Viking (Motter, 2011).

NCL and Star were similarly sized, each with nine ships. Combined, the new company was comparable in size to P&O Princess. But Star Cruises was relatively new to the scene of cruising. It was launched by Malaysia-based Genting International in 1993 with a fleet of middle-aged ships. It quickly introduced ships it had designed and built – the first in 1998. The new ships replaced older ships that were then chartered or sold. One of its charters was to Hyundai Merchant Marine, which partnered with Star after its joint venture with Carnival failed.

In 2005, Star was smaller than it was when it took over NCL. In contrast to hopes in 1999 that it would operate 12 vessels with 18,000 berths, it operated three ships with a total of 4000 berths on regular itineraries and two others under charter. Many of the new ships the company had planned and built had gone to NCL.

NCL was on a growing spurt when acquired by Star. After its brush with bankruptcy, the company expanded and returned to profitability. It acquired Orient Line, which operated Marco Polo, and acquired Majesty Cruise Lines and its two ships, which were renamed Norwegian Majesty and Norwegian Dynasty; stretched Windward (renamed Norwegian Wind) and Dreamward (renamed Norwegian Dream) by 130 feet and added 500 berths to each; stretched Norwegian Majesty by 108 feet and added 404 berths; and it started Norwegian Capricorn Line in Australia. When acquired by Star it operated three brand names and had nine vessels with approximately 13,000 berths. By 2005, NCL closed Norwegian Capricorn Line and began NCL America, a US-flagged line operating in Hawai’i. It operated 12 ships with over 20,000 berths and has three ships on order.
Carnival made its first public play for P&O Princess in August 1999 by attempting a buy-out of the cruise line’s parent company. But on August 22, its offer of £7bn (US$11.3bn) was turned down by the British shipping group Peninsular and Oriental Steam Navigation Co. It was speculated that Carnival intended to spin off P&O’s ferries and ports business and keep the cruise business of P&O and Princess, valued at £4.5bn. This raised further speculation that a combination of the world’s number one and number three cruise ship operators would raise the eyebrows of regulators (Connor, 1999).

Carnival shifted to acquiring Cunard and attempting to buy NCL. As Carnival and Star were announcing their alliance to buy NCL, P&O announced plans to demerge its cruise division, estimated to be worth between US$8.8bn and US$10.4bn. Its logic was that the group’s two business – cruising and logistics (i.e. ferries, cargo, and ports) – had become too big and with such different financial and operating characteristics, they should follow their own separate strategies. Demerger was a positive move for stockholders given the belief that the two resulting companies would have greater value individually than together (Reddall, 2000). P&O Princess became independent on 23 October 2000. Table 10.2 shows the cruise lines under P&O Princess after the demerger.

Less than a year later, P&O Princess was in discussions with Royal Caribbean. On 20 November 2001 they announced a merger of equals. They had been holding secret negotiations the day of the terrorist attacks on the World Trade Centre in New York and Pentagon in Washington, after which ‘the deal made even more sense and we worked at it quickly’ (Kar-Gupta and Connor, 2001). Two cruise companies, American Classic Voyages with its four brands and Renaissance Cruises, filed for bankruptcy in the interim.

Under the planned merger, RCCL and P&O Princess would continue to operate independently and have their own separate legal identity, tax residence and stock exchange listing, but the board of directors for the two companies would be identical and all shareholder decisions would involve shareholders in both Royal Caribbean and Princess. Princess would hold 50.7% of the new company; Royal Caribbean would hold 49.3%. Princess brought 18 ships (with 27,370 berths) and Royal Caribbean brought 41 (with 74,770 berths) to the merger. Although Royal Caribbean had more ships and appeared to be a larger company, it also brought a larger proportion of debt. Two other critical elements in the merger agreement were a US$62.5m break-up fee and a joint venture.

Princess and Royal Caribbean agreed to a joint venture company targeting customers in southern Europe (primarily Italians, French and Spanish) in direct competition with Carnival’s Costa Cruises. According to the Italian consumers’ organization, Costa had practically uncontested dominance of the Italian market. The joint venture company would be equally owned by the two companies, and each would contribute two of its new ships currently under construction – one each in 2003 and one each in 2004. Once underway, the joint venture would cost US$200m to dissolve (Mayer, 2001). There was a single way out; according to a joint press release issued 20 November 2001, the joint venture could be cancelled in January 2003 ‘if certain commercial targets are not met … and unless either party has been subject to change of control.’ Regardless, the joint venture was viewed by analysts as a poison pill meant to deter Carnival from making a counter offer.

Carnival was not deterred. On 14 December 2001 it bid US$4.5bn (£4.50 per share). The offer was immediately rejected by Lord Sterling, Chairman of P&O Princess, leaving Carnival (in its own words) ‘no choice’ but to take its bid directly to the

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**Table 10.2. P&O Princess after demerger.**

<table>
<thead>
<tr>
<th>Cruise line</th>
<th>Ships</th>
<th>Lower berths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Princess (US)</td>
<td>11</td>
<td>19,920</td>
</tr>
<tr>
<td>P&amp;O Cruises (UK)</td>
<td>4</td>
<td>7,170</td>
</tr>
<tr>
<td>Swan Hellenic (UK)</td>
<td>1</td>
<td>360</td>
</tr>
<tr>
<td>AIDA (Germany)</td>
<td>2</td>
<td>2,460</td>
</tr>
<tr>
<td>A’ROSA (Germany)</td>
<td>1</td>
<td>1,590</td>
</tr>
<tr>
<td>A’ROSA River Cruises</td>
<td>2</td>
<td>400</td>
</tr>
<tr>
<td>P&amp;O Cruises (Australia)</td>
<td>1</td>
<td>1,200</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22</strong></td>
<td><strong>33,100</strong></td>
</tr>
</tbody>
</table>
stockholders. This was a challenge given that no single shareholder controlled more than 4% of the stock.

Carnival met with institutional shareholders and they called for an improved bid. Royal Caribbean’s merger valued P&O Princess at £3.61 per share. Those pushing Carnival were looking for a bid of more than £5 per share (Potter, 2002) – 8% more than Carnival’s first offer. P&O Princess would make Carnival a world-wide cruise company and, like Royal Caribbean, it claimed that synergies and economies of scale would save the combined company US$100m/year.

On 28 January, investors got their wish when Carnival offered £5; when it was rejected the bid increased to £5.15 per share. Carnival said that it was eager to spoil a marriage between Princess and Royal Caribbean, and that its latest bid was structured to avoid triggering any financial penalties or ‘poison pills’. Princess’ board of directors said it would consider Carnival’s latest offer, but rejected it on 8 February. It stated a number of concerns, highest among them whether Carnival could obtain antitrust clearance for a merger with Princess. P&O Princess was also sceptical about Carnival’s seriousness of interest and questioned whether it was in the category of ‘nice to have if it is available’. It feared that Carnival’s sole goal was to disrupt the upcoming Extraordinary General Meeting (EGM) on 14 February scheduled to approve the Royal Caribbean–P&O Princess merger (Seatrade Insider, 2002a).

The same day Princess rejected Carnival’s offer, Richard Fain at Royal Caribbean warned that if the merger was not approved on 14 February, there would be no deals. He elaborated (Seatrade Insider, 2002b):

This observation is absolutely correct. There is no free option. I want my view to be very clear. If there is no approval of the P&O Princess/Royal Caribbean Cruises Ltd combination tomorrow, there will, for any number of reasons, be no deals – neither our combination nor the Carnival Corporation takeover. Whilst we have yet to decide what specific actions we would take, it is clear that such an adjournment vote would strike at the heart of our transaction.

P&O Princess’ shareholders met, as scheduled, and following a 14-h meeting voted on a motion from HSBC Bank to adjourn to allow more time to consider Carnival’s bid. Carnival’s lobbying had been successful (Kar-Gupta, 2002).

With the viability of Carnival’s offer relying on antitrust clearance, lobbying efforts moved to regulators. The Royal Caribbean–P&O Princess merger was not subject to review by the European Union’s Competition Directorate, but because of its larger size Carnival’s was. Carnival received a list of concerns in May and in June Micky Arison met with Mario Monti, the Competition Commissioner. Arison lobbied for approval of the Carnival/P&O Princess merger. Richard Fain met with Monti several weeks later and argued against Carnival’s merger plans. Monti approved the Carnival/P&O Princess merger on 24 July.

There was plenty of speculation regarding why the merger had been unconditionally approved, especially given early indications that it would not gain approval; if approval were given divestitures would be required. One factor frequently mentioned is that Monti was being overly cautious. He had a month earlier been chastised by the European Court of Justice for his office’s rejection of a merger between First Choice Holidays and British Airtours. At least four other rulings had been appealed to the Court and were awaiting a hearing (Kanter, 2002).

The Federal Trade Commission on 4 October gave its approval for P&O Princess’ merger with either Carnival or Royal Caribbean. This was the opening P&O Princess needed because it had until then been prohibited from talking to Carnival about a counter offer. Carnival’s offer had to be judged financially superior and deliverable and now it was. Carnival and P&O Princess held talks on 12 October.

Two weeks later P&O Princess paid Royal Caribbean a US$62.5m break-up fee, signed a termination agreement, welcomed Carnival’s proposal for a dual-listed company and withdrew its recommendation for the Royal Caribbean combination. P&O Princess had until 10 January to recommend shareholders vote for a Carnival combination.
This was after 1 January because any earlier would trigger the costly Southern European joint venture poison pill.

The P&O Princess board gave its recommendation on 8 January, and on 16 April 2003 Carnival’s takeover of Princess was approved by P&O Princess shareholders. The combined company had 66 ships with over 100,000 berths and carried 4.7 million passengers in the previous year. P&O Princess also brought to Carnival Westours’ key competitor in Alaska, Princess Tours, with its three hotels, 200 motor coaches, and 7 domed rail cars. By 2006, Carnival had 83 ships equating to 142,300 berths (P&O Princess, 2003).

10.1.3 Cruise tourism in Europe today

The consolidation that dominated the 1990s and early 2000s was followed by a period in which Carnival Corporation and Royal Caribbean Cruises Limited grew their respective brands. RCCL built the world’s two largest ships – Oasis of the Seas and Allure of the Seas – as well as other ships in its Voyager class and Freedom class, and expanded its operations in France with Croisières de France, in Spain with Pullmantur and in the UK through a joint venture with TUI Travel where they operate Thomson Cruises’ five ships (including Island Cruises). TUI also owns Quark Expeditions and yacht rental specialist The Moorings. At the same time, Carnival Corporation introduced new ships with each of its major brands and expanded operations significantly with deployment of additional ships in Australia and New Zealand, and through Costa Cruises introduced cruise vacation in Asia and significantly expanded operations in Europe, in part through Ibero Cruisers in Spain and to a much larger degree through Aida Cruises in Germany. They were faced with competition from some European owned and based cruise lines, most notably privately owned Mediterranean Shipping Company (MSC Cruises), which is a major player in the Italian market with more than 24,000 berths across 12 modern moderate-sized ships, and several relatively smaller brands such as Fred Olsen Cruises in the UK with 4000 berths across four mass market ships, Hurtigruten in Scandinavia with 6000 berths across ten coastal exped- dition ships, and Hapag Lloyd Cruises in Germany with 1875 berths across four small luxury ships, and Cyprus-based Louis Cruises which charters many of its older ships to others.

Three corporations clearly dominate the world cruise market. While consumers have some choices that avoid these behemoth corporations, the options are limited. Carnival Corporation, which earned US$2bn net profit in 2011 (down from US$2.5bn a few years earlier), at the end of 2011 operated a fleet of 101 ships, with another ten ships scheduled for delivery by March 2016. With approximately 200,000 guests and 70,000 shipboard employees, there are more than 270,000 people sailing aboard the Carnival fleet at any given time. Royal Caribbean, in contrast, had net profits of US$547m in 2010, and at the end of 2011 operated 40 ships and had a passenger capacity of approximately 92,300.

What does this preponderance of North American control of cruise companies offering cruises marketed to Europeans mean? Perhaps the largest change is that cruises in Europe are being guided by the same strategies that have made Carnival and RCCL so profitable: the cruise ship is increasingly the destination (rather than the ports) and onboard revenue has become the cruise line’s greatest source of profits (see Klein, 2008). Perhaps one exception is where old cruise ships, no longer marketable to North American travellers, have been redeployed with ‘budget’ European brands – either directly by transferring them to companies such as Pullmantur, Ibero Cruceros, or Croisières de France (and P&O Australia), or selling them to cruise lines such as Fred Olsen Cruises and Louis Cruises that take advantage of reasonably priced ships that have lost appeal to mainstream customers and that often are nearing the end of their anticipated life span of 25 years. In earlier times, as already seen, these older ships were given to European cruise lines (or others) in trade for equity in the company (as was the case with Epirotiki), but these arrangements appear to have gone by the wayside.
The cruise ship as a destination is best reflected in RCCL CEO Richard Fain’s statement, when asked about plans for RCCL’s newest mega-ships, Oasis of the Seas and Allure of the Seas, that there will be so much to do onboard that passengers will have no reason or incentive to go ashore. As passengers look to choices for cruise vacations, they compare the offerings from North American-owned carriers with those offered by local carriers using older ships – some consumers are attracted to the amenities and the ‘glitz’ of the newer vessels. This move to North American-style cruising is seen as new ships are introduced to traditional European brands such as Costa Cruises, Aida Cruises, Cunard Line, and P&O cruises (all owned by Miami-based, Panamanian-registered Carnival Corporation).

The shift to these new North American-style ships is a major change from the traditional ocean-going cruise ships for transatlantic travel. In those days, ships had very small casinos, a rudimentary set of onboard stores and the cruise was, as sold, ‘all inclusive’. Today, there are huge casinos, multiple dining options (many with an extra tariff), many activities (onboard and onshore) that are sold at prices that yield huge profits for the cruise line, and a plethora of shops (RCCL’s newest ships have a shopping mall the length of a football field in the bowels of the ship). A cruise ship now earns more profit from spending onboard than from any other source (including ticket sales). In 2007, cruise lines collectively generated from onboard revenue US$43 net profit per passenger per day; onboard revenue accounted for 24% of the total net revenue for all cruise companies combined. The percentage is significantly higher for the large US-based mass market cruise lines (Cramer, 2006).

The transition from national brands in Europe, each reflecting the culture and style of the country where the ship is registered, has meant a homogenization of the cruise experience. The main cultural tone of a ship is the result of the clientele; not the style of the ship or the nationality of crew members (which today, on most ships, is multinational). And, as cruise lines seek to fill their ships, there is less focus on marketing exclusively to a certain culture or national identity. More importantly, with profit as defined by corporate headquarters in Miami becoming a leading expectation of all cruise lines, the nature of the cruise experience and the way cruises are orchestrated has become less diverse. Not only do the bulk of profits generated from cruises in Europe end up in coffers in Miami, but the product itself (except for small, niche operators) has become similar regardless of the country from which the cruise operates and the country or continent from which most passengers are drawn.

### 10.2 Seasonality of the Market for Nautical Tourism

Seasonality in tourism is a fact and is one of its main characteristics. Business operations under conditions of seasonality complicate both operational organization and financing dynamics. Seasonality requires the management to implement a diversification strategy to reduce the negative effects of seasonality in tourism and nautical tourism. Nautical tourism ‘mobile’ subjects (yachts, cruisers and skippers) can implement a diversification strategy by moving from a market where the season ends to one where the season is beginning, a method that is frequently used by both large cruisers and large charter vessels. Small charter companies that use smaller yachts and local cruisers cannot transport their vessels to distant markets and must use other methods to survive during the low season. They are generally linked to other ‘fixed’ subjects, such as marinas and cruise ports. They implement diversification differently, either by laying off a part of their work force or by engaging in other business activities that are not available to them to perform in marinas during the high season. An interesting example comes from Italian hotel owners from Lido di Jesolo, who move their business and employees after the summer season to their hotels in the Alps. They thus maintain their experienced staff team and are able to develop their human resource management, always one of crucial aspects of business.

In nautical tourism, marinas that have permanent berthing capacities and town marinas...
that offer catering and other services keep most of their employees on during the low season, while others are compelled to close.

The degree of seasonality of marinas and cruise ports varies in different parts of world and European markets. Since Croatian commercial marinas have been thoroughly studied, the example of the way they deal with seasonality may be used for assessing the issue in the Mediterranean region generally.

This seasonality study is based on the quarterly trends in global cruising and in Croatian tourism and marinas. Data can be obtained from records of the issue and renewals of navigation permits in Croatia. The statistical analysis will be carried out through a contrastive analysis of the seasonality coefficient, which gives a ratio between the value of the original phenomenon and the trend value (Y/Yc). The initial hypothesis is that seasonality in the cruise industry is much lower than in tourism generally and in marinas and the charter industry in particular.

As presented in Table 10.3, it is evident that quarterly presentation of data is suitable for a seasonality analysis. Conclusions can be drawn related to seasonal market changes in the main nautical tourism industries. It is evident that the seasonality aspect of operations is present in Croatian tourism and marina operations, but also in the Mediterranean and world markets. The pattern of seasonality depends, of course, on the season in a particular hemisphere. However, it can be concluded that seasonality is less evident in the developed cruise markets of North and Central America. The table does not allow sufficient conclusions relating to places where the seasonality is higher, nor offer any guide to its long-term role in the general and sustainable development concept. In order to investigate these questions it is necessary to apply the methods of statistical analysis to the seasonal indices of world markets and compare them to corresponding European indices.

In order to calculate the seasonality index, first the quarterly linear trend for the analysed year (2004) has to be calculated, followed by the value trend calculation. The obtained data will be used for the calculation of the quarterly seasonality index (Tables 10.4–10.9).

Using the statistical data relating to Croatian marinas in 2004, quarterly values were obtained that were then used to calculate the linear trend Yc = b + aX with the starting point in the centre. A specific aspect of this calculation is the use of percentage as a Y unit, which means that all values are presented as percentages. This trend is suitable for the purpose of this analysis in which quarterly oscillations are shown as percentages. Trend values have then been calculated and, when related to real quarterly indicators, resulted in the calculated seasonal index. Such a system of calculation has been applied in all the following tables, which will allow for the drawing of comparative conclusions (Luković, 2008a).

As can be seen in Table 10.4, the highest seasonal index is in the third quarter and the lowest seasonal index is in the fourth quarter. Their ratio is 1:73 which indicates a very high degree of seasonality.

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Tourism in Croatia (arrival of tourists in %)</th>
<th>Marinas in Croatia (issued permits in %)</th>
<th>North and Central America (Mediterranean and trans-Atlantic)</th>
<th>Rest of the World</th>
<th>Potential market</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.26</td>
<td>1.64</td>
<td>25.87</td>
<td>36.83</td>
<td>48.56</td>
</tr>
<tr>
<td>2</td>
<td>25.40</td>
<td>30.03</td>
<td>23.68</td>
<td>32.94</td>
<td>18.76</td>
</tr>
<tr>
<td>3</td>
<td>63.08</td>
<td>68.04</td>
<td>23.72</td>
<td>41.77</td>
<td>14.29</td>
</tr>
<tr>
<td>4</td>
<td>7.27</td>
<td>1.08</td>
<td>26.73</td>
<td>19.66</td>
<td>30.12</td>
</tr>
<tr>
<td>Total</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>
The calculation of seasonal cruise indices in North and Central America shows that there are no seasonal oscillations in that market, which suggests the conclusion that the market is saturated (Table 10.5).

The quarterly seasonal cruise indices of the European market show that cruise operations are performed under very strong seasonal influence. The ratio between quarters 1 and 3 is 1:5, which indicates a very high seasonality (Table 10.6).

Seasonal indices in the cruise markets of the rest of the world indicate a moderate seasonality that needs to be taken into account. The ratio between quarters 3 and 4 is 1:2.3 indicating the presence of some seasonal oscillations in that market (Table 10.7).

Seasonality is the highest in potential cruise markets that have not been surveyed or are developing markets. The ratio between quarters 3 and 4 is 1:9, suggesting the development potential of the market (Table 10.8).

The calculations of development trends for marinas and the cruise industry indicate great differences in trend parameters, not only in terms of the volume of quarterly oscillations (parameter b) but also in terms of the direction, i.e. the growth (+) or the fall (−). The differences in intensity of quarterly oscillations of the seasonal indices of Croatian marinas, which may reach the ratio of 1:43, indicate a very high level of seasonality. In the European cruise market, the quarterly seasonality index oscillation is 1:7.4, which indicates a significantly lower seasonality. The Central and North American market shows a quarterly seasonal index of 1:1, which means only 0.16% of quarterly seasonality. The absence of seasonality suggests the conclusion that supply and demand are intense, with a high level of cruise market saturation. On the other hand, cruise quarterly oscillations are the highest in the unsurveyed world market.
Table 10.6. Calculation of trends and seasonal cruise indices in European markets in 2004 (source: T. Luković).

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Structure of tourists per quarter (Y)</th>
<th>Value trend (Yc)</th>
<th>Seasonal indices (Y/Yc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5.62</td>
<td>17.37</td>
<td>32.35</td>
</tr>
<tr>
<td>2</td>
<td>32.94</td>
<td>22.46</td>
<td>146.67</td>
</tr>
<tr>
<td>3</td>
<td>41.77</td>
<td>27.55</td>
<td>151.62</td>
</tr>
<tr>
<td>4</td>
<td>19.66</td>
<td>32.64</td>
<td>60.23</td>
</tr>
</tbody>
</table>

Table 10.7. Calculation of trends and seasonal indices in the cruise markets of the rest of the world in 2004 (source: T. Luković).

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Structure of tourists per quarter (Y)</th>
<th>Value trend (Yc)</th>
<th>Seasonal indices (Y/Yc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>36.83</td>
<td>28.69</td>
<td>128.37</td>
</tr>
<tr>
<td>2</td>
<td>18.76</td>
<td>26.23</td>
<td>71.52</td>
</tr>
<tr>
<td>3</td>
<td>14.29</td>
<td>23.77</td>
<td>60.12</td>
</tr>
<tr>
<td>4</td>
<td>30.12</td>
<td>21.31</td>
<td>141.34</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Quarter</th>
<th>Structure of tourists per quarter (Y)</th>
<th>Value trend (Yc)</th>
<th>Seasonal indices (Y/Yc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>48.56</td>
<td>34.76</td>
<td>139.70</td>
</tr>
<tr>
<td>2</td>
<td>16.02</td>
<td>28.25</td>
<td>56.71</td>
</tr>
<tr>
<td>3</td>
<td>4.81</td>
<td>21.74</td>
<td>22.13</td>
</tr>
<tr>
<td>4</td>
<td>30.61</td>
<td>15.23</td>
<td>200.98</td>
</tr>
</tbody>
</table>

Differences in seasonality of quarterly changes in cruise mega-markets indicate a very efficient use of mega-localities in which such cruisers operate. Location in the northern or southern hemisphere affects the timing of seasonal index changes.

Since the parameters of the trends in types of nautical tourism are not sufficient for evaluating seasonality, it is necessary to study and compare the quarterly seasonality indices (Table 10.9).

From Table 10.9 that presents seasonality indices for nautical tourism types and mega-markets, it can be concluded that seasonality in the Croatian tourist market is much higher in marina operations than in
Opportunities for Market Development

A similar conclusion can be drawn for Mediterranean marinas. The quarterly seasonality index of Croatian marinas is between 3.41 in quarter 4 and 252.07 in quarter 3, which means a change of 7,292%. Residual effects are low, which indicates a very strong seasonality effect. All this suggests that the Mediterranean market of marina operations is not sufficiently developed, which is an important precondition for the development of strategic management of sustainable development of marinas.

High seasonality in the European cruise market and the fact that the market of North and Central America has no seasonality suggests the development possibilities of European cruise tourism.

However, any conclusion on the development potential of the European cruise market has to be cautiously adopted, since, as shown in Fig. 10.1, a high level of seasonality due to the climate can be observed in the north-western European market, the Baltic Sea and the Atlantic part of Europe. Nevertheless, developments in ship design and construction mean that they can increasingly function in a wider range of climatic conditions, which is having a noticeable effect in the North and

<table>
<thead>
<tr>
<th>No.</th>
<th>Markets and types of nautical tourism</th>
<th>Quarter 1</th>
<th>Quarter 2</th>
<th>Quarter 3</th>
<th>Quarter 4</th>
<th>Index: highest/lowest</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Croatian marinas (issued permits in %)</td>
<td>7.83</td>
<td>128.50</td>
<td>252.07</td>
<td>3.41</td>
<td>7,392.08</td>
</tr>
<tr>
<td>2</td>
<td>Cruising – North and Central America</td>
<td>102.46</td>
<td>95.02</td>
<td>94.58</td>
<td>105.90</td>
<td>112.00</td>
</tr>
<tr>
<td>3</td>
<td>Cruising – Europe (Mediterranean and Transatlantic)</td>
<td>32.35</td>
<td>146.67</td>
<td>151.62</td>
<td>60.23</td>
<td>469.12</td>
</tr>
<tr>
<td>4</td>
<td>Cruising – Rest of the world</td>
<td>128.37</td>
<td>71.52</td>
<td>60.12</td>
<td>141.34</td>
<td>236.00</td>
</tr>
<tr>
<td>5</td>
<td>Cruising – potential markets</td>
<td>139.70</td>
<td>56.71</td>
<td>22.13</td>
<td>200.98</td>
<td>908.18</td>
</tr>
</tbody>
</table>

Fig. 10.1. Monthly presentation of structural cruise supply in the main world markets in 2004 (% beds/day) (source: Dowling, 2006).
Central American market. Therefore it can be concluded that, regardless of the climate, it is reasonable to expect further development of the cruise industry in all European markets: the Mediterranean, the Baltic Sea, the Atlantic, the Black Sea and in inland markets, the latter two not yet being sufficiently analysed in terms of seasonality.

With the exception of the North and Central American markets, the continued development of the world cruise industry is certain. The good financial results achieved by large cruise companies and corporations stimulate technical adaptation to natural factors and to the destination. Large cruise companies increasingly build large and luxurious cruise ships and also well-equipped small cruisers that can land in small, undiscovered harbours and bays. However, the question remains whether large cruise companies and corporations will recognize the importance of the natural factors of local conditions, geography and climate and accept the limits they impose. One the one hand, recent research (Luković and Božić, 2010) points out the problem of the balance between the capacity of the destination and the increased number of cruise passengers, but on the other hand there is still scope for development. It is necessary to balance two issues: the tourists and the satisfaction of their motives for travelling and the ‘value for money’ factor that best indicates the general success of a trip (Luković and Božić, 2011a). The problem has become increasingly apparent and recent market developments in management partnerships of the destinations, port and cruise corporations indicate that cruise companies have recognized the role of such natural factors and limitations. Both the cruise supply and the destination supply are crucial factors in the complex system of tourists and cruise passengers making a decision on their trips. This conclusion has been confirmed by recent studies of the large cruise corporations (Dowling, 2006).

The CLIA and ECC are intensively engaged in analysing seasonality in large ship cruising, and the results are evident and relevant for the development of the whole cruise industry. Using intensive studies of seasonality and constant market demand analyses, CLIA has managed to eliminate seasonality from its mega American market almost completely, as shown by Table 10.10. Owing to the high quality and facilities of large cruise ships, pricing policy, expert management and marketing concepts based on ongoing market research, the schedule of quarterly use of cruise ships has been balanced. In such conditions development rates are slightly lower. The European market, on the other hand, has distinctive cruise seasonality (Fig. 10.1).

The structural analysis of the world market confirms the conclusions presented in Table 10.10, which clearly distinguishes seasonal cycles of cruise consumption. An interesting phenomenon is that of idle vessels, which remain as potential cruise markets, present during the three summer months. This indicates the under-developed markets of a part of the Pacific Ocean, the Indian Ocean and the South Atlantic Ocean, part of the North Atlantic and some other markets. They are potential markets that emerge during the process of market repositioning. Thus the European supply market has distinct seasonal oscillations that are much less evident in the American market and the Rest of the World and Idle Vessel categories. It may be concluded that the seasonal oscillations of all European submarkets indicate some possibilities for further development in that region.

10.3 The Future of Nautical Tourism

Nautical tourism, a sub-type of tourism, has been continually growing in the last 30 years in all its industries at an annual growth rate exceeding 10%. No other industry can match such growth and development. The growth of nautical tourism is due to a good market position, i.e. a coordination of the demand and the corresponding supply.

The future of nautical tourism worldwide is a continued development; however, new studies are required in order to observe changes in the market demand and to adapt to such changes. The changes have been observed in all the three nautical tourism industries, and supply is designed to meet new forms of demand, thus ensuring the upward development trend in future.
Cruising is perceived to be attractive to cruise tourists for a number of reasons. For example, Professor Gibson states the following in relation to the UK:

The cruise industry continues to grab the headlines although not always for the most positive reasons. The fate of the Costa Concordia has presented the public with a long lasting image that challenges the long held notion that cruising is totally safe. Of course, no form of travel can guarantee total safety, but until this event, this type of vacation had managed to generate and make best use of a reputation that was driving growth. Despite this set-back, the future of cruising from and to the UK appears to continue to hold excellent potential. Ports are well configured to cope with growth, cruise destinations possess strong attributes that add vitality and attractiveness for itineraries and, geographically, the UK is well located to capitalize on new business. Growth is expected to remain constant – it would seem that as long as cruise ships are being constructed the future appears bright. There are uncertainties, such as: the short to middle-term implications of economic instability on international markets; the likelihood of major changes to ship design and onboard management systems in response to the Costa Concordia incident; and continued concerns to do with flags of convenience and how the community onboard can be maintained in a safe and responsible manner. Then again however, the industry is well known for its resilience, its responsiveness and its resolve, so it would seem likely that for cruising it will be business as usual.

Professor Alexis Papathanassis suggests that:

When compared to the US market, the market penetration of cruise tourism in non-US, developing and emerging source markets (e.g. Europe) is relatively low. This supports the expectations related to the continuation of passenger growth at an international level. Nevertheless, the mere existence of ‘market-space’ does not guarantee economically sustainable growth. Over the last years, cruise operators have been reducing ticket prices and are becoming increasingly dependent on onboard revenue to safeguard their profitability. Onboard revenue currently represents approximately one quarter of the total cruise revenue. Moreover, onboard revenue is not growing proportionally to the growth of cruise passenger days, suggesting that the average onboard spending per cruiser is following a downward trend. Concurrently, the operational costs are growing, mainly because of fuel prices. In addition, changes in the regulatory environment and emerging operational standards are expected to push costs even higher in the medium- /long-term. At the end of the day, the sector’s growth is also characterized by increased competition and emerging operational challenges, putting the industry’s profit margins under pressure. This is likely to fuel more vertical integration in the sector and cruise operators will be required to shift their...
investment focus from capacity development to demand generation. The parallels between the development and challenges of mainstream packaged tourism in the 90s and of today’s cruise tourism are indeed striking.

When observing the development characteristics of charter and marina industry in the Pacific and contrasting them to their counterparts in Europe and worldwide, Prof. Ross Dowling came to the following conclusion:

Cruising in Australia is on an upward trend. The numbers of people cruising has increased every year for over a decade and it does not look likely to slow at any stage soon. There are more people cruising, more ships being based in Australia, and much larger ships meaning there is a greater capacity for potential passengers. The same can be said of marinas with a phenomenal growth in the number of marinas and berths being built. The recent report on marinas in Australia highlighted the significance of Australian marinas as economic, employment and social hubs within their communities. Finally, another opportunity for Australia is in the area of attracting super-yachts to the country. With a well-established yacht cruising industry and the growth of marinas and facilities to maintenance the yachts, the future looks bright for this segment of the industry too.

The market changes observed by Dowling have to be accepted, moreover, they are also included in new demand in European sub-markets. A great number of mega-yachts arrive in European markets, especially to the Mediterranean, and ‘an extra berth’ is constantly demanded. This directs investors to further investments and to new marinas for mega-yachts. Dowling makes similar estimations in terms of larger cruisers and better supply. However, it has to be noted that there is a need for better cooperation between large cruise companies and destination management aimed at increased satisfaction of cruise tourists.

In the most recent studies conducted by Professor Ross Klein, when analysing the other studies, he came to the following conclusion:

Nautical tourism will continue to grow as we look forward, however the locations of greatest growth will shift. The greatest expansion in cruise tourism initially was in North America. As the North American market became saturated, there was considerable expansion of capacity (particularly in the UK and Italy) and itineraries that incorporated previously under-utilized markets in Europe (especially the Mediterranean and Baltic Sea). More recently, the cruise industry has set its sights on Australasia, initially in Australia and New Zealand, and later on China, which is poised to become the next rapidly expanding market. The growth in China is facilitated by Costa Cruises devoting ships to the market, and in late 2012 and 2013 Royal Caribbean moving its Voyager of the Seas to Australia and to China. As we have seen elsewhere, this growth and expansion of cruise tourism isn’t so much a response to pent-up consumer demand, but that the cruise industry will move ships to the market and then stimulate demand by finding a price point that consumers can’t resist.

Both Klein and Dowling forecast a continuous growth of nautical tourism and changes in some markets. The saturation of certain world markets, as indicated in the study on seasonality, will cause the end of growth in saturated markets, but new markets will open soon thus continuing the further expansion of nautical tourism. Klein explicitly forecasts the growth of nautical tourism in the Mediterranean and the Baltic Sea, which has to be accepted.

All analysts agree that the development of the three nautical tourism industries will continue, but the consumption within them will significantly change. We can already notice a more rational use of time and vessel’s capacity. The level of satisfaction measured as ‘value for money’ is gradually increasing, which requires the development of supply aimed at satisfying the demand. New future forms of cooperation and partnership may be expected, which will increase the need for research within sustainable development and ensure the expanding continuity of nautical tourism.

**Note**

1 Cruise lines that ceased operations include Premier Cruises, Commodore Cruise Lines, Crown Cruise Line, Cape Canaveral Cruise Line and the World Cruise Company in 2000; Marine Expeditions, American Classic Voyages, America Hawaii Cruises, Delta Coastal Voyages and United States Line in 2001; Regal Cruises in 2003; and in 2004 Society Expeditions, Festival Cruises and Royal Olympia Cruises all experienced financial difficulties leading to cessation of some or all of their operations.
Tourism and nautical tourism can not be the basis of any national economy, but they can be a support to development, especially at the local level, where tourism may have an important role. Its development power can be observed in all European markets and in other markets in Asia and on the Pacific coast.

In terms of the engaged capital, nautical tourism is one of the strongest mega-industries of the global economy. Capital effects and related capital in the main nautical tourism industry and its three sub-industries reach several hundred trillions of Euros and hundreds of thousands of people employed, while indirect effects are even more significant. It may be concluded that it is a mega-industry with sub-industries, which has been continually growing in recent decades, even during the current global economic crisis. It is therefore clear that it deserves more attention from researchers and investors. However, nautical tourism development has so far been rather spontaneous, with few quality studies, a lack of accurate information and consequently with numerous erroneous assumptions and estimations. The situation is gradually changing and is being supported by the European Commission and its communication on the ‘Challenges and Opportunities for Maritime and Coastal Tourism in the EU’ in 2012. The aim of the process that will be completed by 9 July 2012 through DG MARE and DG ENTERPRISE is to obtain the new data needed for planning a European nautical tourism development strategy.

Although a more dynamic development of all nautical tourism industries is yet to come, all European countries are developing nautical tourism in all of the five European markets according to their capacities. The differences in the development levels of nautical tourism and their trends can be observed among European countries. The situation is similar in the Pacific, while there is a trend of opening new and so far unexplored markets. That fact contributes to the estimate relating to future development given at the 4th International Cruise Conference by John Peijs in his presentation on the development prospects of the Holland America Line in the next 25 years, when he smiled and said ‘bright’.

The development of nautical tourism taking place in the Asian and the Pacific

11 Conclusion

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markets and elsewhere requires new studies and information and the adoption of new development models and development management. Therefore, it is necessary to forecast numerous changes within the demand and supply structure and also new forms of partnership, all aimed at maintaining development continuity. This research should be considered as a first step in a broad ongoing project that will be pursued through future editions.


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