ECSIP CONSORTIUM

Study on the competitiveness of the recreational boating sector

Final Report

Client: DG Enterprise and Industry

Rotterdam / Brussels, 24 November 2015

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Compiled by the following partners of the ECSIP consortium:

Ecorys

Rotterdam / Brussels, 24 November 2015

ECORYS
Research and Consulting

About ECSIP

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Executive summary

Introduction and objective of this study

The 2008 economic crisis strongly impacted the European economy and also hit the recreational craft industry and related sectors like coastal and maritime tourism. The European Commission has underlined the importance of coastal and maritime tourism in its Communication COM(2014) 86 final on "*A European Strategy for more Growth and Jobs in Coastal and Maritime Tourism*" especially for employment for the whole economy. In this context this study assesses the overall competitiveness of the recreational boating sector.

The core objective of this study is to assess the overall competitiveness of the recreational boating sector. The study identifies the main factors influencing the competitive performance of the EU recreational boating industry and provides policy recommendations on how the competitiveness of this sector in Europe could be improved.

The methodology used in this study consisted of desk research/literature review and data collection through interviews and an online questionnaire. First of all Ecorys made an analysis of the demand for recreational boating in Europe (**chapter 2**). In order to present the bigger picture of the competitiveness of the recreational craft sector it has proven to be necessary to analyse both the boat manufacturing sector (**chapter 3**), as well as the services sector (marina's and charter) in **chapter 4**. Ecorys revealed drivers and barriers for the competitiveness of the sector to further improve the European competitive position in the recreational craft sector and to stipulate its full potential to contribute to growth and jobs in the EU. As an outcome of the analysis, Ecorys developed scenarios and recommendations to improve the EU's growth and employment strategy in **chapter 5.**

In perspective: the demand for recreational boating in Europe

The European recreational boating industry begins to see 'some bright spots on the horizon'. Nevertheless, the recreational boating sector is highly depending on consumer confidence and the industry is characterised by the level of discretionary spending. Both consumer demand and the production levels are not fully recovered yet from the economic crisis. One crucial outcome of the crisis is that European boat builders shifted their focus from the internal market to export. Since the start of the global economic downturn in 2009 registration of new boats has declined with 40% in the EU. Although the economic downturn has resulted in a 60% to 80 % drop of in business in Europe, other regions in the world saw a remarkable increase in sales in 2013, of which 47% increase in North-America.

According to EBI[1], some 6 million boats are owned in Europe and 36 million European citizens regularly participate in recreational boating activities. The user demographics are drastically changing. In the last 10 years the average age of users more or less changed by 10 years from around 45 to 55 years. This means that basically no young boat owners entered the market. consumers spend less and less time on the boat and renting gaining popularity. Recreational

[1] http://www.europeanboatingindustry.eu/facts-and-figures.

boating is gaining popularity as a new type of spending vacations.[2] Chartering therefore endured the crisis rather well, however, smaller companies faced difficulties.

The competitiveness of the manufacturing industry

The overall production value in the EU of recreational crafts peaked in 2008 (and 2010) and decreased after the 2008 crisis with 12%. In 2013 the overall production value for the EU28 was approximately € 6.5 billion. In 2013 the main boat producing countries in the EU were IT, NL, GE, UK and FR. The Baltic States and Poland are gaining market share due to the shift of production activities from Scandinavia. In 2012 approximately 4,500 manufacturing enterprises were present in the EU-28. Compared to 2008 this is a decrease of 4%. Approximately 95% of the companies in the manufacturing sector are SMEs. The high-end of the market is dominated by a small group of major serial boat manufactures.

The European industry is weakened, but still a strong global player

The 2008 economic crisis had an enormous impact on the overall position of the European recreational craft industry. While the EU-28 production value of manufactured boats for pleasure or sports peaked in 2008 and 2010, it is in 2013 still substantially lower. This downturn is also reflected in a decrease in the overall number of enterprises and the overall number of employment, although there exist severe differences between the different Member States. Although detailed information is lacking it is clear that also the profitability of the industry is under pressure, resulting in lower investments in business development and R&D, especially under SMEs. In line with the (slow) recovery of the European economy, also the recreational craft market seems to recover slowly.

Nevertheless it is also clear that, although the US market is much larger than the European market and also recovering faster, the European industry still has a very strong global position. The European export is larger than the US export and also the European export of for example motor yachts is more than double the European import. Brands like Group Bénéteau (France), Sunseeker (UK), Azimut-Benetti (Italy), Ferretti (Italy), Princess (UK), Bavaria Yachtbau (Germany), and Hanse Group (including Sealine) (Germany) are well-known European manufacturers with a global client base. At the same time, the “Made in Italy” trademark is a strong and desired ‘signal’ of quality and status. The recent investments of non-EU / Chinese investors illustrate that the European brands are desirable. The spill-over effects of these large European manufacturers towards other actors in the value chain (mainly SMEs) and nautical clusters are substantial. It is expected that they will benefit from the (slow) recovery of the market.

The industry needs to adapt to a changing world

Like described in chapter 2, the overall demand for recreational crafts in Europe is shrinking (less ownership, less days spend on a boat) and shifting (more rental). The industry is aware that they need to adapt to these changing circumstances and that it is unlikely that the “booming market” of the 70s and 80s will return. It is expected that the coming years some level of consolidation will take place, but most likely this development will be relatively small. This implies that especially the ability of small, often family owned, businesses to adapt to the changing circumstances will determine the overall performance of the industry. Given the fact that the business models of the various (especially SME) boat builders are still quite traditional and have a small production scale, it is uncertain whether they are able to realize that and can recover from the impact of the 2008 economic crisis within 3-5 years. Additionally, we have identified the main barriers for growth:

[2] Interviews with charter companies.

regulatory differences regarding standards between EU and the US; export barriers due to import tariffs in e.g. Brazil and China and the lack of access to finance for SMEs.

Strengthening of the European industry competitiveness

Given the fact that the European industry is mainly active on a open European and global market, the industry is primarily responsible for their own performance and competitive position towards for example the US. This is also recognised within the industry. Value added from the involvement of policy makers is mainly expected from (i) the (continued) standardisation process between the EU and the US, (ii) the continued harmonisation of the European internal market (licenses, safety requirements, etc.) and (iii) the lowering the international trade barriers, like the import taxes in Brazil and China. Specific attention is requested for the more focused use of European investment and R&D instruments, like for example Horizon 2020 (investments in sustainable technology) and the regional funds (coastal development, etc.).

The competitiveness of the services sector (charters and marinas)

The turnover of the European **charter sector** is estimated to be € 6 billion, while the sector employs approximately 20,000 people. While the highest number of boat owners is in Northern Europe (in particular Sweden and the Baltic States), the Mediterranean Sea alone attracts 70% of world charter demand. The sector is dominated by five companies (Sunsail, Le boat and Footloose which are owned by TUI Marine, Dream Yacht Charter, Kiriakoulis) which cover about 80% of the European market. **Marinas** realise a turnover of almost €4 billion and employ approximately 40,000-70,000 people. Like the charters, there is a strong seasonal influence on demand and turnover. Marinas can be distinguished broadly in private and public (municipality/regionally) owned marinas. There is a trend towards private owners that operate a chain of marinas or marinas that are organised as a network (clusters). Most of the marinas are located in a limited number of Member States (SE, FI, UK, NL, DE, FR, IT, GR, HR).

The service industry has an important role in the tourism industry

The nature of the competiveness assessment of the services differs from the manufacturing industry. Notwithstanding the rise in **marina** chains and networks, most marinas operate at a local or national scale. Main issues to them are related to difficulties in national/local regulation and local/national market conditions, although to some extent they might be influenced by national or EU regulation. It also makes it a rather fragmented market with many individual players each operating on their own regional/local boating market. Nevertheless, obviously there is a connection to the overall attractiveness of coastal region as they form part of the overall tourism package. The **charter market** on the other hand is dominated by a limited number of large charter companies controlling some 80% of the charter market. They are supplemented by a large number of small companies. As a result charter companies are also impacted more strongly by a lack of harmonisation in rules across Europe. Also users of boats and boat owners are affected by diverging rules across Europe.

Harmonisation of regulation is an important issue

As mentioned earlier, lack of harmonised regulation is mainly an issue for charter companies, who are hiring professional skippers, and to a smaller extend also for boaters that sail across Europe. Key issues are related to differences in flag rules coming from where the boat is registered (which flag is sailed) and the country where the boating activity takes place. First and foremost it is the absence of clear and comprehensive information for each country in Europe which present a difficulty, in particular for private boaters who want to exercise their boating in another country. For

charter companies (and in particular the larger charter companies) a lack of information is less of a hurdle, but the impact of diverging rules is.

Most often mentioned difficulties observed in this respect are the lack of harmonisation in skippers licenses and in particular the licensing of professional skippers and the requirement on safety equipment for recreational craft. The requirements to skippers on small commercial boats across EU Member States are different and classifications obtained in one Member State are often not recognised in another. The issue occurs when licensing state, costal state and flag state are not identical. This is particularly an issue when looking at professional skippers given the non existing harmonisation of such a profession for recreational craft (for larger boats there is some harmonisation). Some harmonisation on private licenses exists through the ICC (International Certificate of Competence). The problem is however that not all Member States including some important boating regions recognise the ICC. In addition, there are different country requirements in obtaining a license and future training. No common training scheme and/or recognition create confusion and incoherence among professional qualifications and private users. This creates differences in the level of competence required under a license which might be relevant. This is underlined by the fact that human failures are quoted as reasons for accidents in more than 25% of the cases.

Further to different license requirements differences exist in requirements to technical and safety standards. Again lack of awareness creates a difficulty in knowing what is expected, in addition to some specific rules which are not logical from an non-EU perspective (e.g. having the relevant overview of requirements available in the local language on board for foreigners). Enhancing awareness of applicable rules, mutual recognition of licenses and flag state rules, and further harmonisation (by e.g. creating a minimum standard which would then classify for mutual recognition) would be possible avenues to decrease these issues.

To a more limited extent differences in VAT regimes also create a specific behaviour in boating by choosing low tax regimes for boat registry. This is a common phenomenon for higher value vessels, which are often registered in a country outside Europe due to tax reasons. Apart from creating different conditions to boaters across Europe, VAT levels in some countries disincentive recreational boating, as boating is treated as a luxury product and luxury activity, hence impacting the growth potential of the sector.

Other market barriers

Finally some national/regional market barriers exist. To a certain extent they are valid for most countries across Europe, such as lack of employees with high technical expertise (e.g. machine manufacturing and engineers) or access to finance, but on the other hand they have a strong local character (e.g. national regulation on marina development, environmental regulation etc.). Nevertheless, they have an impact, not only on the national development of recreational boating in a region or a country, but also on the wider performance of recreational boating, for example in the demand for new recreational craft.

Sector outlook and recommendations for further improvement

In order to develop the sector outlook and identify recommendations for further improvement, Ecorys made a SWOT-analysis, addressing strengths and weaknesses of the sector and linked this to four scenarios.

Future scenarios	
SHIPWRECK **Low market demand / Strong competition** ➢ Demand stays low, both EU and global, due to ageing and other activities; ➢ Competitors from Asia and US are strong on the European and global markets.	**HIGH-WAVES** **High market demand / Strong competition** ➢ Demand is booming in Europe and worldwide; ➢ Competitors from Asia and US are strong on the European and global markets.
AIRLESS **Low market demand / Low competition** ➢ Demand stays low, both EU and global, due to ageing and other activities; ➢ Competitors from Asia and US are not able to develop their market share on European and global market.	**DOWNWIND** **High market demand / Low competition** ➢ Demand is booming in Europe and worldwide; ➢ Competitors from Asia and US are not able to develop their market share on European and global market.

Manufacturing industry

The SWOT analysis clearly indicates that the performance of and foresights for the manufacturing industry is still mainly positive. The sector has a strong global market position, benefits from the exposure of the high-quality 'EU-brand' and is still innovative. At the same time the sector may benefit from the growing demand in upcoming markets, the demand for environmental-friendly technologies and the further harmonization of standards. Nevertheless, there are a number of aspects which cause some concerns. While the industry is still recovering from the global economic crisis (lacking investments, low profitability), the business environment is changing: shrinking and shifting demand at the EU-market (changing demographics and a shift of leisure expenditure) in combination with increased pressure on manufactures' business models due to competition.

With respect to the future outlook it became clear that the two most extreme scenarios (shipwreck and downwind) mainly strengthen or dampen the strength/weaknesses, as well as the opportunities and threats. In the downwind scenario the strong competitive position is further strengthened (high demand for EU brand and EU technologies) and the industry is taking advantage of the strong market developments (new markets, new products). At the same time the downwind scenario softens the current weaknesses of the industry (room for investments, higher profitability, etc.). For the shipwreck scenario it is more or less the other way around: the low demand and the increased global competition strengthen the current weaknesses and undermine the current industry strengths.

The competitive position of the industry is to a very large extent depending on the development of the EU or global market and how the industry positions itself. At the same time we see large societal developments which can hardly be influenced (demographical changes, ageing, changing leisure patterns, upcoming 'sharing economy'). Considering the position of the industry and the European Commission we see potential in the following fields:

- **Alignment of international legislation** in order to remove unnecessary barriers for international trade (given the strong competitive position of the EU); *see also recommendation 1 in section 5.3;*
- **Stimulating research, development and innovation** in order to protect or even strengthen the global competitive position of the manufacturing industry; *see also recommendation 2 in section 5.3;*
- Trying to **reduce the import barriers** for promising export markets (given the strong competitive position of the EU); *see also recommendation 3 in section 5.3;*

- Strengthening the awareness on **access to finance**, while at the same time we realize this is mainly a private / market activity (banks, private investors); *see also recommendation 4 in section 5.3.*

Services – charter and marinas

The charter sector in the EU is a strong sector with high demand within EU territories, particularly in the Mediterranean. A handful international providers capture a large share of the market supplemented by many small local providers. The charter industry is profiting from a trend towards less boat owners and more rentals. This has also helped the sector during the crisis period following the year 2008. The EU charter sector is also profiting from a very attractive sailing area, which has the potential to be well connected to hinterland activities. New business models following the trend of higher charter demand such as cruise style chartering or skipped charter offer opportunities to further develop in the future. On the other hand, remaining regulatory uncertainties and difficulties for cross-border operation such as professional skippers license requirements, flag state rules etc. risk to hamper the development of the sector. Threats to the sector are reduced demand for second hand boats, which make it more difficult to replace older boats in the fleet as well as high capital demand.

Given the external nature of some of the key strength and weaknesses of the EU charter industry (such as attractive sailing area, Europe as a brand etc.); the direct impact of the scenarios is limited on the sector. In both the downwind and the high-waves scenario high demand would continue in the services sector. Consequently the strength of the EU charter industry could be fully played out. A challenging situation would be the shipwreck scenario, where decreasing demand would be combined with higher competition. In such a situation it would be crucial that the sector plays out its opportunities to avoid losing remaining clients to areas outside the EU.

Charter - Based on this analysis we see policy potential in areas where external factors play a crucial role. These cover the scope from keeping attractiveness of the area high, reduce complexity and intransparency and provide a framework that keeps the European charter sector competitive. Despite the important role for the industry and individual Member States we see potential in the following fields:

- Ensuring **easy cross-border movement of boats within Europe**, in order to simplify boat chartering in Europe and improve the functioning of internal market; *see also recommendation 5 in section 5.3;*
- Supporting the ability of the charter sector to **keep the quality of its services high or even increase it** (e.g. through well trained staff) and thus keeping the demand for chartering high; *see also recommendation 6 in section 5.3.*

In the perspective of the four future scenarios, the high waves scenario most significantly impacts the marinas. In this scenario the strong competitive position, as well as high market demand are further strengthened. The other scenarios have diverse patterns. The downwind scenario is a scenario that would help existing marinas to invest in their offer. The low level of competition would however mean that the sector could ‘afford’ its weaknesses and would not have to adapt as quickly.

The airless scenario would lead overall to a negative development of the sector or to a ‘freezing’ of the state of play. The shipwreck scenario with low demand and high competition is rather unrealistic.

Marinas – For marinas the policy potential lies in the improvement and establishment of framework conditions that cause an incentive to improve the quality of the offer from a European and sector

perspective and not only from a local perspective. Specifically we see potential in the following fields, where there is also an important role for the industry itself and Member States:

- Ensuring **easy cross-border movement of boats within Europe**, in order to improve the functioning of internal market; *see also recommendation 5 in section 5.3;*
- Supporting the ability of marinas to **keep the quality of its services high or even increase it** and thus keeping the demand high; *see also recommendation 6 in section 5.3;*
- Promoting **recycling of recreational craft vessels;** *see also recommendation 7 in section 5.3;*
- Supporting coordination of **clusters development** between marinas within Europe; *see also recommendation 8 in section 5.3.*

1 Introduction

The 2008 economic crisis had a huge impact on the European economy. Especially Southern European Member States are still struggling with high unemployment rates and in particular youth unemployment. It is therefore more important than ever to understand the key drivers of competitiveness and performance of those sectors most relevant for these Member States to provide the necessary means for policy makers to counter the effects of the Crisis. The European Commission has underlined the importance of coastal and maritime tourism in its Communication COM (2014) 86 final on "*A European Strategy for more Growth and Jobs in Coastal and Maritime Tourism*" especially for employment for the whole economy. As part of this communication it stated that an assessment of qualification requirements for the recreational boating sector and of current provisions for nautical tourism safety equipment is necessary.

1.1 The overall objective

The core objective of this study is to assess the overall competitiveness of the recreational craft sector. The study identifies the main factors influencing the competitive performance of the EU recreational craft industry and provides recommendations on how the competitiveness of this sector in Europe could be improved. This draft final report synthesises and updates previous findings.

1.2 Methodology and approach

The methodology used in this study consisted of desk research/literature review, quantitative data collection from boating associations, interviews and an online survey.

Literature review and data collection

Literature review and data collection has been particularly important in the first research phase of this study. From the literature review it became clear that the number of existing reports on the overall recreational crafts industry is limited, have certain (data) limitations or have a specific focus. At the same time it became clear that the statistical data sources (Eurostat, Comtrade, etc.) provide very useful information, although also here limitations exist. The survey and stakeholder interviews were thus very useful to improve our understanding of the raw data collected in the first research phase.

Interviews

Interviews with relevant stakeholders constituted important part of this study. The main objective of these interviews was to gather insights and information, which was neither available in literature nor data bases and get a better understanding of problems that the recreational craft industry is facing.

After initial interviews with European associations, in the months of February to April 2015 we conducted first round of interviews with relevant national stakeholders from all relevant groups for the study. This was followed by a second round of interviews, which took place during the Summer 2015, and enabled us to delve further into the details and shed light on the remaining hidden factors of competitiveness of this sector. In total we have approached 127 stakeholders across Member States and stakeholder groups. At the end 40 people have been interviewed. A complete overview

of interviewed stakeholders can be found in the Appendix 1. The table below provides a summery of conducted interviews per stakeholder category.

Table 1.1 Interviews conducted

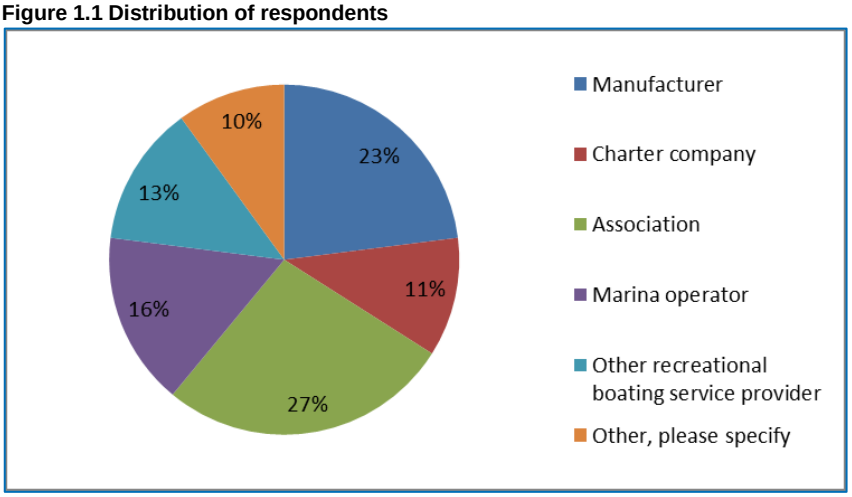
Stakeholders	Number of interviews conducted
European/international industry associations	4
National associations	13
Boat manufacturers(incl. SMEs)	13
Charter companies	6
Marinas	3
Crewing agencies	1
Total	40

Online sector survey

In addition to the interviews we conducted an online sector survey. The request was to launch the survey to at least 100 recipients. In order to reach this amount of recipients we approached companies directly, as well as industry associations. Additionally we asked the associations to distribute the link to the survey and an information letter to their members. Next to that we approached associations directly (NL, DE, UK, etc.). Besides approaching companies directly for an interview, we have also asked several of them to fill out our online survey. Given the expected increase of survey response rate through an extra push by the European Boating Industry (EBI) through their newsletter, we further extended the original deadline of the survey by 10 days.

The survey was launched 9 March 2015 and was closed 10 April 2015. Eventually, 371 respondents opened the survey, of which 135 respondents started the survey and 80 of them reached the end of the questionnaire. The respondents were evenly distributed among the various actors in the sector:

Figure 1.1 Distribution of respondents



Source: Ecorys sector survey 2015.

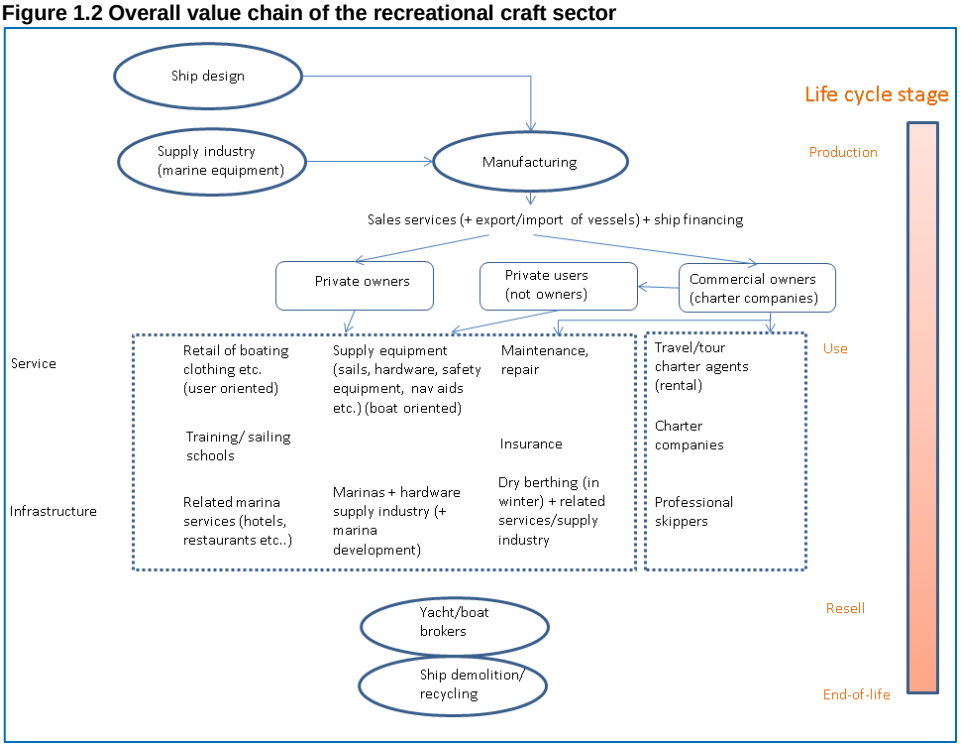
The online sector survey has been an important instrument to gather information, as not all the relevant information was available in the public domain (databases, reports, etc.). We thereby prepared a questionnaire, which basically consisted of five sub-surveys (manufacturers, charter, associations, marinas, other services). Each respondent was directed to relevant questions through a set of screening questions. The amount of respondents does not allow for final conclusions on

each question, but indicates relevant trends which have been validated through interviews and literature review.

1.3 Scope of the study

Because the recreational boating industry is a very broad industry, the focus in this study was on the manufacturing industry and on the services industry. Nevertheless the literature review showed that the scope of the recreational boating industry differs from time to time. ICOMIA for examples makes in her statistical handbook (in relation to employment) a distinction between four sectors. i.e. boat builders (5 different types); engine manufacturers; boat accessory and marine equipment manufacturers; and service providers.[3] The European Boating Industry uses a somewhat different breakdown and makes a distinction between boat builders; equipment manufacturers for boats; equipment manufacturers for water sports; infrastructure builders and operators (marinas) and service providers. In the figure below we present, based on different sources, a general breakdown of the industry, which also illustrates the broad scope of the sector, along the life cycle stage of the products. In the next chapters we provide a more detailed scoping of the industry.

Figure 1.2 Overall value chain of the recreational craft sector



[3] ICOMIA (2014): Recreational Boating Industry Statistics 2013.

2 The demand for recreational boating in Europe

In this chapter, a preliminary assessment is made of the demand for recreational boating in Europe. It sketches some quantitative and qualitative trends from the user perspective, focusing on the demand for recreational craft products and demand for recreational boating services in Europe.

2.1 Demand for recreational craft in Europe

There is no comprehensive statistic on the number of boat sales in Europe, in terms of units. In terms of sales value, data of ICOMIA may be used to sketch an indication of the annual market volume of boat sales in Europe (it is however incomplete in terms of country coverage). Overall, there were sales in the order of magnitude of well over half a billion euro in 2013 (estimate based on seven large European boating countries in 2013).

Domestic retail sales information on boats in the EU

In the ICOMIA (2013) edition data for the Czech Republic, Finland, Germany, Greece, Ireland, Italy and Spain is provided. The data distinguishes between four categories of boats: sailboats/yachts, inboard/motorboats, other rigid boats, inflatables (+2.5 kg).

Table 2.1 emand trends affecting the industry: a market overview – known domestic retail sales (€ million)

Member State	Sailboats / Yachts	Inboard / motorboats	Other rigid boats	Inflatables (+2.5 kg)	Total
Czech	-	-	0.2	-	0.2
Finland	-	-	-	-	104
Germany	30.8	57.3	3.3	-	91.4
Greece	36.5	14.5	5.8	2.9	59.7
Ireland	4.2	5	0.2	0.4	9.8
Italy	11	62.5	5	10.5	89
Spain	37.7	59	41.8	36	174.5

Source: ICOMIA (2013) Recreational Boating Industry Statistics report.

Motorboats are the largest category, followed by sailboats. From this group of seven countries, Spain and Finland show the largest sales figures, although the breakdown for Finland is unclear.

Demand trends affecting the industry: a market overview

The ICOMIA 2013 annual yearbook analyses the world market trends, including a specific focus on the European market developments caused by the economic crisis of recent years. First of all, ICOMIA concludes that the European recreational boating industry begins to see 'some bright spots on the horizon'. Nevertheless, the recreational boating sector is highly depending on consumer confidence and the industry is characterised by the level of discretionary spending. Thus, the consumer demand and the production levels are not fully recovered yet.

One crucial outcome of the crisis is that European boat builders shifted their focus from the internal market to export.[4] Since the start of the global economic downturn in 2009 registration of new boats has declined with 40% in the EU. The Bénéteau group, the largest (sail) boat producer of the world and also a major global player in the manufacturing of superyachts, reported a 2.4% increase in boat sales with a value of €624 million in 2013. Although the economic downturn has resulted in a 60% to 80 % drop of in business in Europe, other regions in the world saw a remarkable increase in sales in 2013, of which 47% increase in North-America. The recovery of the US market in the last three years led to $36.7 billion in sales of boats, engines accessories and services. Which is a 3% increase compared to 2012.[5] Improving economic conditions and what seems to be a resurgence in Americans' outdoor trend helped fuel steady growth in new power boat sales. The recovery was also boosted by the creation of innovative, more versatile and accessible boats that appeal to a variety of interests and budgets and fall within the 15-26 foot range. It's these smaller boats, those less than 27 feet, which make up 96 percent of the 12.4 million registered boats in the U.S. and are leading the industry out of the recession.[6]

Key EU Member States determining the demand on the EU recreational boating market are, first, **Germany**: the largest importer in terms of value in the EU. Especially the import of small sail and power boats has grown. Secondly, **France**, which facing a declining consumer confidence, resulting in a decline in French boat production with 4%, in value € 740.3 million and -14% in volume in 2013. Third, the **UK** saw an 2.7% rise in 2012-2013 in revenue from boat manufacturing and distribution, up to £ 1 billion. Fourth, The **Netherlands** faced an all-time low consumer confidence level after the 2009 global crisis and nearly half of the companies in the sector faced a decline in turnover. However, the sector of superyacht building has improved and its reputation for high-end builds remained established. Fifth, Italy's internal demand is estimated to be down with 88% and exports have not been able to fully fill the gap in demand. Boat builders are currently exporting 93% of their production, mainly to the US and the Middle-East. Lastly, **Poland** faced an increase of particularly Scandinavian boat builders moving their production activities.[7]

2.2 Demand for recreational boating services in Europe

According to EBI[8], some 6 million boats are owned in Europe and 36 million European citizens regularly participate in recreational boating activities. Boat ownership patterns across Europe are rather diverse with Northern countries (Finland, Sweden, and Norway) showing high ownership ratios. Scandinavia and Baltic States account for around 2 million recreational boats[9]. Most privately-owned recreational craft in Europe (including sailing and motor boats) are estimated to be less than 7.5 metres length overall.[10]

Demand trends affecting the industry

The high volatility of local demand and unpredictability of non-resident visits to coastal regions through time makes maritime and coastal tourism, including recreational boating, a vulnerable segment within tourism destinations, causing difficulties in long-term planning of developments and

4 Interview with mr. Rice, ICOMIA, 3rd of December, 2014.
5 Data extracted from: ICOMIA (2013) Recreational Boating Industry Statistics report p. 6-7.
6 Website US National Marine Manufacturers Association (NMMA).
7 Data extracted from: ICOMIA (2013) Recreational Boating Industry Statistics report and supported by Eurostat's data.
8 http://www.europeanboatingindustry.eu/facts-and-figures
9 BMF (2004)
10 Figures from the European Marine Industry submission point to fees of € 50-150 per night typically being charged per vessel.

investments on a basis of a proper mix of local and foreign visits to stabilise the demand patterns and ensure the investment returns in a relatively short time.[11]

The demand trends are also reflected in the age of the boat owners. The user demographics are drastically changing. In the last 10 years the average age of users more or less changed by 10 years from around 45 to 55 years. This means that basically no young boat owners entered the market. Reasons quoted by stakeholders are, apart from the overall economic crisis affecting Europe, a lack of available capital among the younger generation purchase recreational craft, but also a changing attitude of young people towards owning a boat (vis-à-vis using a boat). The problem for the sector is however that if people don't start young, experience shows that they won't start at a later age. According to industry representatives, to a certain extent this is countered by a trend towards more chartering.

The above demand trend is also attributed to the phenomenon that today's users of boats appear to be less willing to accept long preparation of their boating trips, constant maintenance or dealing with upcoming problems, leading to decreasing tendencies to own a boat and an increased growth demand for charters. They want to go to their preferred destination, have a boat ready and everything functioning throughout their holidays. In the past, boat owners took all these issues into account when using their boats.[12] In the last years, sales of boats went down, but chartering went up, even though periods of charter were shortened. This trend was confirmed through the interviews with boating associations and charter companies. They stated that consumers spend less and less time on the boat and renting gaining popularity. Recreational boating is gaining popularity as a new type of spending vacations.[13] Chartering therefore endured the crisis rather well, however, smaller companies faced difficulties.[14] The crisis moved all over the EU; the above consumer trend started in the southern Member States and is now reaching France and the UK.[15]

In the last ten years, the average size of the boats has been growing. This trend was partially reversed over the economic crisis, however the size increase trend is back again due to the demand for larger (charter) boats (currently about 13m average length).[16]

The type of charter clients are categorized by 51.7% as friends, 25.1% family, 15% couples, 5.3% colleagues and 2.8% others. The average age of the youngest charter crew members is 31 years and the one of the oldest charter crew members 51 years. Peak of the season in chartering is July (22%) followed by August (19.2%) and September (18.6%).

Based on interviews with charter companies and marina operators, good service on boat and in marinas, including rental of crew and skippers are gaining on importance. The survey confirms that good and personalised services, as well as attractions in and around marinas play an important role. In addition, safety and price are also vital.[17]

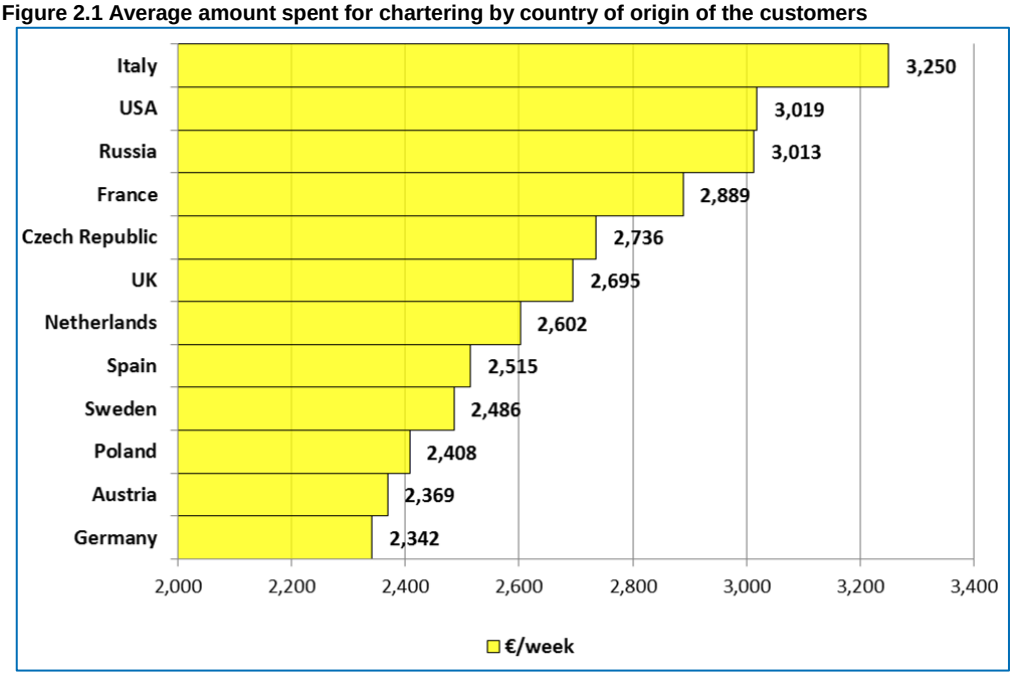
Customers spending for charter vacation

Customers' spending for charter vacation differs by the origin of the customers. The amounts spent per week thereby do not reflect the average purchasing power of the countries. Data collected on the issue by YachtSys and Yachtbooker show that customers with the highest expenditure on charter vacation per week

11 ECORYS (2012): Study in support of policy measures for maritime and coastal tourism at EU level.
12 Interview with EBI.
13 Interviews with charter companies.
14 Interview with EBI.
15 Interview with charter company.
16 http://www.yachtsys.com/images/yacht-charter-infographic.aspx.
17 Ecorys survey.

come from Italy with about 3,250 euro per week followed by US-Americans (€3,019/week) and Russians (€3,013/week)[18]. The following figure provides a detailed overview for the selected countries.

Figure 2.1 Average amount spent for chartering by country of origin of the customers



Source: http://www.yachtsys.com/images/yacht-charter-infographic.aspx.

While sailing yachts are preferred by the traditional sea-faring enthusiasts, motor boats tend to be more attractive to the broader masses thanks to such characteristic features as ease of handling, design elegance, comfort, speed and power.[19] In comparison with yachts, motor boats continue to be more popular.[20] Seventy-two percent of boat and yacht sales, representing a total of EUR 5.12 billion, were attributable to the motor boat segment, signifying a growth rate of 5% compared with year 2005. By comparison, growth in the sailing yacht segment in 2005 came to 4.4%, for a total of EUR 1.99 billion. Based on our interviews with charter companies, there is a demand trend also for renting catamarans.

[18] http://www.yachtsys.com/images/yacht-charter-infographic.aspx.

[19] http://www.boot.de/cipp/md_boot/custom/pub/content,oid,14877/lang,2/ticket,g_u_e_s_t/~/Trends_in_the_European_maritime_industry.html.

[20] http://www.boot.de/cipp/md_boot/custom/pub/content,oid,14877/lang,2/ticket,g_u_e_s_t/~/Trends_in_the_European_maritime_industry.html.

3 The manufacturing industry

3.1 Introduction

Before we describe the manufacturing industry and assess different elements which influence the competitiveness of the industry, we present and discuss a number of underlying elements, like the definition and scope, the value chain and the main used data sources (databases, interviews, web-survey).

Definition and scope

Recreational boating is defined in the EU directive 94/25/EC as *"any boat of any type, regardless of the means of propulsion, from 2,5 to 24 m hull length, measured according to the appropriate harmonized standards intended for sports and leisure purposes".*[21]

The scope of this study is primarily focused on the manufacturing of these recreational and sporting boats, which is defined by the Eurostat as: *'manufacture of inflatable boats and rafts, building of sailboats with or without auxiliary motor, building of motor boats, building of recreation type hovercraft, manufacture of personal watercraft, canoes, kayaks, rowing boats and skiffs'.*[22] In line with the revised work plan it is decided to also include vessels which are commonly known as "super yachts". In practice this means that there is no specific restriction to the hull length.

The definition of the recreational boating sector in the Directive 94/25/EC excludes surfboards, canoes, kayaks, rowing boats and skiffs. In the data analysis this definition will be applied, meaning that the scope of the definition of Eurostat on the manufacturing sector is narrowed down.[23]

Value chain

As described in the Blue Growth report[24] economic sectors active on or near the seas are interacting with other sectors in complex value chains. The list of sectors relevant from a maritime perspective is diverse and these value chains intertwine. For these reasons this study focuses on maritime functions only, more specifically in this part the manufacturing of recreational crafts is examined. Economic activities in different sectors contribute to these functions in mutual interaction. The overall value chain is more and more characterised by the presence of large multinational shipyard groups throughout the EU with a strong and sometimes increasing focus on the involvement of (specialised) SMEs. SMEs are involved from the beginning to the end of the production chain and large(r) boat manufactures include these SME services throughout the entire production process. At the same time, not only services are outsourced, sometimes also the actual manufacturing is executed by SME's and large shipyards concentrate on the core activities:

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21 Directive 94/25/EC of the European Parliament and of the Council of 16 June 1994.

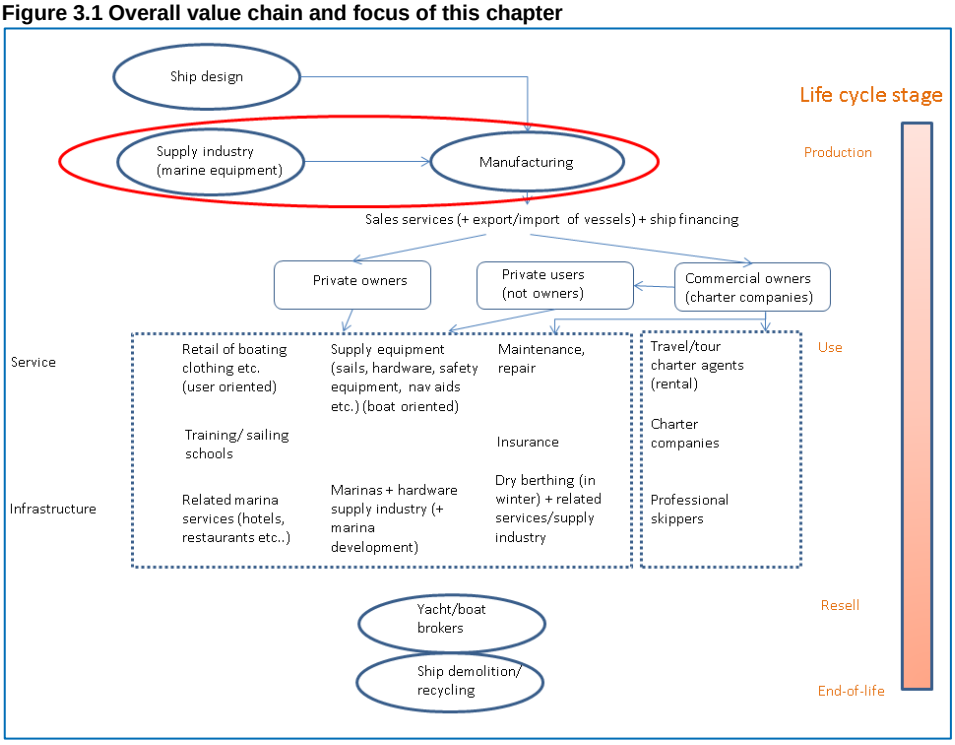
22 Eurostat, see http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Impact_of_the_economic_crisis_on_maritime_sectors#Further_Eurostat_information.

23 Eurostat defines the sector with the following code: NACE class 30.12. This class includes: manufacture of inflatable boats and rafts - building of sailboats with or without auxiliary motor - building of motor boats - building of recreation-type hovercraft - manufacture of personal watercraft - manufacture of other pleasure and sporting boats:· canoes, kayaks, rowing boats, skiffs.

24 Ecorys, Deltares and Oceanic (2012) Blue Growth *Scenarios and drivers for Sustainable Growth from the Oceans, Seas and Coasts.*

engineering and project management.[25] As a result the overall value chain contains multiple dimensions and different types of market players. Following our value chain as depicted in chapter 1, this chapter focuses on the manufacturers of boats and engines and upstream supply industry. The detailed insights are presented in the next sections.

Figure 3.1 Overall value chain and focus of this chapter



Source: Ecorys.

Used data sources

For the analysis of the manufacturing part of the recreational craft industry, we used different data sources which will be briefly discussed here.

Existing data bases and taxonomies

In order to map the industry and specify the various products, the existing taxonomies of the industry are very useful. The Prodcom and commodity codes serve as the main basis for a bases such as Eurostat/Comext and UN Comtrade. Please note that the presented taxonomies focus on the production process of a finalised boat. In practice however, many components of the production process are outsourced. For example, in most cases boat manufactures do not produce the engines of the boats themselves and this is not covered in the data. Since this is a crucial and comprehensive part of the value chain, the production process of engines, inboard and outboard, is separately included in our analysis.

The **commodity codes** shows that there are three main categories of recreational crafts: inflatable vessels, sailboats/yachts and motorboats/yachts. The 6-8 digit taxonomy is shown in the table below. These commodity codes are mainly used for the registration of international trade.

[25] European Commission. Directorate-General for Employment, Social Affairs and Equal Opportunities Unit F3 (2009) Executive summary p15. *Building and Repairing of Ships and Boats sector Comprehensive sectoral analysis of emerging competences and economic activities in the European Union.*

Table 3.1 The 6 and 8 digits commodity codes (used in Eurostat)

Commodity code HS	Description
890310	Inflatable vessels for pleasure or sports.
890310.10	Inflatable vessels for pleasure or sports, of a weight <= 100 kg each
890310.90	Inflatable vessels, for pleasure or sports, of a weight > 100 kg each
890391	Sailboats or yachts, with or without auxiliary motor.
890391.10	Sea-going sailboats and yachts, with or without auxiliary motor, for pleasure or sports
890391.90	Sailboats and yachts, with or without auxiliary motor, for pleasure or sports (excl. seagoing vessels)
890392	Motorboats or yachts, other than outboard motorboats
890392.10	Sea-going motor boats and motor yachts, for pleasure or sports (other than outboard motor boats)
890392.91	Motor boats for pleasure or sports, of a length <= 7,5 m (other than outboard motor boats)
890392.99	Motor boats for pleasure or sports, of a length > 7,5 m (other than outboard motor boats and excl. seagoing motor boats)

Statistics by **Prodcom** codes provide data on the production of industrial / manufactured goods. Prodcom uses the product codes which are identified by an 8-digit code. The first four digits match with the European NACE-classification, while digit 5 and 6 refer to the classification of products by activity (CPA). As the next table shows, the Prodcom codes also match with the commodity codes presented before (although the codes differ). **Eurostat** data provide also annual detailed Structural Business Statistics (SBS), which follow the NACE-classification, which comply with the Prodcom codes (NACE Rev. 2, B-E C3012: *the building of pleasure and sporting boats industry).*[26]

Table 3.2 Prodcom and NACE codes used in Eurostat

Prodcom codes	Description
301212.00	Inflatable vessels for pleasure or sports
301211.00	Sailboats (except inflatable) for pleasure or sports, with or without auxiliary motor
301219.30	Motor boats and motor yachts, for pleasure or sports (excluding outboard motor

Besides these international databases we used other data sources, like the Amadeus database (for the manufacturing industry the selection could be based on the NACE-codes) and data for ICOMIA (broader scope than only manufacturing).

Ecorys survey – manufacturers

Besides the collection of quantitative data and detailed statistics, Ecorys designed a web-survey which was distributed through boating associations to their members, such as the British Marine Federation, Italian Marine Industry Association and the European Boating Association. The results of the survey will be presented throughout the report in order to support and verify previously acquired insights. Here we present some general information of the respondents regarding the manufacturing industry:

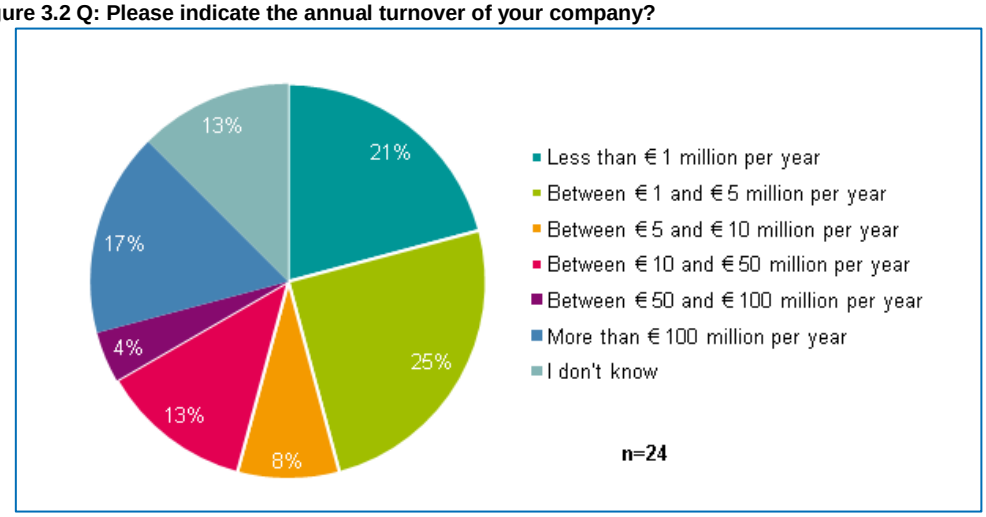
- **Type of activities -** First of all, 23% of the overall respondents of our survey categorised themselves as 'manufacturer' of either boats, engines or equipment (31 respondents). A majority of these respondents, 41%, is a manufacturer of boats with a hull length of 11 up to 24

[26] Structural business statistics SBS - industry and construction (sbs_ind_co): Annual detailed enterprise statistics for industry (NACE Rev. 2, B-E) (sbs_na_ind_r2): http://epp.eurostat.ec.europa.eu/portal/page/portal/european_business/data/database.

meters. 28% of the respondents produce equipment or components and 24% focuses on primarily repair and maintenance work. The remainder operates in niche markets;

- **Geographical spread –** From this group of respondents, most of the companies' headquarters are located in Italy (20%) and the rest is evenly spread over the EU, e.g. Germany, Austria, Estonia, Poland, Sweden and the United Kingdom. The production facilities are also evenly spread over the EU, including the Baltic states and Poland. Additionally some respondents have indicated to have manufacturing sights in the e.g. the US, China, Turkey and India;
- **Size -** With respect to the size of the companies that responded to our survey this reflects a relative even distribution regarding annual turnover, including both SME's as well as major serial yachts producers. This is shown in the next figure.

Figure 3.2 Q: Please indicate the annual turnover of your company?



Source: Ecorys 2015.

Interviews – manufacturing

In order to retrieve other ('soft') insights from market players and verify quantitative data, we approached both big serial yacht producers and SME's. Please see Appendix 1 for an overview of the interviewees.

3.2 Basic market conditions and the market structure

In this section we present the main industry information about the structure of the manufacturing industry and the overall market and industry conditions.

3.2.1 Main industry characteristics

Level of production and value added

The following section includes most important components of the manufacturing sector, first, recreational boat builders and second, engine manufacturers.

Manufacturing figures of recreational boats in the EU

Prodcom data on the **production value** of manufactured recreational boats on EU28 level is available from Eurostat[27], however in some cases data on Member State level is missing due to confidentiality issues (e.g. Germany and Ireland) and in some cases estimates are used. The

[27] Eurostat (2014) Prodcom – Statistics by Product. The statistical classification of Economy Activity in the European Union (NACE 2).

following table indicates the total amount of the production value of the three NACE product subcategories in the manufacturing sector of recreational boating: (i) motor boats, (ii) sail boats and (iii) inflatable vessels. The table indicates that the total production value of manufactures boats in 2013 was € 6.5 billion, which is a **decrease of 12%** down in comparison with 2008 (€ 7.4 billion). Especially the production of sailboats and vessels decreased, while the production of motor boats was relatively stable (with a large peak in 2010). Countries that faced the biggest drop in total production value of manufactured boats in the period 2008-2013 are Italy (-82%) and the UK (-71%).

Table 3.3 Production value of manufactured boats for pleasure or sports (2005-2013, million €)

Type of boat	2005	2006	2007	2008	2009	2010	2011	2012	2013
Motor boats	2,187	3,135	3,407	4,515	4,205	5,560	4,719	4,342	4,656
Sailboats	1,605	1,717	1,999	2,498	1,776	1,929	1,729	1,647	1,618
Inflatable vessels	61	52	54	354	294	236	283	208	205
EU total *	3,853	4,905	5,459	7,367	6,275	7,572	6,731	6,197	6,479

Source: Eurostat Prodcom data. Note: * over the years data is missing for various Member States due to absence of date (reported value is "zero") or confidentiality issues (e.g. Germany and Ireland).

Distribution of production (within the EU)

In 2013 the biggest boat producing countries in the EU were Italy, the Netherlands, Germany, UK and France. Poland is also gaining market share due to the shift of production activities towards the Polish industry. Several interviewees indicate that especially Scandinavian and German boat builders, but also the Bénéteau Group, moved / outsourced a part of their production to Poland. In the next table, the distribution of the 2013 production for a selection of Member States is shown (selection based on the availability of data).

Table 3.4 Eurostat production data for a selection of EU countries (2013, in million €)

Country	Motor boats	Sail Boats	Inflatable vessels	Total	% of total EU production
Italy	1,711	176	99	1,986	30%
The Netherlands	1,044	164	C	*>1,208*	20%
Germany	1,098	C	C	*>1,098*	17%
UK	427	390	44	861	13%
France	213	458	31	702	11%
Poland	23	68	C	*>91*	1.5%
EU total *	**4,656**	**1,618**	**205**	**6,479**	**-**

Source: Eurostat Prodcom data (2014). Note:* over the years data is missing for various Member States due to absence of date (reported value is "zero") or confidentiality issues (e.g. Germany and Ireland); C= confidential data.

Value added

The value added at factor cost for the building of pleasure and sporting boats has been recorded by the Structural Business Statistics in Eurostat. [28] The table below gives an overview of the trend of

[28] Value added at factor cost is the gross income from operating activities after adjusting for operating subsidies and indirect taxes. The value added is calculated by deducting the costs of operating activities from the income from the activities. Profits include also deliveries from an establishment to the enterprise's other establishments, and costs include also purchases from the enterprise's other establishments. According to the definition, costs exclude the costs related to the establishment's personnel. It can be calculated as the total sum of items to be added (+) or subtracted (-): •turnover (+); •capitalized production (+); •other operating income (+); •increases (+) or decreases (-) of stocks; •purchases of goods and services (-); •other taxes on products which are linked to turnover but not deductible (-); •duties and taxes linked to production (-).

value added at factor costs in several EU boat producing countries. It shows that the gross income from operating activities (after adjusting for operating subsidies and indirect taxes) are fluctuating very strongly. However some countries, like Germany and the UK recovered from the sheer drop in 2009.

Table 3.5 Value added at factor cost in Euro's (2008-1012, top 11 countries for 2012, million €)

Country	2008	2009	2010	2011	2012
Germany	482,0	256,8	495,0	408,5	498,1
UK	309,8	383,8	360,2	331,3	389,3
France	*missing*	258,2	353,0	350,8	286,4
Italy	864,0	457,4	336,8	374,9	259,8
Sweden	107,7	69,5	72,4	79,1	78,3
Finland	137,7	63,2	77,5	77,0	73,7
Poland	79,7	56,6	78,2	79,9	63,1
Spain	58,9	71,9	26,4	17,4	*missing*
Denmark	*missing*	*missing*	16,1	13,6	14,5
Portugal	11,7	4,6	4,8	5,4	7,3
EU 27	**2,960**	**1,924**	**2,208**	**1,763**	**2,089**

Source: Structural Business Statics, Eurostat (2014). Note: Over the years data is missing for various Member States. Value adjustments (such as depreciation) are not subtracted.

Engines

Eurostat and Prodcom do not provide detailed data about engines. The data below is extracted from the ICOMIA 2013 report and only presents sales data of recreational outboard boat engines.[29] It shows that there are a number countries with outboard engine production in Europe, with France and Finland as the leading countries. Nevertheless, interviewees indicate that the overall engine market (inboard and outboard) is dominated by large non-European companies like Yamaha and Honda (see below).

Table 3.6 Known Domestic Sales (2013, units)

Country	outboard <40HP <30KW	outboard >40HP >30KW	outboard total
France	10,194	7,439	17,633
Finland	12,126	3,413	15,539
Germany	9,904	2,143	12,047
Sweden	6,932	4,501	11,433
Italy	8,659	2,45	11,109
UK	7,077	1,851	8,928
Netherlands	6,317	996	7,313
Spain	2500	1600	4100
Croatia	2,185	469	2,654
Greece	2,064	492	2,556
Poland	1,75	470	2,222
Czech	233	84	317
Ireland	265	32	297

Source: ICOMIA (2013) Recreational Boating Industry Statistics report.

[29] The rest of the data from the ICOMIA 2013 report on engines (sales, import and export) is incomplete and therefor not included in this report.

Structure of the industry – market players

Structure of the market / industry structure and size distribution of companies in the EU

In 2012 approximately 4,500 manufacturing enterprises were present in the EU-28. Compared to 2008 this is a decrease of 4%. The table below gives an overview of the number of the manufacturing companies in the recreational craft sector for eleven countries. Over the period 2008-2012 especially Italy faced a severe decrease of 44%. Other countries are facing an increase in manufacturing companies, such as Poland (+50%) and the Netherlands (+21%). The 66% increase in Greece is relatively large, but in absolute terms it reflects an increase with (only) 30 companies.

Table 3.7 Number of companies in the manufacturing sector of recreational boating (NACE C3012)

Country	2008	2009	2010	2011	2012	% change '08-'12
Netherlands	740	811	923	905	895	21%
Italy	1.081	940	711	694	598	-44%
Sweden	610	596	583	576	564	-8%
UK	620	620	594	552	541	-13%
France	-	352	385	394	390	-
Poland	210	383	381	354	316	50%
Germany	252	166	297	337	256	0%
Finland	259	259	253	254	238	-8%
Croatia	107	105	103	105	103	-4%
Greece	45	45	44	44	75	66%
Spain	49	52	57	47	:	-
EU 28	**4.663**	**4.648**	**4.660**	**4.701**	**4.475**	**-4%**

Source: Structural Business Statistics, Eurostat (2014).

In addition to this Eurostat data, it is useful to present some ICOMIA data which shows a breakdown between different types of companies. Although the ICOMIA-data differs from the Eurostat data it shows that the majority of the companies are boat builders, which are followed by manufacturers of boats accessory and marine equipment. The number of engine manufacturers seems quite limited.

Table 3.8 Known number of companies by sector (2012)

Country	Boat Builders	Boat accessory / marine equipment	Engine manufacturers	Total
Netherlands	950	20	1	971
Italy	-	-	-	-
UK	330	530	4	864
France	200	571	25	796
Germany	400	200	10	610
Poland	100	50	-	>150
Sweden	80	-	2	>82
Finland	47	24	1	72
Croatia	45	12	2	59
Greece	45	8	-	>53
Spain	20	28	1	49
Czech Republic	8	4	-	>9
Total	**2,225**	**1,447**	**46**	**3,718**

Source: ICOMIA (2013) Recreational Boating Industry Statistics report. Note: please note that the data collection method differs from Eurostat and that the quality of the data differs per country.

Size of manufacturers and the role of SME's

Approximately 95% of the companies in the manufacturing sector are SMEs. However, due to data limitations it is not possible to extract data from Eurostat (SBS) on the preferred industry level. From interviews it became clear that the high-end of the market is dominated by a small group of major boat manufactures. These include well-known European manufacturers, such as Group Bénéteau (France), Sunseeker (UK), Azimut-Benetti (Italy), Ferretti (Italy), Princess (UK), Bavaria Yachtbau (Germany), and Hanse Group (including Sealine) (Germany). A large boat builder from the US is for example the Brunswick Boat Group.

Engine manufacturers are mainly large multinational companies, such as Volvo Penta, Mercury, Yamaha, and Honda. It is noted that there are a few manufacturers in Europe that produce engines that have been developed by themselves. Examples in this category are Volvo Penta and Selva Marine. There are multiple players which are so called 'marinisers', like for example OXE and Seven Marine. In such business model, engines from Asian, but also European and American car and truck manufacturers (e.g. Volkswagen, Volvo, General Motors) are imported and made fit for maritime purposes ('marinesed').

3.2.2 *Employment*

Is this section we present multiple aspects of the employment in the industry, including the level of employment and insights from the web-survey and interviews on the employment skills.

Overall level of employment (EU-28)

Over the period 2008-2012 the overall employment in the manufacturing industry in the EU-28 decreased with approximately 5%. Several EU countries are dealing with a steep decline in employment levels. The number of employees in the sector in Italy for example declined with 37% from 2008 until 2012. Other countries, such as Germany, seem to recover in terms of employment levels and are back at the same level as before the 2008 global economic crisis. The table below presents Eurostat's annual detailed enterprise statistics on the level of employment for the EU-28 and some individual countries.

Table 3.9 Number of employees in the building of recreational crafts (2008-2012)

Country	2008	2009	2010	2011	2012	% change '08-'12
Italy	13,271	11,416	9,732	9,060	8,337	**-37%**
France	-	8,382	7,396	7,479	6,976	**≈ 22%**
Germany	5,019	3,668	4,884	5,772	5,440	**8%**
Netherlands	4,649	4,717	4,851	4,633	4,419	**-5%**
Poland	3,746	3,588	3,663	3,888	3,756	**0%**
Finland	2,860	2,318	2,155	2,038	1,876	**-34%**
Sweden	2,384	1,793	1,598	1,564	1,321	**-44%**
Spain	1,580	1,262	867	653	-	**≈ -50%**
Portugal	597	239	305	284	420	**-30%**
Croatia	767	607	442	387	360	**-53%**
Estonia	454	284	295	-	342	**-24%**
Denmark	-	-	220	287	253	**-**
Romania	320	254	214	194	245	**-23%**

Greece[30]	91	168	191	119	197	**+116%**
EU-28	**35,738**	**38,696**	**36,813**	**36,358**	**33,942**	**-5%**

Source: Eurostat Structural Business Statistics (NACE C3012). Note: The biggest boat-producing countries in the EU are included, however UK data is missing.

Besides the Eurostat data, also ICOMIA has data on the level of employment in the industry although the figures differ substantially from the Eurostat data. The table below indicates 'known numbers' of the total amount of employees in the recreational boating sector in 2012. The most obvious difference between the data from Eurostat and ICOMIA is the amount of employees in the boat building sector in Poland. Most likely the large differences are based on the different methods for data collection and scoping of the industry. As a result we assess the Eurostat data to be the most robust data source.

Table 3.10 Known number of employees in EU countries (2012)

Country	Boat Builders	Engine manufacturers	Accessory / equipment manufacturers
Poland	37,000	-	3,000
Italy	11,777	635	5,667
UK	8,204	472	3,526
France	7,255	1,062	3,198
Germany	7,000	-	3,000
Sweden	1,500	-	-
Spain	450	80	400
Greece	320	-	140
Total	**73,571**	**2,249**	**18,931**

Source: ICOMIA (2013) Recreational Boating Industry Statistics report p. 37. Note: ICOMIA retrieves its data from their members and in most cases the employment figures are estimated. These figures should be interpreted carefully.

Employment levels of six large manufacturers

Detailed analysis of the employment levels for six large manufacturers shows that over the period 2006-2013 the level of employment increased, with a peak in 2008. The table below gives an aggregate overview of the total number of employees for six selected companies: Bénéteau Sunseeker, Azimut-Benetti, Ferretti, Princess and Hanse yachts.

Table 3.11 Number of employees on selected companies 2006-2013

Year	2006	2007	2008	2009	2010	2011	2012	2013
Aggregate	**14,551**	**14,315**	**17,928**	**16,237**	**14,607**	**15,805**	**15,801**	**15,208**

Source: BVD Amadeus database.

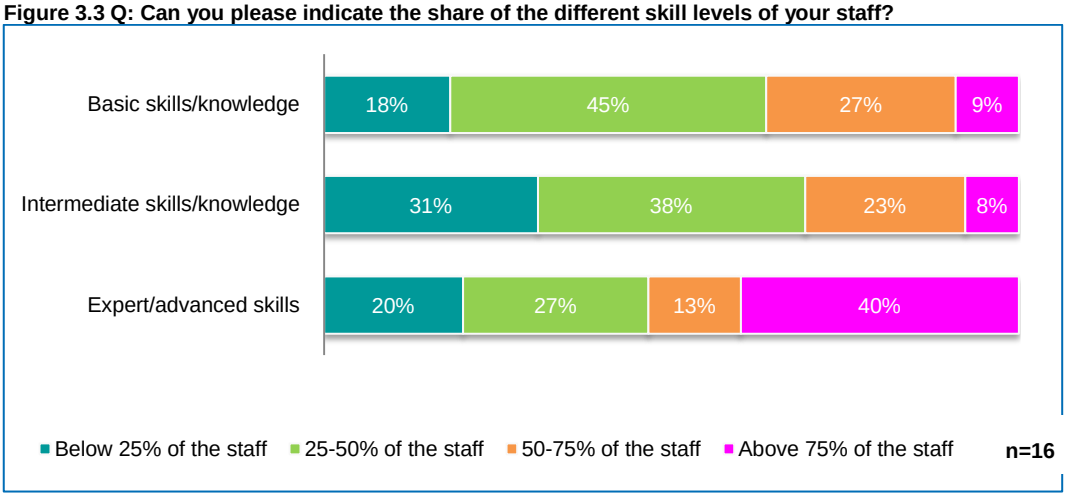
These six major companies faced a decline in production figures and revenue, see part 3.3, and therefore also had to lay off many of their employees. However these figures above are easily misinterpreted. It is important to keep in mind that many manufactures work with sub-contractors, meaning that the number of total employees in comparison to the number of employees from subcontractors is relative. Therefore it can also be explained why the drop in employment is not as significant as the drop in production figures and profit margins; the employees of sub-contractors are not included in the above figures.

[30] Greece experienced an employment increase and looking at the percentage growth this is rather impressive. However relatively seen the growth comprises only small numbers and can be explained by the bankruptcy and emergence of one or two companies. So indeed the trend goes against general trend in Europe as well as perception of state of Greek economy, however the small numbers should tone down the occurring trend.

Required skill levels – skill shortages

Pertaining to the required skill levels, the survey provides some interesting insights. The next figures shows the current level of skills from the responding manufacaturing companies. It shows that both basic skills as wel as intermediate skills are required, but indicates that especially 'advanced skills' have a very prominent position within the manufacturing companies.

Figure 3.3 Q: Can you please indicate the share of the different skill levels of your staff?



Source: Ecorys 2015.

From the interviews it became clear that serial yachts producers, focussing on the assembling of parts deliverd by subcontracts, acquire relativly more employees with basic skills, whereas SME's and producers that use less subcontractors do need advanced skilled employees in order to deliver the final product. Often, very specific expertise is needed.[31]

Required skills in relation to the production method

From the interviews it became clear that the required level of education and specific skills that are needed in the manufacturing industry are largely depending on the production methods, e.g. serial or customised production. The differences are most obvious regarding the various methods of assembling a boat. Roughly speaking there are two types of production methods, requiring a different skillset from the employees:[32]

- **Customised production** - Most importantly, the SME's producing (customized) boats on a small and local scale, most of the time in a family owned business, acquired skills through experience and evolved their craftsmanship for boatbuilding over the years. In many cases the skill level of these producers cover a whole range of the production process;
- **Serial production** - Besides the SME's, there are a few serial producing companies in Europa: these top 10 to 20 boat manufacturers have roughly speaking two different ways of producing the end product, both acquiring different set of skills. First of all, one way to produce a boat is focused on 'putting the final components together'. Boat manufacturers are depended on the supply of subcontractors and additionally produce parts themselves. 98% of the components of the boat is then supplied, and only needs to be assembled in the shipyard. This last part of the production process is done by a large workforce, often by low skilled (migrant) workers. This production model is also known as the 'IKEA' model.[33] The second method to serial produce boats is manufacturing op to 80% of the boat by subcontractors and the company itself. These

31 An example from the open answers in the survey is indicative for this insight: "We find it impossible to find good hydraulic engineers under the age of 55 and have started taking on apprentices to try and develop their engineering skills". This respondent is a component manufacturer from the UK.

32 In order to make this section not too detailed, we do not differentiate between types of boats, which is of course an important factor determining the production process and thus the skill level required.

33 Based on insights from interviews.

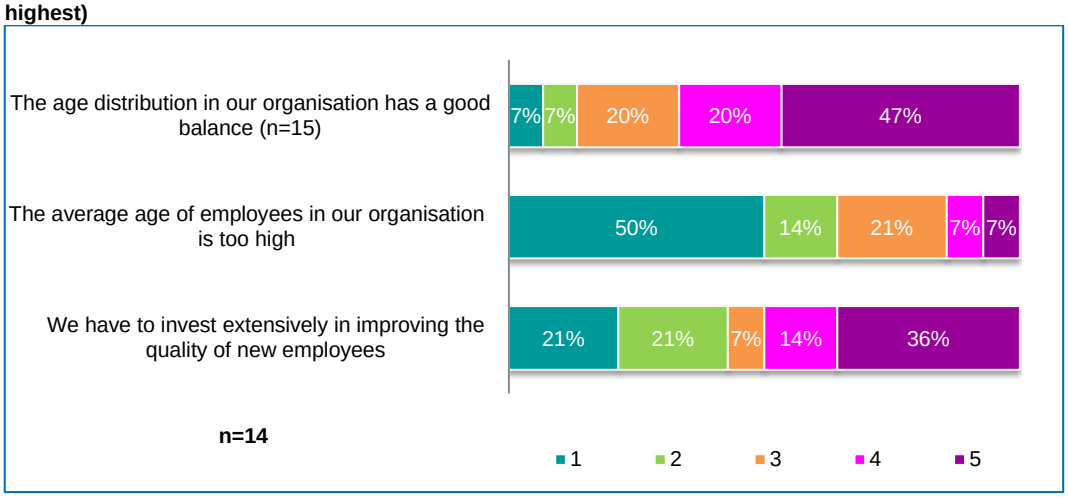
components are then supplied to the contractor and the assembling of the boats is then done by skilled workers who still need to possess craftsmanship in order to finish the final product.

Approximatly two third of the respondents indicate that their company is facing problems with finding employees with the right skill set.[34] Some respondent made additional remarks. It was indicated that after the 2008 crisis hit the recreational craft industry, many employees were laid off and therefore left the industry. Now that the sector is showing some recovery, companies have difficulties finding skilled employees, for example steel workers and painters, which found employment in other sectors. Similarly, respondents pointed out that the issues with respect to finding the right employees is not a matter of quality, but, mainly, a matter of quantity of employees in order to finish the work.

Age –distribution

With respect to the age distribution within the companies that respondend, it was indicated that approximatly 67% of the employees is between 25-40 years old and 33% between 40-55 years old[35] The respondents were also asked to give their opinion on a few statements, which are shown in the next figure.

Figure 3.4 Q: Please respond to the following statements; agreement on a scale from 1 to 5 (5 being the highest)



Source: Ecorys 2015; scale from 'I do not agree' (1) to 'Neutral' (3) and 'I strongly agree' (5).

The responses show that a vast majority of the respondents is satisfied with the age distribution in their company and a similar amount does not think that the average age is too high. We have received a mixed response on the investment required in order to improve the quality of the new employees. We have also asked manufacturing companies if they face problems in finding employees with the right skill set: 2/3 of the respondents replied with 'yes' (see above). This seems contradictory; employees with the right skills set are not easily found, but half of the respondents are also reluctant with respect to investing in improving the quality of new employees.

3.2.3 *International trade flows*

Data on recreational boat trade between the EU and the rest of the world, per country, are available from sources like Eurostat and UN Comtrade. The first contains EU trade data since 1988 by 6 and 8-digit commodity codes. In this stage of the study it was decided to depict aggregate trade data on

[34] Question: Does your organisation face problems in finding employees with the right skill set?(n=14).

[35] Question: Please indicate which age group makes up the largest share of your organisations staff? (n=12).

a 6-digit level, meaning that we present that the date for recreational crafts in three subcategories: inflatable vessels, motor yachts and sail boats.

Export from the EU

In the next table the overall level of extra EU export is shown. A key observation relating to export levels is first of all the 41% drop from 2008-2009. A recovery has been made in the years after the crisis that hit the global markets. However, after the quick recovery in 2010-11, the EU is facing a decrease in export levels again. Resulting in an overall decline of export levels of 27% in comparison to 2008.

Table 3.12 Total (extra) EU export of all recreational crafts in million Euro's

Craft type	2007	2008	2009	2010	2011	2012	2013
Inflatable vessels	45,3	48,1	38,8	35,8	40,7	46	50
Motor yachts	3,181	3,431	1,995	2,594	2,601	2,430	2,455
Sail yachts	546,3	583,4	361,4	418,5	498,2	553,9	463,3
Total	**3,773**	**4,062**	**2,395**	**3,049**	**3,140**	**3,030**	**2,969**

Source: Eurostat international trade data retrieved via Comext, 2014.

The individual country level data show that in 2007 Gibraltar, the Cayman Islands, the Virgin Islands and the US were the main trading partners and they still complement the top 4 (2013). This implies that the trade data seems 'contaminated' in order to avoid taxation. The only thing that can be concluded from this insight is that tax havens are an important factor in this sector, however it does not imply any insights on where the production is taking place or were recreational crafts are traded with. In other words, the tax havens disguise the real trade flows. Currently 17% of the total European export of recreational crafts goes to the US. However, the preliminary insights and the information retrieved from interviews impute a much larger share of total export to the US. The tax havens are however used as an intermediary, which causes a distorted picture of trade flows.

Import to the EU

When looking at import levels, similar trends with respect to export trends are visible. In 2009 the import levels dropped with 40%, while 2010 was a year of recovery, (+175%). However, overall the import levels of 2013 are still 17% down in comparison to the import of 2007. This is shown in the next table.

Table 3.13 Total EU import of all recreational crafts in million Euro's

Craft type	2007	2008	2009	2010	2011	2012	2013
Inflatable vessels	65,3	64,1	49	59,4	64,4	63,3	58
Motor yachts	1,090	1,056	563,4	1,883	1,796	1,553	1,011
Sail yachts	261,9	217,9	194,5	274,2	218,5	202,6	109,6
Total	**1,417**	**1,338**	**807**	**2,216**	**2,079**	**1,819**	**1,179**

Source: Eurostat international trade data retrieved via Comext, 2014.

Two observations relating to import levels are that (i) the EU imports most inflatable vessels from China, and (ii) in 2013 most motor yachts were imported from the Cayman Islands. The above two points are interesting because, first of all, the Chinese manufacturing industry controls the global production of inflatable vessels. This has been confirmed in the interviews with ICOMIA and EBI and is now underpinned with the import data: 65% of all inflatable vessels that are imported are built in China. The second point, again indicates the importance of tax havens. With the current insight it is safe to conclude that it is unlikely that most motor yachts are produced on the Cayman Islands.

The role of the US in the global market

Analysing international trade flows and considering the global market for recreational boats, the focus should also be on the United States' recreational marine market: the US covers approximately 75% of the entire world market of pleasure boats.[36] European interviewees estimate this share a bit lower (approximately 60%). The total US export was in 2013 approximately € 1,1 billion ($ 1,4 billion). The largest US export countries are Canada and Australia, followed by Belgium. The table below presents the US export figures to the EU.

Table 3.14 US exports to the largest EU trading partners (2009-2013, in million USD)

Country	2009	2010	2011	2012	2012 YTD	2013 YTD	Change YTD '12–'13
Belgium	81,8	104	92,1	106,5	93,3	97,3	4.3%
Italy	85	92,9	70,2	53,8	50,2	51	1.6%
Germany	46,2	54,9	51,1	49,9	43,5	37,5	-13.7%
Spain	27,3	34,6	41,5	29,6	25,7	40,8	58.6%
Netherlands	46,9	49,1	57,2	35,7	31	27,4	-11.5%
France	30,6	34,2	29,4	26,7	23,9	23,3	-2.7%
UK	56,1	44,9	38,6	29,6	25,7	19,6	-23.7%
Total US export	1,774	2,194	2,193	2,270	1,838	1,803	-2%

National Marine Manufacturers Association (2014) Pleasure Boat International Resource Guide. A Reference for U.S. Exporters.p2.. Note: Recreational Marine Craft, Parts, and Accessories, as defined by the Harmonized Tariff System. Year-To-Date (YTD) from January–October.

3.3 Market conduct and performance

After assessing the basic market conditions and the overall structure of the market, this section focuses on the **conduct** of the different market players (supply; demand was already discussed in chapter 2), which in turn influence the overall **performance** of the industry. In the next sections we focus on the following elements:

- **The business environment** – We assess how the industry organised in terms of ownership and company structures, and also discuss in more detail the different business models which are used;
- **Innovation and R&D** – Some insights are presented how manufactures deal with innovation and R&D;
- **The industry performance** – Although standardised data (e.g. Eurostat) on the overall industry performance is lacking, some insights and data can be presented on the broader position of the industry.

3.3.1 The business environment

Ownership and company structures

As mentioned before, the majority of the European boat manufactures (95%) is a small and medium sized enterprise. From interviews and our survey it became clear that these SME's are often 'family owned' (limited liability companies) or have one or two private owners.

[36] National Marine Manufacturers Association (2014) *Pleasure Boat International Resource Guide. A Reference for U.S. Exporters.p2..*

Besides these SME's which often either produce customized boats, or in many cases serve as sub-contractors, producing components or equipment, there are a few serial boat producers. Roughly speaking there are 10 to 20 major companies who dominate this market. The ownership structure of these large companies differ. Although some are family owned as well (e.g. Benetti), there are some examples of private equity funds and non-European (apparently Chinese) investors who bought shares of European manufacturing companies like Sunseeker and Ferretti.

Sunseeker & Ferretti

In 2012 The Ferretti Group, the parent company of CRN, Ferretti Yachts, Ferretti Custom Line, and five other Italian yacht brands, formally announced it is being acquired by China-based Shandong Heavy Industry Group for €374 million. SHIG-Weichai Group intends to keep all production in Italy and retain the present management team. Eventually the goal is to integrate Ferretti's engineering and branding strengths into the group's Chinese operations, which are focused on commercial vehicle engines.[37] Also the UK base Sunseeker has been acquired in 2013 by the Chinese Dalian Wanda investment company, buying 92% stake in the company for £320 million.[38] Another example is the San Lorenso's case. This Italian boatbuilder started a joint venture with the Chinese Sundiro Holding investment company. The opening of Sanlorenzo China Holding Limited in Hong Kong represents a central step of the recent agreement with the Chinese group Sundiro Holding, in which Sanlorenzo maintained the Italian ownership and the identity of a "Made in Italy" icon worldwide, with the advantage of a strategic local Chinese partner.[39]

Industry business models

In relation to the actual manufacturing of boats, there seem to be a limited number of business model dimensions. The small and medium sized enterprises in the industry (both equipment and crafts) often have a rather 'traditional' business model and focus on their expertise of specific (regional) niches and do not outsource activities.

As mentioned above, a distinction can be made between the **serial and customised production**. The luxury (mega) yachts are custom build, while the boats under the 24 meters are mainly build by serial production. Some interviewees indicate that more and more 'custom built' start at 20 meters.

The second distinction relates to the **level of integration**: integrated in-house production versus the use of different subcontractors (integration of different product and material flows). From the interviews it became clear that integrated in-house production is mainly present in France, the UK and Germany (although German manufacturers also subcontract Polish enterprises), while Italy has a strong(er) tradition of subcontracting work within the region. Italy has several traditional 'marine clusters' which are based on the historical presence of large companies like Benetti and Ferretti. In the case of super yachts, SMEs often work exclusively for 2-3 builders. Poland is an upcoming market and especially German and Scandinavian companies, but also the Bénéteau Group, are moving part of their (own) production to Poland.

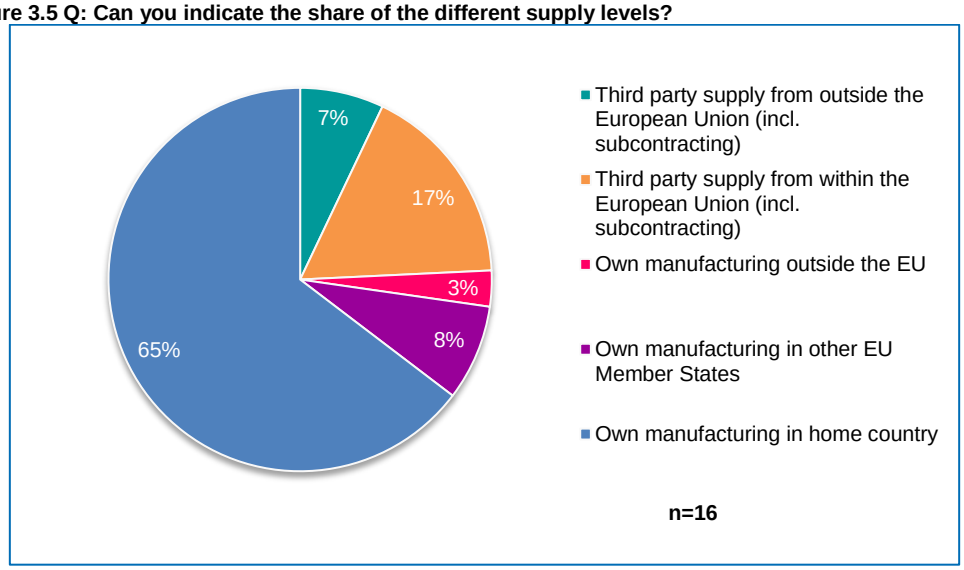
The level of outsourced production outside the EU seems quite limited. Interviewees indicate that for smaller boats for example some moulding is done in Turkey or Tunisia, but that the scale is limited. Italian manufacturers for example stress the fact that their customers want their product to be "made in Italy" as a sign of quality and exclusivity. This view is confirmed in our web-survey. The figure below indicates that nearly two third of the production is done in the home country of the manufacturing companies. Only a small part is done outside the EU.

37 http://www.yachtingmagazine.com/ferretti-group-have-new-owners.

38 http://www.irishtimes.com/business/manufacturing/chinese-company-buys-uk-yacht-manufacturer-1.1435113.

39 http://www.sanlorenzoyacht.com/en-us/Home/Events-News/Latest-News/News-Details/ArtMID/718/ArticleID/5/Sanlorenzo-China-Holding-Limited.

Figure 3.5 Q: Can you indicate the share of the different supply levels?



Source: Ecorys 2015.

Regarding the **engines** it seems that the traditional engine manufacturers more and more try to partner up directly with boat builders, resulting is a higher level of 'exclusivity' and strategic cooperation. New players on the market are mainly focused on low-end outboard engines (< 60 Hp).

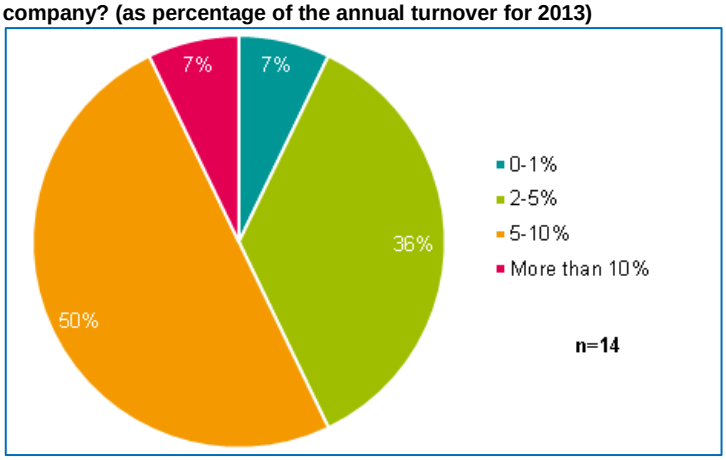
3.3.2 *Innovation and R&D*

The interviews carried out so far indicate that R&D is especially relevant for the (limited group of) manufacturers of large recreational crafts. These manufacturers often have their own R&D-department in cooperation with universities or research institutions. For small and medium sized enterprises the level of R&D of is unclear, but especially the design of new models is an important element. Additionally, it was indicated that a lot of innovations are in fact spin-offs from the automotive industry (e.g. on engines, material use, etc.). Insights generated from the interviews indicated that research and innovation activities focus on more sustainable material use and also fuel saving engines. This is verified in an interview with Yamaha-Motors. Additionally, Yamaha specifically focuses on a trend of developing bigger outboard engines for the larger segment of recreational crafts. This shift is occurring due to the fact that outboard engines are (more) easy to maintain and saves a lot of space on board.

The segment of electric propulsion is rapidly growing. An interviews with the market leader, Torqeedo revealed that a growing segment is interested in alternatives for fossil fuel engines. However the EU market is lacking venture capital funding. Start-ups don't grow into big companies yet.

In the survey we have asked the respondents to indicate the share of investments in R&D and innovation within their company. This figure clearly indicates that a majority of the respondents spends up to 10% of their annual turnover on R&D. This of course differs between SME's and large manufacturers. SME's indicated that they are continuously in the process of innovating their products, not dedicating a special budget to R&D. Whereas large manufacturers, if they have the available funds, may allocate a part of their annual budget to R&D.

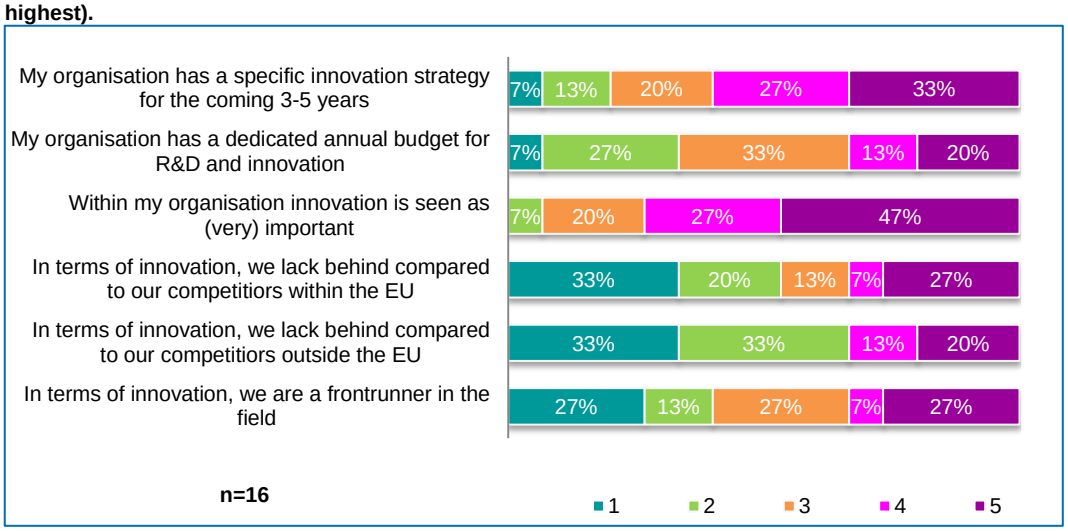
Figure 3.6 Can you please indicate the share of investments in R&D and innovation within your company? (as percentage of the annual turnover for 2013)



Source: Ecorys 2015.

We have also asked the respondents how they perceive their own performance regarding research, innovation and the development of their product (see below). The main observations we can draw from these statements are that, first of all, companies are confident regarding the fact that they believe to have a specific innovation strategy for the coming years. However, if we look at the dedicated annual budget for R&D, respondents seem to be less convinced to have certainty about the allocation of funds for innovation. On the other hand, within the organization innovation is seen by a majority as (very) important.

Figure 3.7 Q: Please respond to the following statements; agreement on a scale from 1 to 5 (5 being the highest).



Source: Ecorys 2015; scale from 'I do not agree' (1) to 'Neutral' (3) and 'I strongly agree' (5).

We received a mixed response on the statement regarding lacking behind or being the forefront with respect to innovation with competitors in the EU. However, regarding completion outside the EU, European manufacturers see themselves as superior regarding innovation. Overall, we can not conclude that respondents agree or disagree with them being the frontrunner regarding innovation. Within the EU competition is fierce and it seems to be difficult for the respondents to argue that they consider themselves as a frontrunner: it is a mixed story. The EU manufacturing industry in general is a frontrunner versus the rest of the world, but inside the EU companies struggle surviving and use innovative products as a means to compete with each other. It is therefor difficult to argue who is most innovative. What we do know from the interviews we conducted is that companies face more and more difficulties allocating funds for R&D. Some interviewees argued that only major

(serial) recreational craft manufactures have enough capital to reserve for innovation. Others, mostly small companies, still need all their funds to keep the company afloat or reserve some capital due to the volatile demand.

3.3.3 *Industry performance*

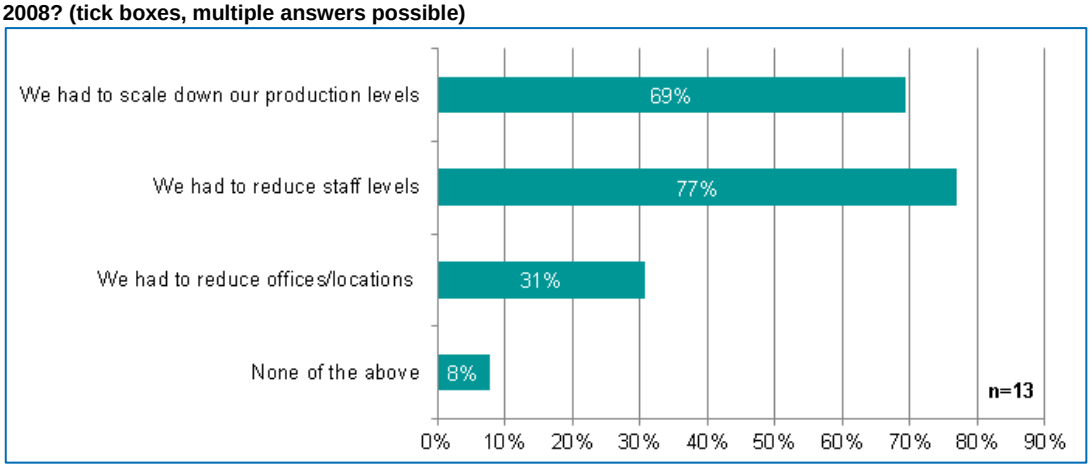
As mentioned before, trustworthy and detailed data about the overall performance of the industry (at the required industry level) is lacking. Nevertheless, we present some other insight on the current state of the industry.

Impacts of the economic crisis and future expectations

The productivity and employment data presented before already showed that the 2008 economic crisis hit the industry very hard. From individual country reports and the interviews became clear that a lot of companies had to reduce their staff levels, reduce the level of production and sometimes had to close down.

In the survey we specifically stipulated the effects of this crisis and have asked manufacturing companies to respond to a number of statements (see below). These results did not generated surprising insights. As the figures from the previous chapter already revealed, this again clearly indicates the effects for the manufacturing industry: production dropped and employees were to be laid off. However, many SME's have indicated in the interviews that, indeed with less work, they still managed to maintain their business.

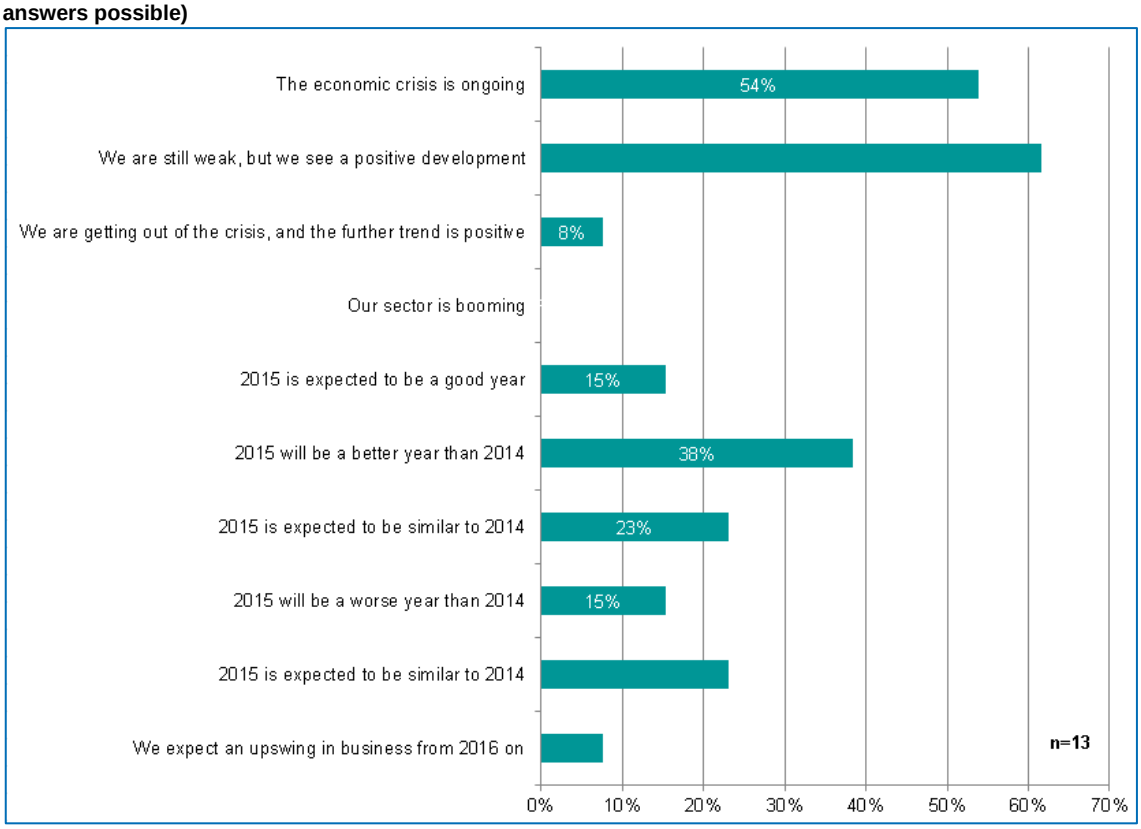
Figure 3.8 Q: Which of the following statements are true as a consequence of the economic crisis in 2008? (tick boxes, multiple answers possible)



Source: Ecorys 2015.

We have also asked the respondents to indicate their expectations for the future (see below). These results clearly visualize the ongoing effect of the crisis. 54% of the manufactures still face the results of the economic crisis and consider themselves not fully recovered. However due to emerging markets some positive sentiment is forthcoming.

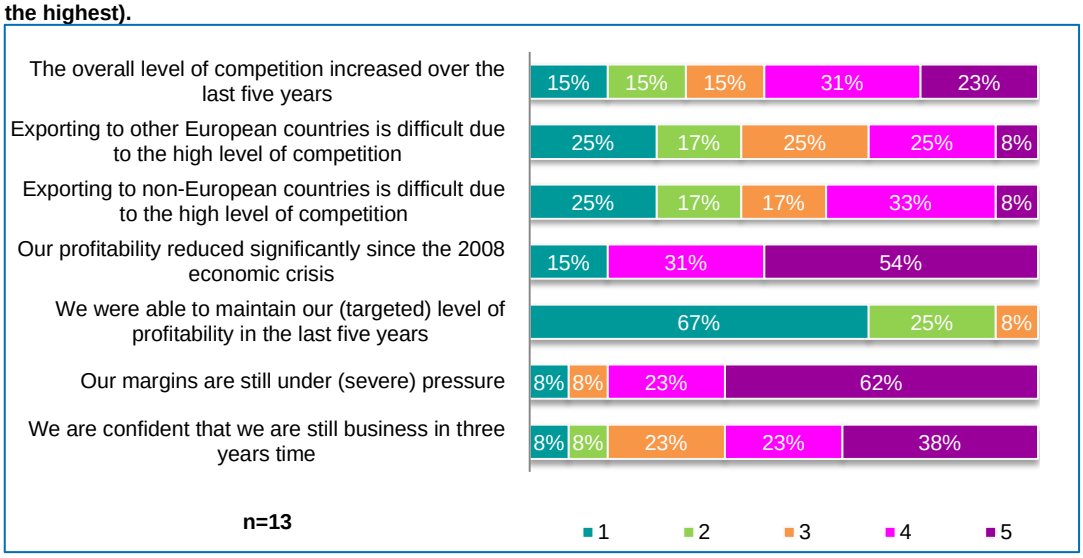
Figure 3.9 Q: Which of these statements on expectations of 2015 is true for you? (tick boxes, multiple answers possible)



Source: Ecorys 2015.

Also other responses regarding the overall 'performance' of individual companies reflect the high impact of the economic crisis and the increased level of competition on the position and performance of the companies (see next figure). Interviewees confirmed that the profitability level is very low; as a consequence of the economic crisis a race to the bottom occurred.

Figure 3.10 Q: Please respond to the following statements; agreement on a scale from 1 to 5 (5 being the highest).



Source: Ecorys 2015; Note: scale from 'I do not agree' (1) to 'Neutral' (3) and 'I strongly agree' (5).

State of profitability for a selection of countries

Due to the economic crisis also the profitability of the industry was put under a lot of pressure. Nevertheless the number of actual bankruptcies seemed relatively low compared to the large

decrease in demand and sales. One of the interviewees indicated that most likely the financial buffers of a lot of SMEs were reduced, but that they were still able to continue their operation. The table below summarizes the profit margins (net profit / revenue) of recreational craft manufacturers for a selection of EU member states.

Table 3.15 Profit margins (in %) on selected countries 2007-2013

Country	2007	2008	2009	2010	2011	2012	2013
Croatia	0.1	-10.0	-20.7	-25.4	-7.3	-1.4	-5.2
Finland	4.7	-0.3	-14.6	-4.0	-4.3	-4.0	-2.9
France	-2.1	0.2	-3.7	3.2	2.9	-2.1	-2.1
Hungary	3.3	-1.2	-0.1	-7.4	3.0	5.2	9.8
Italy	6.2	-1.1	-57.7	-16.5	-41.6	-13.9	-15.1
Spain	2.7	-2.2	-0.9	-14.6	-8.1	-11.4	-6.1
Sweden	4.3	3.5	2.1	-1.9	-1.6	-5.1	-1.2

Source: BVD Amadeus database. Note: the selection was based on the availability and assessed reliability of the data.

This table clearly indicates the drop in profit margins after the economic crisis in 2008, but also shows slow recovery up top this year. Profit margins show how much profit is earned from every Euro worth of sales. Dividing net profit or net loss by sales will result in a net profit margin. A net loss will result in a negative profit margin. Most countries still face an overall negative profit margin.[40]

State of profitability for a selection of large companies

The below tables provides data on company level, with a special focus on the operating revenue of major boat producers. The data clearly indicates the diminishing effects of the global crisis on the operating revenue of the biggest serial recreational craft manufacturers. Sunseeker and Princess, both originated in the UK, did remarkably good in comparison to for example the Italian companies. Bénéteau suffered also a major drop in revenue. Due to the confidentiality of the financial figures we created indices of the actual figures.

Table 3.16 Index of operating revenue on selected companies (2006-2013)

Company	Country	2006	2007	2008	2009	2010	2011	2012	2013
Bénéteau	France	100	123	131	80	94	112	101	99
Sunseeker	UK	100	106	124	118	121	105	123	137
Azimut-Benetti	Italy	100	108	130	84	63	88	87	80
Ferretti	Italy	100	123	139	91	60	69	15	52
Princess	UK	100	116	94	104	105	108	130	125
Hanseyachts	Germany	100	159	210	84	112	129	100	100

Source: BVD Amadeus database. The grey figures are estimations by Ecorys (based on the previous or later years).

Related to the operating revenue, the table below gives insight in the profit margins from the same selection of companies. The table shows the pressure on the profit margins for six of the largest European boat manufacturers. In 2013, most of these companies still faced negative profit margins.

[40] The data used is aggregated data from individual business statistics classified under the NACE REV. 2 C3012 classification. The database used for aggregation does not have information on all companies operating under this classification. Also, profit and EBIT margins were not present for all companies included in the database. For these reasons, the numbers presented in the tables above should be interpreted as estimates, rather than as precise values. In Appendix 3 we presented a table with data availability per country.

The interviews we had with some of the above companies confirmed these insights. Nevertheless, most companies seem to have consolidated their new production figures now and adapted their business model. However, due to a volatile demand and uncertainty on the global market, future prospects are uncertain. Again, due to the confidentiality of the financial figures we created indices of the actual figures.

Table 3.17 Index of Profit margins on selected companies (2006-2013)

Company	Country	2006	2007	2008	2009	2010	2011	2012	2013
Bénéteau	France	100	105	116	-21	45	61	-2	-1
Sunseeker	UK	100	83	120	-77	-473	-87	197	-300
Azimut-Benetti	Italy	100	63	87	-1	7	6	-15	-52
Ferretti	Italy	100	58	-5	-135	-155	-270	-418	-232
Princess	UK	100	110	112	75	90	63	64	65
Hanseyachts	Germany	100	119	69	-425	-161	-74	1	23

Source: BVD Amadeus database. The grey figures are estimations by Ecorys (based on the previous or later years).

3.4 Framework conditions affecting the industry competitiveness

3.4.1 Introduction

In this section the focus is on the broader framework conditions which affect and influence the competitiveness and market performance of the industry. From an analytical perspective, these framework conditions refer to a range of determinants shaping the broader business environment for the industry, including the direct regulatory environment but also more indirect circumstances like the availability of skilled and qualified labour, access to finance and international trade barriers.

Recreational Craft Directive

For the manufacturing industry, the revised Recreational Craft Directive[41] 2013/53/EU will apply from 18 January 2016 is the key regulation which determines the regulatory environment for the industry. In this Directive, the European Legislators, the Council and the European Parliament, harmonised the technical safety and environmental requirements for the industry. In essence, the recreational crafts placed on the market in the EU must comply with these harmonised technical safety and environmental requirements, and meet the administrative obligations defined by this Directive. The safety and environmental requirements refer to the design and construction of the craft with specific limits for exhaust and noise emissions. Additionally, the Directive requires that the manufacturer keeps a technical file of all relevant data and officially declares the conformity of his product. A special marking (CE) must be affixed to the product and users must be provided with detailed information about safety and maintenance.

Overall, the industry is quite satisfied with the amended Directive. Several interviewees indicated that it has been a long process of preparation and discussion, but that the Directive is now 'up-to-date'. Pertaining to the content and scope of the Directive hardly any issues were raised during the web-survey and the interviews. As a result this section will mainly focus on the more indirect framework conditions and not on the Directive itself.

3.4.2 Identification of regulatory or other framework conditions affecting the industry's competitiveness

Insights from the web-survey

In order to gain insights on issues which currently hamper growth of the manufacturing industry we have asked the respondents of the survey to respond to a number of statements. The responses

[41] Directive 94/25/EC No L 164/15 on the approximation of the laws, regulations and administrative provisions of the Member States relating to recreational craft.

indicate that a number of issues are perceived to have a high impact on the growth of businesses, especially (i) high 'barriers' for exporting European products to non-EU countries (e.g. high import barriers), (ii) lack of skilled employees, (iii) lack of proper enforcement of regulation and (iv) high regulatory burdens at national level. It is important to note that one issue is more applicable to SME or large manufacturers than the other. SMEs tend to focus more on the local market or serve as a supplier for large manufacturers. As such SMEs tend to have less issues with regard to import and export of boats. However SMEs do face high regulatory burdens at national level. The formal requirements for procurement procedures are mentioned as a regulatory burden, while regarding the enforcement of regulation some interviewees refer to the importance of a level playing field and the necessity to stick to the rules (payment of taxes, safety requirements, but also the import of uncertified boats from the US by individuals). The barriers for trade will be discussed in more detail below. Other issues which are addressed to be very important for the future growth of businesses and the inddustry are the access to finance, the development of standards and the European harmonisation (e.g. uniform safety requirements, acceptence of licenses, etc.).

Insights from the interviews

The interviews with branch organisations and large individual companies more or less confirm the main insights from the web-survey and a number of issues are flagged to be important for the current and future position and competitiveness of the industry.

Importance of EU-US standards – Nearly all interviewees representing major manufacturing companies stress the importance of the further development of standards for recreational boating, especially between the EU and the US. The interviewees are aware that this is an ongoing, long and delicate process, but see definitely a lot of value added in bringing together (elements of) the European (ISO) and US (ABYC) system. The current discussion on the trade agreement between the EU and the US (TTIP) is also seen as an opportunity for the further harmonisation of standards. Besides the industry itself, the industry sees a clear and important role for the European Commission in stimulating the process (especially within TTIP). Indeed mutual recognition on base of acceptance of international ISO standards could be helpful, on the other side mutual recognition of recreational craft's legislations could be detrimental for the EU as the level playing field is different in the EU and the US. Which means that the US can exploit their comparative advantage.

Furthermore the benefits of harmonization between the EU and the US of environmental regulation are emphasized by interviewees.[42]

Barriers for trade – First of all it is important to make a distinction between SME and major manufacturing companies: SMEs tend to focus on their local market or trade within the EU boundaries. Whereas the 10 to 20 major boat manufactures trade around the world. The European Market Access Database (MADB), which provides information about import conditions in third country market, refers for "shipbuilding" to the US 'Jones Act' which provides for various shipbuilding subsidies and tax deferments for projects meeting domestic built requirements. In principle this act covers 'vessels', but also hovercraft and inflatable rafts fall under this definition.[43] Interviewees did not refer to this specific act as a trade barriers. Overall, the interviewees that represented large manufacturing companies identified only a limited number of trade barriers or trade distortions. Interviewees mentioned explicitly the import tariffs by China and Brazil (the import tariffs in Brazil vary between provinces). Some boat producers even started their own production facilities in Brazil in order to be able to enter the market. Bénéteau for example opened a

[42] Emission regulation EPA in line with RCD2.

[43] European Commission, Market Access Database: Jones Act and Shipbuilding Subsidies, see http://madb.europa.eu/madb/barriers_details.htm?barrier_id=960098&version=4.

production facility 2012 in Brazil (Angra dos Reis) which is likely to be partly triggered by the high import duties.

Access to finance – Several interviewees confirm (as the web-survey already indicated) that the access to finance is seen as an important barrier for the further growth of the industry. A substantial number of recreational craft manufactures seem to face cash flow problems and have difficulties financing their business. This issue can be explained twofold: first of all due to the business model, companies need to purchase components and assemble their crafts, before it can be sold as an end product. Due to volatile demand, the expected revenue is unstable. Secondly, the banking sector and other credit providers are restrictive after the 2008 financial crisis. Given the sensitive and confidential nature of this problem it was difficult to assess the scope and magnitude of this problem via the interviews, but it fits in the broader European picture of the reluctance of banks to provide credit and the lack of venture capital funding especially compared to the American market.

Innovation - EU legislation has two effects, on the one hand strict environmental standards is a driving force to invest in clean engines. Europe's standards to protect water (drinking water, keep oceans clean) compared to the rest of the world, therefore Europe has leadership on the electric boating market. On the other hand electric mobility is a new technology and moves faster than technical standards. Some new regulation will be detrimental for the electric mobility industry. Legislation for electric motors is designed only for motor vehicles on land and the boating industry is lacking adapted standards and legislation. The industry expects to see a boost in the electric propulsion only when the commercial ships, transporting goods, will switch to electric motors.

Lack of harmonization - The lack of a harmonised registration system is seen as a problem (there exits large differences between the Member States in terms of registration of boats). While for example the UK and Germany have a clear (national) registration system, the Netherlands lacks such a national system (several registrations exists next to each other). As a result it is unclear how many boats there are, who is the owner, whether there has been paid taxes / VAT, etc. Furthermore harmonization is lacking with regard to licenses and tax levels between different Member States.

EU regulation - Small and medium enterprises have complained that EU norms stemming from the directives are only available in French, German and English. This means that many small companies with only a few boat builders from other EU member states not always have the language skills which is needed to understand specific EU norms and regulation.

Recycling. Most European countries do not have a structured system set up in order to recycle and demolish used boats, which is a growing concern since yachts tend to have a very long lifespan (up to 50 years). Most interviewees stress the importance of demolishing used boats, since the second hand market is growing rapidly, and creating a barrier affecting the demand of newly produced boats and may also have environmental risks. In some countries, like Germany, 80% of boats for sale, are used boats. In France there are a few demolishing sites and Sweden is setting up structured system with a big recycling company involved, but Germany for example does not have such a facility. In terms of financing two main systems can be distinguished (i) the final user pays for the recycling, as is the situation in France, and (ii) the costs are divided over the value chain. A few important issues that has been raised in the interviews are, first, the industry still did not find a way to recycle thermo plastic composites. In other industries, like the building of windmills, they face the same problem: after 10 years the rotor blades need to be replaced, but it is not possible to reuse the old blades. Another problem is that EU regulation for recycling (health and safety regulation) is a lot stricter compared to building a ship. In other words, it is a lot more expensive and

difficult to demolish a boat, than to build it. This is by no means an incentive to start up a recycling industry.

3.5 Overall analysis: industry competitiveness and performance

In the next table we summarize the main elements which determine and influence the industry's competiveness.

Table 3.18: Overall analysis

SCP-elements	Summary
Basic conditions market structure	
Main industry characteristics and the value chain	- The overall production value in the EU of recreational crafts peaked in 2008 (and 2010) and decreased after the 2008 crisis with 12%. In 2013 the overall production value for the EU28 was approximately € 6.5 billion. In 2013 the main boat producing countries in the EU were IT, NL, GE, UK and FR. The Baltic States and Poland are gaining market share due to the shift of production activities from Scandinavia; - In 2012 approximately 4,500 manufacturing enterprises were present in the EU-28. Compared to 2008 this is a decrease of 4%. Approximately 95% of the companies in the manufacturing sector are SMEs. The high-end of the market is dominated by a small group of major serial boat manufactures.
Employment	- In 2012 the industry employed approximately 34,000 people. Over the period 2008-2012 the overall employment in the manufacturing industry in the EU-28 decreased with approximately 5%; - Most companies have a flexible workforce: subcontractors. Due to volatile demand; - Both basic skills as well as intermediate skills are required (depending on the production method e.g. serial production or custom made), but especially 'advanced skills' have a very prominent position within the manufacturing companies.
International trade	The EU traditionally exported more boats than imported. After the crisis and the diminishing demand in the EU, the share of export increased further, primarily to the USA. In 2013 nearly €3 billion was exported and €1 billion imported. The EU is market leader with respect to the production of sailing boats.
Market conduct and performance	
Business environment	- Ownership and company structures: 95% is SME, often family owned. There 10 to 20 major companies controlling the market of serial boat production. The ownership structure of these companies differ, and some are family owned as well. However there are some examples of private equity funds and non-European (apparently Chinese) investors who bought shares of European manufacturing companies; - Industry business models: There are a limited number of business model dimensions. SMEs mostly have a 'traditional' business model, focusing in their expertise of specific (regional) niches and do not outsource activities. Large manufacturers can be separated between serial and customised producers and also the level of integration might differ: in-house production or subcontracting.
Innovation and R&D	Innovation of the end product is seen is a key factor and eventually if a manufacture is successfully distinguishing from competitors this is a major competitive advantage. The respondents spend up to 10% of their annual turnover on R&D.

SCP-elements	Summary
Industry performance	The aftermath of the economic crisis are still visible and the sector has not recovered yet. The profitability of the industry was put under a lot of pressure after the crisis and in 2013 major companies face (still) a loss.
Framework conditions affecting the industry's competitiveness	
Regulatory and other framework conditions	- The industry did not raise issues regarding the amended and revised 2013/53/EU Recreational Craft Directive. However, large manufacturers face barriers of trade and high regulatory burdens at national level take their toll. The lack of harmonization of standards and difficult access to finance hamper growth; - Due to the long lifespan of recreational crafts and the absence of a demolishing / recycling system in most EU MS, the market is flooded with occasions, resulting in a race to the bottom concerning prices.

Besides this summary table a number of broader observations and (preliminary) conclusions can be made pertaining to the overall competitive position of the industry.

The European industry is weakened, but still a strong global player

The 2008 economic crisis had an enormous impact on the overall position of the European recreational craft industry. While the EU-28 production value of manufactured boats for pleasure or sports peaked in 2008 and 2010, it is in 2013 still substantially lower. This downturn is also reflected in a decrease in the overall number of enterprises and the overall number of employment, although there exist severe differences between the different Member States. Although detailed information is lacking it is clear that also the profitability of the industry is under pressure, resulting in lower investments in business development and R&D, especially under SMEs. In line with the (slow) recovery of the European economy, also the recreational craft market seems to recover slowly.

Nevertheless it is also clear that, although the US market is much larger than the European market and also recovering faster, the European industry still has a very strong global position. The European export is larger than the US export and also the European export of for example motor yachts is more than double the European import. Brands like Group Bénéteau (France), Sunseeker (UK), Azimut-Benetti (Italy), Ferretti (Italy), Princess (UK), Bavaria Yachtbau (Germany), and Hanse Group (including Sealine) (Germany) are well-known European manufacturers with a global client base. At the same time, the "Made in Italy" trademark is a strong and desired 'signal' of quality and status. The recent investments of non-EU / Chinese investors illustrate that the European brands are desirable. The spill-over effects of these large European manufacturers towards other actors in the value chain (mainly SMEs) and nautical clusters are substantial. It is expected that they will benefit from the (slow) recovery of the market.

The industry needs to adapt to a changing world

Like described in chapter 2, the overall demand for recreational crafts in Europe is shrinking (less ownership, less days spend on a boat) and shifting (more rental). The industry is aware that they need to adapt to these changing circumstances and that it is unlikely that the "booming market" of the 70s and 80s will return. It is expected that the coming years some level of consolidation will take place, but most likely this development will be relatively small. This implies that especially the ability of small, often family owned, businesses to adapt to the changing circumstances will determine the overall performance of the industry. Given the fact that the business models of the various (especially SME) boat builders are still quite traditional and have a small production scale, it is uncertain whether they are able to realise that and can recover from the impact of the 2008 economic crisis within 3-5 years. Additionally, we have identified the main barriers for growth:

regulatory differences regarding standards between EU and the US; export barriers due to import tariffs in e.g. Brazil and China and the lack of access to finance for SMEs.

Strengthening of the European industry competitiveness

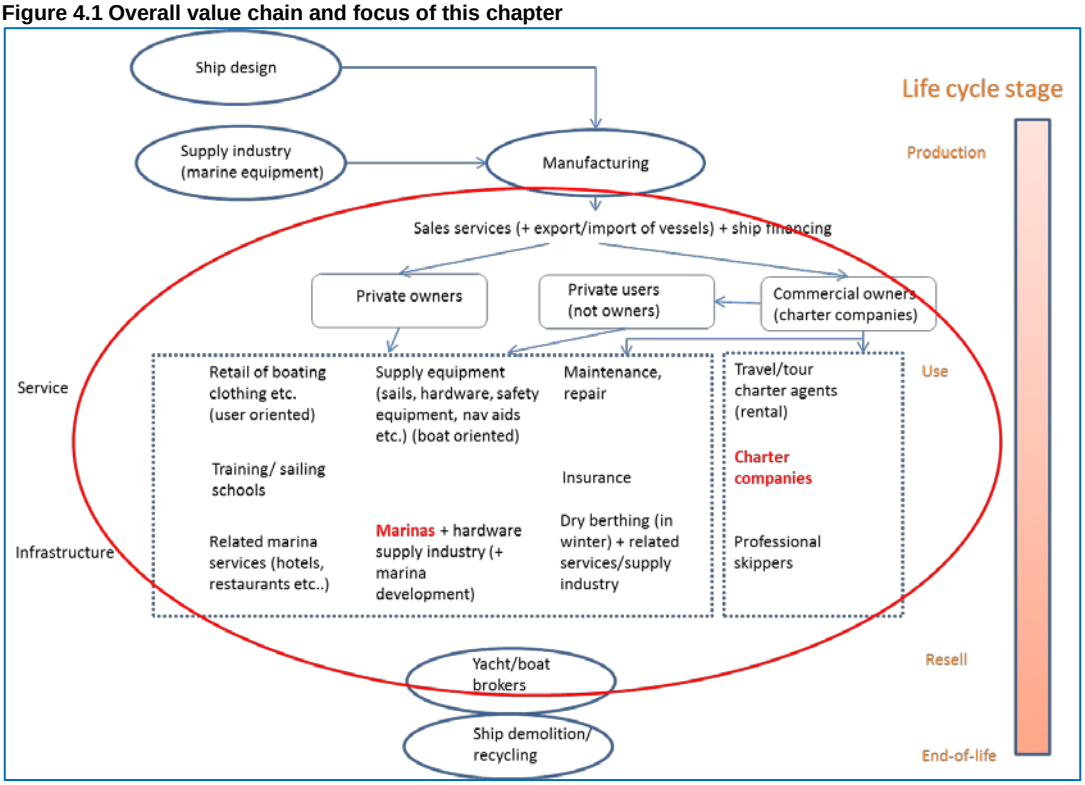
Given the fact that the European industry is mainly active on a open European and global market, the industry is primarily responsible for their own performance and competitive position towards for example the US. This is also recognised within the industry. Value added from the involvement of policy makers is mainly expected from (i) the (continued) standardisation process between the EU and the US, (ii) the continued harmonisation of the European internal market (licenses, safety requirements, etc.) and (iii) the lowering the international trade barriers, like the import taxes in Brazil and China. Specific attention is requested for the more focused use of European investment and R&D instruments, like for example Horizon 2020 (investments in sustainable technology) and the regional funds (coastal development, etc.).

4 Recreational boating services

4.1 Introduction

Service provision is a fundamental part of recreational boating. In order to present the bigger picture of the competitiveness of the recreational craft sector it is thus necessary not only to analyse the boat manufacturing sector, but also to look into the services industry of recreational boating.

Figure 4.1 Overall value chain and focus of this chapter



The delineation of the services value chain is less straightforward than in the case of manufacturing as a wide range of different activities form part of the total chain. These are both related to service provision or in supplying the enabling infrastructure for boating. Some of them are exclusively directed at the recreational boating sector, whereas others have a wider client base. In the above scheme, core activities are **charter (rental)** and **marinas**, which in themselves generate a number of other (indirect) services. The type of additional services provided is depending among others on the size and location of the marina. Additional marina services may include essential services, like fuel and boat servicing, but can also include additional non-marine services such as entertainment and leisure facilities. Other examples of services attached are trading, retail, sailing schools, vessel insurance etc.

To improve our understanding of the services value chain in recreational boating we focus our analysis on the two identified core activities (charter and marinas). The focus on these two core activities was also supported in scoping interviews with the industry.[44] Other service activities are

[44] Interview with EBA.

only covered if their linkage has an influence on the performance of the manufacturing activities under analysis or marinas and rental/charter (indirect relation).

Charter

Charter (boat rental) is a key activity in the area of services connected to recreational boating. Not all consumers who engage in recreational boating want or can own a boat, as owning and maintaining recreational craft might be too much effort and/or too costly. However these boaters still do not want to miss out the experience of yachting and sailing. As a result, rental of recreational craft has become a core activity within maritime tourism. Such a trend got even intensified throughout the crisis where sales of boats drastically decreased, but rentals where much less affected. The difference to the classical manufacturing value chain is that a different type of customer is attracted. This has an impact on business models and strategies of stakeholders.

We distinguish between two types of rental:

- **Charter of the boat (only):** This means that at least one of the persons on board renting the boat has an accepted license to skipper the boat (bareboat charter);
- **Charter including skipper (and crew):** Such a rental includes (at least) a skipper and potentially further crew. The persons renting the service do not necessarily have a license to skipper a boat themselves.

Marinas

The definition of what a marina actually is differs throughout the literature, as it can include quite diverse facilities ranging from simple docking facilities to ports or harbours. This leads to diverging numbers of marinas in statistics, not only because definitions deviate, but also because it is not always easy to make a clear distinction. Our sector survey underlines the diverse understanding of what a marina may be as for example, the number of marinas in Italy estimated by marina operators being active on the Italian market, varies greatly between 543 and 7,000 marinas. The low response rate to this question and big differences in the numbers provided by marina operators emphasize the difficulty of estimating the number of marinas in each MS as well as the EU in general.

A good classification is given by Lukovic[45], who makes a distinction between anchorage/moorings, (wet) berths, dry marinas and marinas (see text box). In this study we focus on marinas only. In addition, findings towards marinas might be equally relevant to other berthing facilities as well.

[45] Lukovic (2013), Nautical Tourism.

Classification of berthing facilities (based on Lukovic 2013)

- **Anchorages/moorings:** part of the water area appropriate for anchoring/mooring vessels in a bay that protects against bad weather;


- **(Wet) Berths:** part of a water areas and coast that is allocated for berthing vessels and equipped with a berthing system (e.g. a quay);


- **Dry marinas:** part of a the coast/mainland that is sectioned off and equipped with supplying storage services;

- **Marinas:** part of the water area and coast specifically built and equipped for supplying berthing services and for guarding vessels and providing marina


In practice, the distinction between a marina and berthing is not always easy to make. This means that when speaking of marinas we mean smaller ports or docking facilities which host exclusively recreational craft, but do offer certain services such as toilets, showers, cafes etc. This means that for example the port of Hamburg is excluded, but (part of) the port of Nice is included.

A further distinction can be made between river, lake, canal and salt water marinas.[46] Marinas along rivers, lakes or canals in continental Europe have rather small capacity. With a few exceptions, they do not exceed 500 berths[47]. On the other hand, salt water marinas are on average bigger.[48] For example, the Port of Camargue, in the South of France between Montpellier and the Parc Naturel Regional de Camargue, is one of the largest marinas in Europe with 4,500 berths and more than 65 restaurants and hotels based at the marina.[49]

As stated, the quantification of the number of marinas depends on the definition used (distinction between harbour, marina and berthing places). Based on the ICOMIA report[50], there are more than 10,000 marinas in Europe. In the ICOMIA report, marinas are defined as yacht harbours, excluding wet berth/slips, open moorings and slipways.[51] The number of 10,000 marinas (including small yacht clubs and municipal moorings) in Europe was confirmed by some of the interviewed stakeholders. Most of the marinas are located in Sweden, Finland, United Kingdom, Netherlands, Germany, France, Spain, Italy, and Croatia.[52]

Related marina activities/services

As shown in the value chain figure above, a marina can play an important role in supporting a range of other services. Partially these are related to spending of boaters when boating for consumption purposes, partially these are services which are related to the boating activity itself. As such marinas are not on performing a recreational boating and berthing function but also support associated consumer services and can form part of a centre for entertainment and leisure and be a hub for local communities.[53] Marinas are even mentioned as increasingly being developed as 'business parks' with a wide range of businesses choosing to locate offices on their premises because of the good location.[54]

Through providing facilities and units for use by other industries, marinas can increase their role as centres for employment, business, skills development and training. Without a well-developed network of marinas in a sea basin the attractiveness of yachting in the area substantially decreases. Also, marinas are a key attraction for tourists within cities and villages along the coast. Various studies indicate: that spending of boaters on the marina activity itself is only part of their total spending.[55]

Based on interviews with marina operators, for some marinas the residential customer is the most valuable customer, because he/she keeps the boat in the marina all year round.[56] That constitutes the core business - about 70% of marinas income comes from residential berthing.[57] The remaining 20% include visitor berthing and 10% comprise sales of other services (e.g. fuel, gas etc.).[58] Other marinas take advantages of the rental business, because they are more depending on frequent in- and outgoing boaters.[59] This is the case especially in Croatia, Greece and Spain, where the share of charter boats amounts even to 100%.

46 Lukovic (2013), Nautical Tourism.
47 Lukovic (2013), Nautical Tourism.
48 http://www.yachtsandberths.com/EUmarninas.html.
49 http://www.yachtsandberths.com/EUmarninas.html.
50 ICOMIA (2014): Recreational boating and industry statistics 2013, p. 32, 36-37.
51 ICOMIA (2014): Recreational boating and industry statistics 2013, p. 40.
52 Ecorys sector survey 2015.
53 McKinley (2012): Drivers for Marina 2020 in the Channel Region: A draft report, p.18.
54 McKinley (2012): Drivers for Marina 2020 in the Channel Region: A draft report, p.9.
55 See e.g. Decisio (2012) Inventory Water sports sector North-Holland (in dutch, BMF (2007) Economic benefits of coastal marinas).
56 Interview with marina operator.
57 Interview with marina operator.
58 Interview with marina operator.
59 Interview with marina operator.

4.2 Basic market conditions and the market structure

4.2.1 Size of the sector

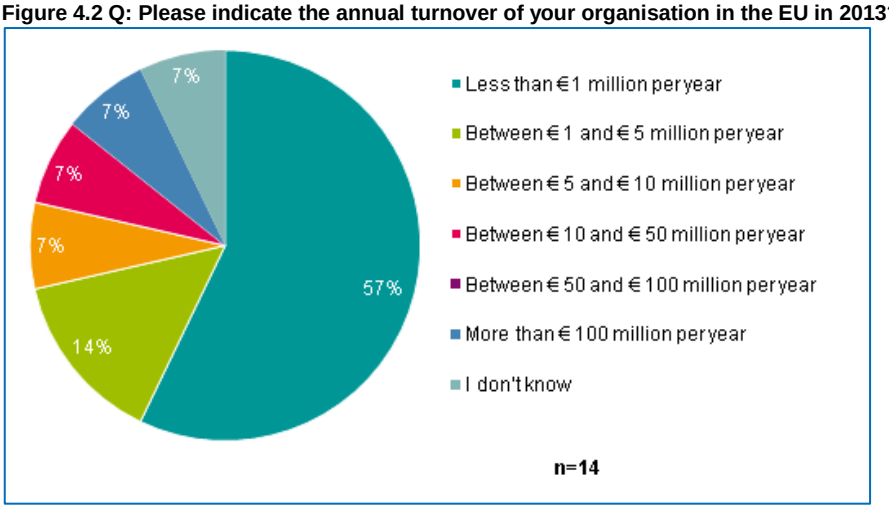
Previous studies have often aimed at assessing the size of the sector in form of a very broad definition covering either the whole value chain including manufacturing and services, or not thoroughly delineating what is actually meant by 'services'. Such estimates describe the sector for example as one generating a gross value added of € 38.7 billion[60] in 2011.

Further detailing these numbers is challenging. Estimates on the basis of available data add to an annual turnover of almost € 6 billion for charter (see explanation below) and almost € 4 bn for marinas. In the following we describe the size of the sector in terms of turnover for both parts.

Charter

Based on the Ecorys sector survey[61] responses from charter companies, 57% of charter in 2013 had a turnover of less than € 1 million per year and 14% estimated their turnover between € 1 and € 5 million per year. Even though most of the charter companies, who participated in the survey, were rather small, one of the companies has stated a turnover of more than € 100 million per year.[62] Most of the charter companies, who participated in the survey, are primarily active on the European Union market, but some of them also offer their services in Oceania, Asian/Middle East, South America, North America as well as other European countries.[63]

Figure 4.2 Q: Please indicate the annual turnover of your organisation in the EU in 2013?



Source: Ecorys sector survey 2015.

Despite the low response rate, the indication of the survey is not contradicting what comes out of interviews. The market for charter is dominated by a handful of very big international companies with high turnovers (about 80% of the market) with a large number of very small and local charter companies providing their services at a small scale.

Using turnover information provided in the ICOMIA (2014) report on the provision of services presented for eight Member States an estimate can be made for total EU turnover by extrapolating numbers (using turnover/GDP data for which a rather linear relationship could be observed). In

[60] Ecorys et al. (2012): Blue Growth Scenarios and drivers for Sustainable Growth from the Oceans, Seas and Coasts.

[61] This survey was conducted in the beginning of the year 2015. Given the just ended year 2014, the project team decided to refer in the question to the year 2013 to receive coherent and complete answers. Many companies would have not been able to provide data for the year 2014 yet.

[62] Ecorys sector survey 2015.

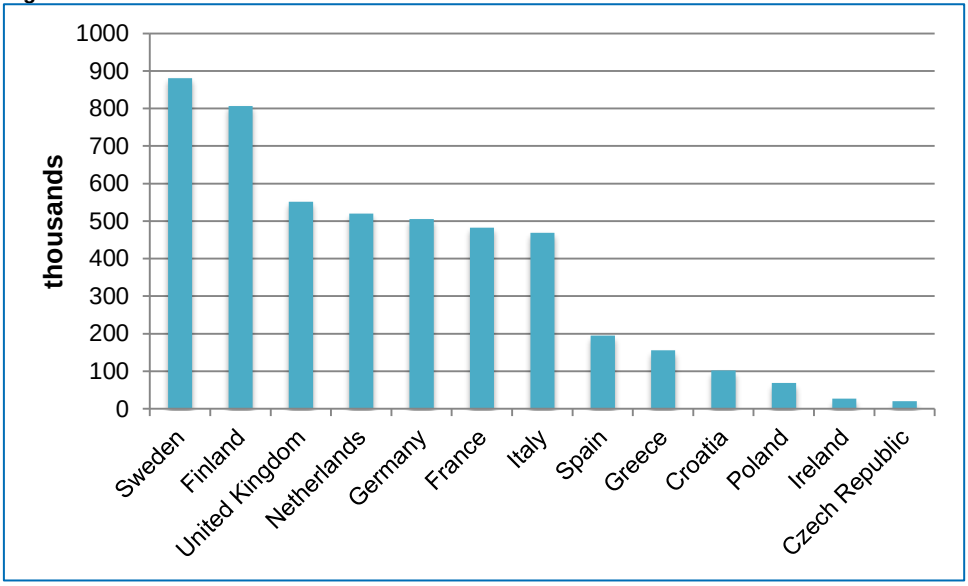
[63] Ecorys sector survey 2015.

addition, ICOMIA (2014) provides a further breakdown for the UK on the composition of the heading 'services'. For the UK, about 22% of the turnover in the "services" category is related to charter services. Assuming a similar composition for other Member States results in an EU estimate of about € 5.8 bn for charter.

Number of boats in the EU

The fact that not all Member States have compulsory and central boat registration systems makes it difficult to quantify the actual number of boats existing and/or in use in the EU. The boat fleet of recreational boats up to 24m being in use in the most important boating countries in Europe (ICOMIA 2014 provides data on Croatia, Czech Republic, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Poland, Spain, Sweden and United Kingdom) however consist of about 9.5 million recreational boats.[64]

Figure 4.3 Number of boat fleet in use[65]



Source: ICOMIA report (2013).

Even though hard to quantify, the existing charter fleet is only a smaller share of all existing boats. However, charter boats are much more used than privately owned boats as charter companies aim to maximise the use of their stock. Private boats are sometimes not used at all for complete seasons.

Marinas

The operation of marinas is not defined as a single activity under the NACE 2 classification, but falls under the code 93.29 '*other amusement and recreation activities*'. The code contains apart from '*operation of recreational transport facilities, e.g. marinas'* also '*operation (exploitation) of coin-operated games*', '*activities of recreation parks (without accommodation)', 'renting of leisure and pleasure equipment as an integral part of recreational facilities', 'fairs and shows of a recreational nature', 'activities of beaches, including renting of facilities such as bathhouses, lockers, chairs etc.'* and the *'operation of dance floors'*. This makes it fairly difficult to estimate the size of the marinas sector in the EU based on NACE2 data. A further analysis in the Amadeus company database reveals that there are 62,689 companies in the EU registered under NACE 2 93.29. Filtering out unrelated companies leads to 365 relevant companies registered in the EU active in the operation of marinas, ports, yacht harbours or similar.

64 ICOMIA (2014): Recreational boating and industry statistics 2013.

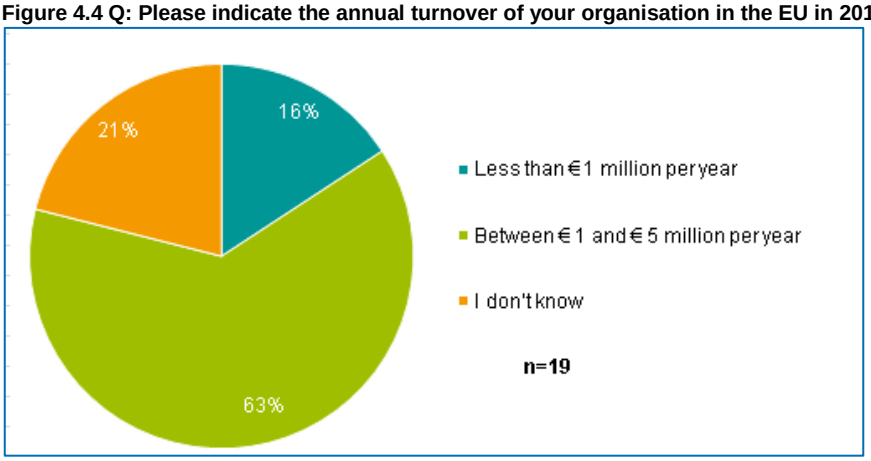
65 Data for all the EU countries are not available.

Extrapolation of the available Amadeus data would indicate a turnover of about half a billion euro. Looking however into estimates based on a specific study carried out in the UK[66], combined with an extrapolation based on ICOMIA data we arrive at an EU estimate of more than € 3.2 bn.

This latter figure is also confirmed when applying the same approach as for charter using ICOMIA data on the 'services' combined with composition of the 'services' sector for the UK. Such an estimate leads to almost € 4 bn.

Based on the available survey responses from marina operators, 63% of marinas in 2013 had a turnover between € 1 million and € 5 million per year and 16% estimated their turnover to be less than € 1 million per year.

Figure 4.4 Q: Please indicate the annual turnover of your organisation in the EU in 2013?



Source: Ecorys sector survey 2015.

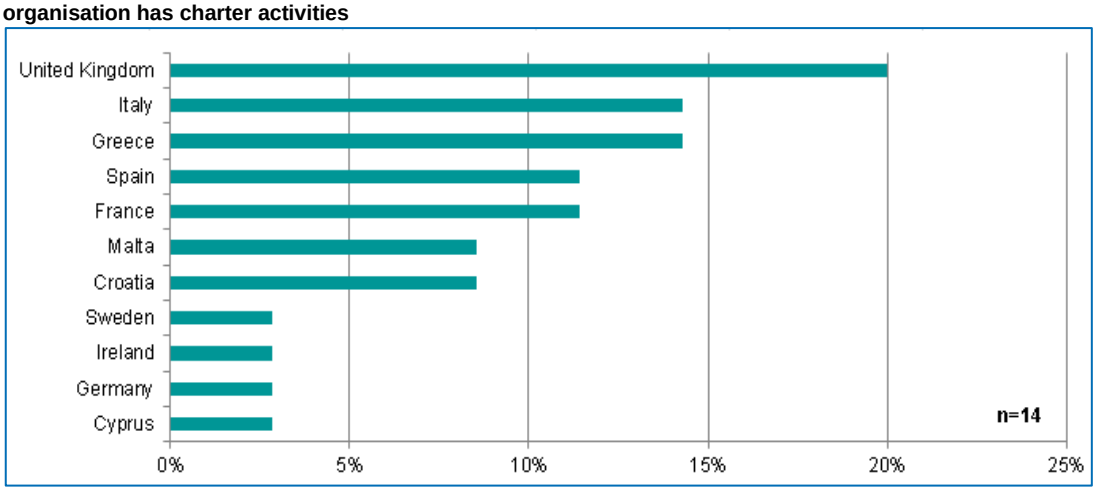
4.2.2 Geographical spread

Charter

The Mediterranean Sea alone attracts 70% of world charter (including crewed and 'bareboat' charters or boat rentals).[67] Looking at the presence of bareboat charter yachts worldwide we can see that EU Member States are leading with Croatia, Italy and Greece.[68] According to our survey, the highest number of surveyed charter companies is active in the UK, followed by Italy and Greece.

[66] British Marine Federation (2011): UK leisure, superyacht and small commercial marine industry.
[67] Ecorys et al. (2014): Study in support of policy measures for maritime and coastal tourism at EU level.
[68] http://www.yachtsys.com/images/yacht-charter-infographic.aspx.

Figure 4.5 Q: Can you please indicate (by ticking the appropriate boxes) in which countries your organisation has charter activities



Source: Ecorys sector survey 2015.

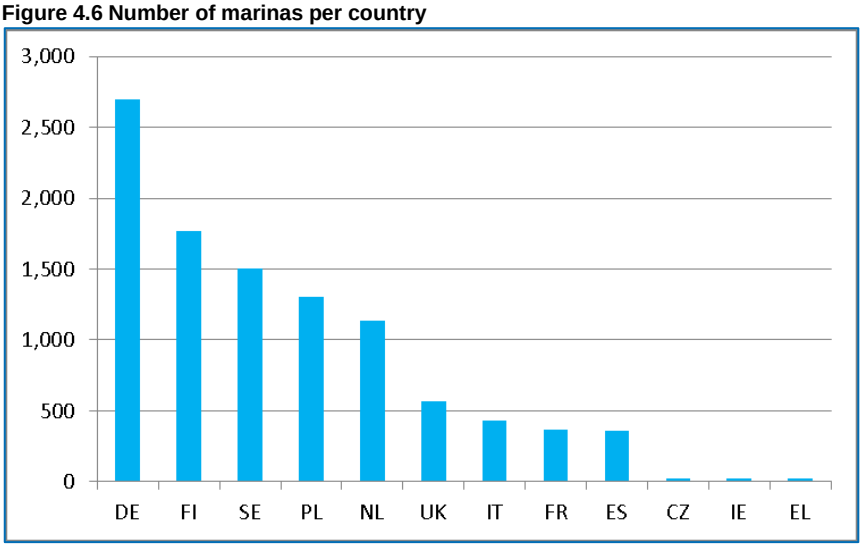
However, as the number of respondents is only small (14 charter companies), and their geographical representation is rather skewed towards the UK these numbers should be interpreted cautiously. Also interviews underline the importance of the Mediterranean for charter companies.

According to a third of survey respondents, clusters are an important factor of success for their business. As example of a cluster in Spain, the Association of the Boating Industry (ANN) and Spanish Maritime Cluster) can be mentioned.[69] Clusters in the sense of an integrated maritime policy for a specific regions support the common branding and attract tourists. This is particularly important for smaller providers of charter which stronger depend on tourists already on the spot than for the big charter companies which are able to better advertise their offer online.

Marinas

Marinas are spread all across Europe. Depending on the exact definition the number differs from a few thousand to more than 10,000 marinas. According to ICOMIA data[70] for 12 Member States the distribution of about 10,000 marinas is as follows:

Figure 4.6 Number of marinas per country



Source: ICOMIA (2014).

[69] Interview with association.

[70] ICOMIA (2014): Recreational boating and industry statistics 2013.

Within presented sample, the highest number of marinas in Europe can be found in: Germany (2,700), Finland (1,770), Sweden (1,500), Poland (1,300), and Netherlands (1,135).[71] Based on our interviews, however, countries like Croatia and Greece were mentioned very often by interviewees as most popular destinations for recreational boating.[72] Based on insights from the survey, 71% of marina operators (n=17) do not have branches in other countries and are only present in one country.

In general, when it comes to the size of marinas in Europe, marinas in the Mediterranean are the largest in size, with an average of 426.83 berths per a marina.[73] 'Typical size' of a marina was estimated to be about 150 to 200 berths in the UK and between 300 and 400 in Portugal.[74] The smallest marinas can be found in the continental part of Europe (freshwaters), with 78.49 berths per marina.[75] However big marinas we talked to provide between 500 and 800 berths.[76] The size of a marina depends on economic activities around it.[77] Well developed services and attractions around the marina as well as good access to transport are important aspects for marina quality.

According to almost half of survey respondents, clusters are an important factor of success for their business and for a third of respondents clusters facilitate marketing of their business. The definition of a maritime cluster building on M. Porter[78] defines it as *"a geographically proximate group of interconnected companies and associated institutions in the maritime field, linked by commonalities and complementarities (external economies)[79]".* The idea of a cluster is to generate collective gains through making use of synergies and cooperation. In the maritime tourism field this is particularly important in terms of collective provision of tourism offer, connecting individual promotions, guiding tourists, common advertising and branding etc. Small individual stakeholders often would not be able to reach a sufficient target group or to fulfil all their requests. A cluster provides the scale to cope with these issues. Consequently beneficiaries of clusters are on the one hand side participants in the cluster such as individual organisations offering a specific product or service e.g. marinas, restaurants, hotels, charter providers, local transport, museums etc., but on the other hand also their customers as they get a better harmonised collective offer, reduce search cost to find what they want, may receive beneficial offers etc. At European level, clusters can be found around e.g. Southampton, Hamburg, Amsterdam, Barcelona, Nice, Mallorca, Brest, La Rochelle, Split, Athens. In case of Italy as an example, marinas in Genova, Rome, Olbia, Palermo, Naples, Bari, Ancona, Rimini, Chioggia, Venice and Lignano are a cluster. An Ecorys (2014)[80] study has identified only in the Mediterranean 117 maritime clusters. These are mainly located around ports or marinas.

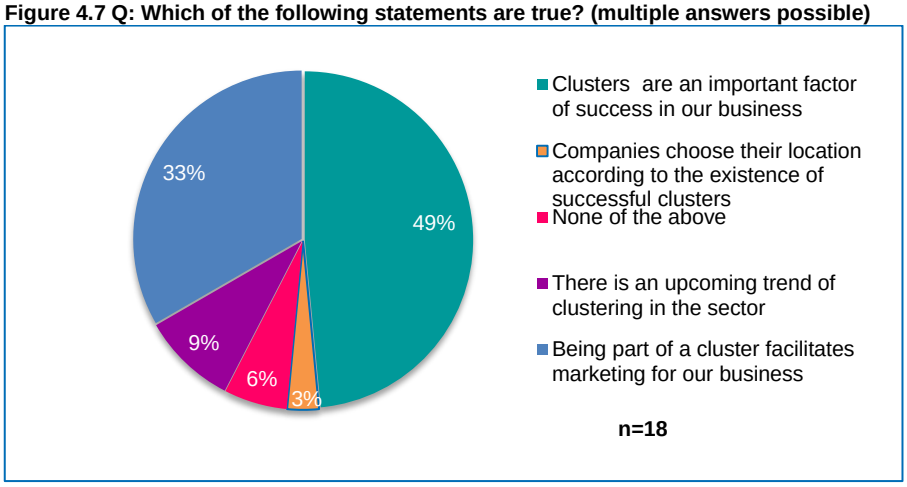
Apart from clusters other forms of cooperation can be found which offer economies of scale. An example of this is Transeurope marinas.[81] It is network of selected European marinas offering reciprocal visitor discounts to their berth-holders. Member marinas seek to encourage cruising throughout a wide network international marine destinations whilst benefiting from shared expertise to advance individual management practice and offer an improved service to the boating

71 Icomia 2014.
72 Interviews with charter companies and marina operators.
73 Kizielewicz & Lukovic (2013) The Phenomenon of the Marina Development to Support the European Model of Economic Development.
74 Interview with marina operators.
75 Kizielewicz & Lukovic (2013) The Phenomenon of the Marina Development to Support the European Model of Economic Development.
76 Interview with marina operator.
77 Interview with marina operator.
78 Professor Michael E. Porter, 20120213, MOC2012 (HBS course), Session 5 – final.
79 Maritime clusters at national level are therefore not the focus of this study.
80 Ecorys (2014): Support activities for the development of maritime clusters in the Mediterranean and Black Sea.
81 Interviews with stakeholders.

community. The association today numbers 69 member marinas with representation in 8 European countries. Involved are especially small marinas, which benefit from being part of the network through being more competitive/offering similar services as big marinas.

Initiatives such as Transeurope Marinas' discounted berthing programme provide clear benefits to both member berth-holders and marina operators. Each marina that wants to be part of Transeurope marinas, has to provide at least 50% discount for its members. Some marinas offer additional benefits like for example e.g. coffee in one of marinas restaurants. Being part of this association has a positive impact on the marinas attractiveness and results in increased number of customers.[82]

Figure 4.7 Q: Which of the following statements are true? (multiple answers possible)



Source: Ecorys sector survey 2015.

4.2.3 Market players

The services related to recreational boating are mainly locally and nationally oriented. The exception is the charter sector which has a strong concentration in the Mediterranean and attracts consumers from all around Europe. A lot of small and medium sized enterprises (SMEs) are active in the recreational boating services.[83]

Charter

The structure in the chartering sector is dominated by five companies (Sunsail, Le boat and Footloose which are owned by TUI Marine, Dream Yacht Charter, Kiriakoulis), which cover about 80% of the European market. The TUI Marine brands alone (about 1,500 boats) already cover about half the market. The remaining market is characterised by a large number of very small (1-2 persons) companies.[84] The charter boat market in Europe is supplied mainly by major European boat builders[85]. Based on the survey results, Bavaria, Bénéteau and Jeanneau constitute the most common boats' brands.

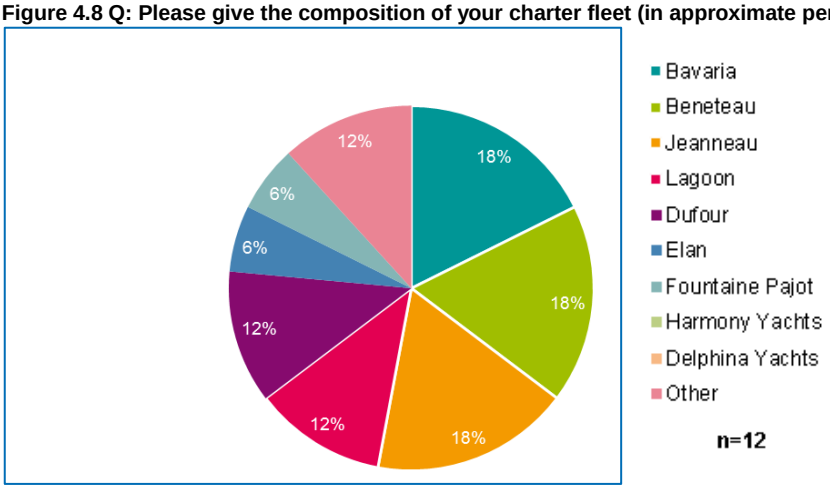
82 Interviews with marina operators.

83 Ecorys et al. (2013): Study on Deepening Understanding of Potential Blue Growth in the EU Member States on Europe's Atlantic Arc.

84 Interview with EBI.

85 http://www.yachtsys.com/images/yacht-charter-infographic.aspx.

Figure 4.8 Q: Please give the composition of your charter fleet (in approximate percentages).



Source: Ecorys sector survey 2015.

Marinas

Marinas are not strongly organised at a European level, although the number of marina associations is on the rise and membership is increasing. Marinas differ significantly in their ownership structure and management. Two main types of marina development and ownership/management can be distinguished in Europe: (1) private investment project, and (2) urban municipal investment.[86] Both forms exist across Member States.

Key private marina investors (turnover of more than €5 mln) are for example: Compagnie des Ports du Morbihan (FR), Yacht Havens Group Limited (GB), Sem des Ports de Plaisance et Equipements Publics de Loisirs du Pays de Lorient – Sellor (FR), Lamda Flisvos Marina α.ε.(GR), Pampas Marina Aktiebolag (SE), Marina Dalmacija d.o.o. (HR), British Waterways Marinas Limited (GB), Quay Marinas Holdings Limited (GB), Quay Marinas Limited (GB), Marina de Vilamoura S.A. (PT), Marina Portorož Turistično Podjetje D.D. (SI), Ste du Nouveau Port Vallauris Golfe-Juan (FR), Marina Punat D.O.O (HR), Marina Hramina D.O.O (HR), Μαρινα Ζεασ A.E. (GR), Premier Marinas (Brighton) limited (GB), Sa du Port de Plaisance-Marines Cogolins (FR).

Further upcoming marina chains are: Mdl marinas (UK), Premier marinas (Uk), ACI (Croatia), K&G marinas (Greece), D-marin marinas (Turkish dogus group owns also 3 marinas in Croatia).

4.2.4 *Employment structure*

According to an earlier study by Ecorys, in 2011, yachting and marinas in the EU generated employment for 372,000 people. These include 253,000 persons directly employed and additional 119,000 persons indirectly employed (e.g. boat manufacturing).[87] Employment in recreational craft sector has increased in recent years in countries such as Denmark, Finland, Ireland, Poland, and the UK, whilst countries such as France, Italy, the Netherlands, Portugal and Sweden have experienced a slight decline in employment since 2003.[88]

As for turnover, precise estimates on the number of people employed in charter and marina are difficult to collect. Using the same approach as for estimating turnover we estimate “Charter” to

[86] Kizielewicz & Lukovic (2013) The Phenomenon of the Marina Development to Support the European Model of Economic Development.

[87] Ecorys et al. (2014): Study in support of policy measures for maritime and coastal tourism at EU level, p. 20.

[88] British Marine Federation (2005), European Overview 2004 – Leisure Marine Industry at Your Fingertips.

employ about 20,000 persons and “marinas” to employ between 30,000-50,000 persons (see below text).

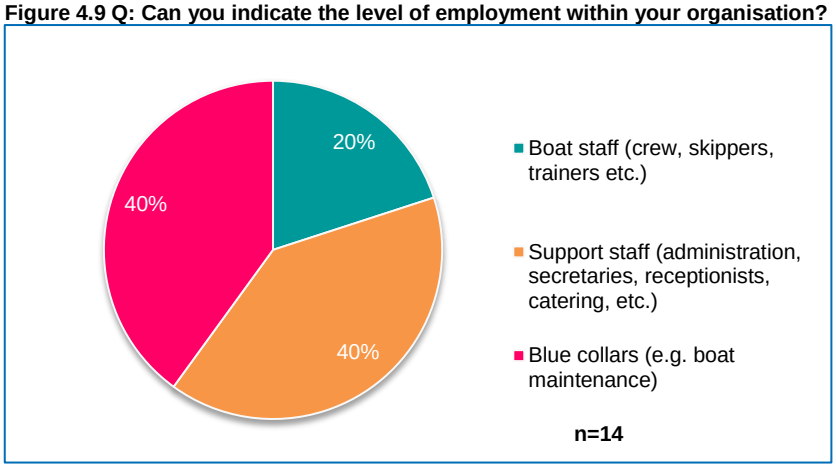
In addition to charter and marinas, the marina and yachting sector hosts some highly skilled employment in the sectors of yacht building and repair, marina construction and maintenance and as well in the category of professional boaters.[89] Other jobs in the sector, such as those in retail and hospitality services, are less skilled.[90] Moreover, part of the employment is seasonal.[91]

Charter

To achieve a size estimate of total employment in charter services, we use a similar approach as used for the EU turnover estimate. Based on the UK share of “charter” in the total “services” category as reported by ICOMIA and using the overall ‘service” size for Europe of the same report total EU employment in charter can be estimated at 22,000 persons. This results in a high turnover (some € 260,000 per person employed, which in turn can be explained by the high capital intensity of the activity (boats)). It should be noted that not all seasonal employment might be included in the below figures.

Based on the survey results[92], the biggest share in charter companies consist of blue collar workers (mainly maintenance related) and support staff (administration, secretaries, receptionists, hostesses etc.), each making up 32% of total number of employees.

Figure 4.9 Q: Can you indicate the level of employment within your organisation?

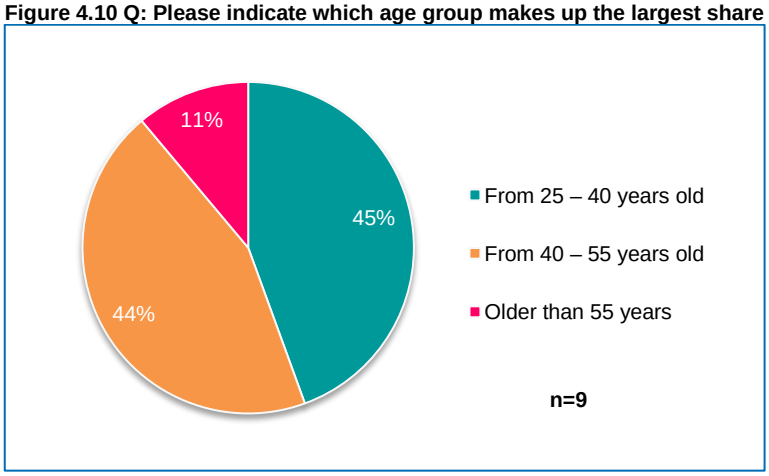


Source: Ecorys sector survey 2015.

Majority of the survey respondents (63%) agree that the age distribution in their organisation has a good balance.[93] The age of the majority of charter companies’ staff varies between 25 and 50 years old. Only a small percentage (11%) of employees is over 55 years old.[94] The interviewed charter companies stated that they often hire young people that just have finished their education. This is especially the case for blue collars workers and hostesses positions.[95] One of the big advantages of this age group is their good knowledge of foreighn languages, in particular English is important.[96]

89 Ecorys et al. (2013): Study on Deepening Understanding of Potential Blue Growth in the EU Member States on Europe’s Atlantic Arc.
90 Ecorys et al. (2013): Study on Deepening Understanding of Potential Blue Growth in the EU Member States on Europe’s Atlantic Arc.
91 Ecorys et al. (2013): Study on Deepening Understanding of Potential Blue Growth in the EU Member States on Europe’s Atlantic Arc.
92 Ecorys sector survey 2015.
93 Ecorys sector survey 2015.
94 Ecorys sector survey 2015.
95 Interviews with charter companies.
96 Interviews with charter companies.

Figure 4.10 Q: Please indicate which age group makes up the largest share of your organisations staff?



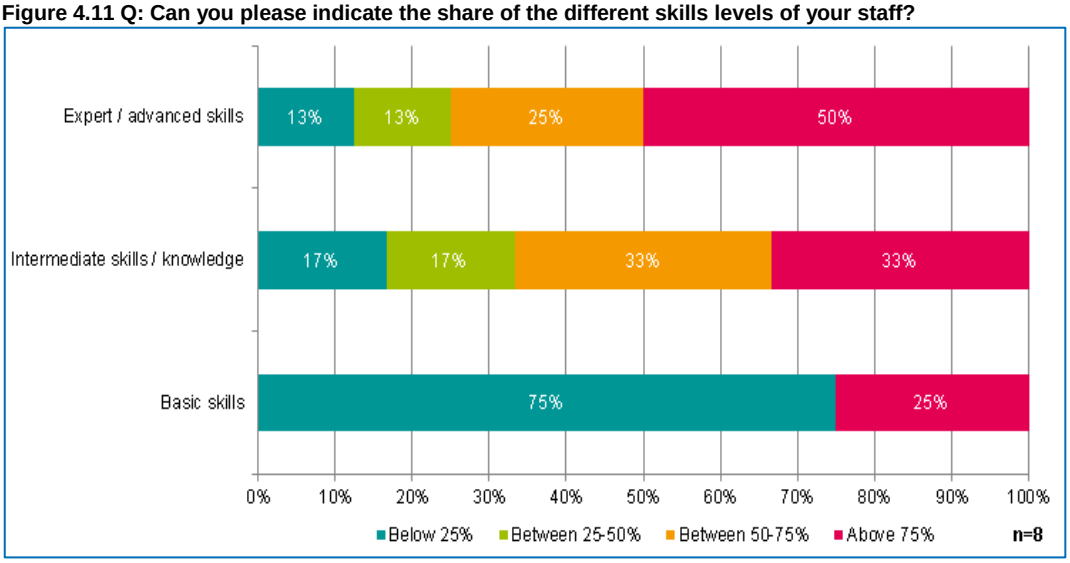
Source: Ecorys sector survey 2015.

The charter companies hire staff with different skills levels. Expert/advanced skill levels have a prominent position within the charter companies (50% of respondents stated that staff with advanced/experts skills represent above 75% in their company). That is in line with the observed education levels of staff (37% of staff with higher education and 42% of employees having secondary education). In addition, language skills are particularly important for employees working on phone/e-mail information for clients, as well as client service on the ground (83% of respondents rated it as being of highest importance).[97]

The majority of survey respondents (67%) does not face problems in finding right employees, although still one third of charter companies report difficulties in finding staff with the right skills.[98] In particular there is a lack of employees with expert/advanced skills (e.g. machine manufacturing and engineers).[99] As an example, one of the interviewed charter companies looking for employees has received around 200 hostess applications, 100 skipper applications, but only one engineer application. In addition, the skippers often are lacking practical skills.[100] In the charter segment there are often people who have no training at all and simply build up competence 'learning-by-doing'.[101]

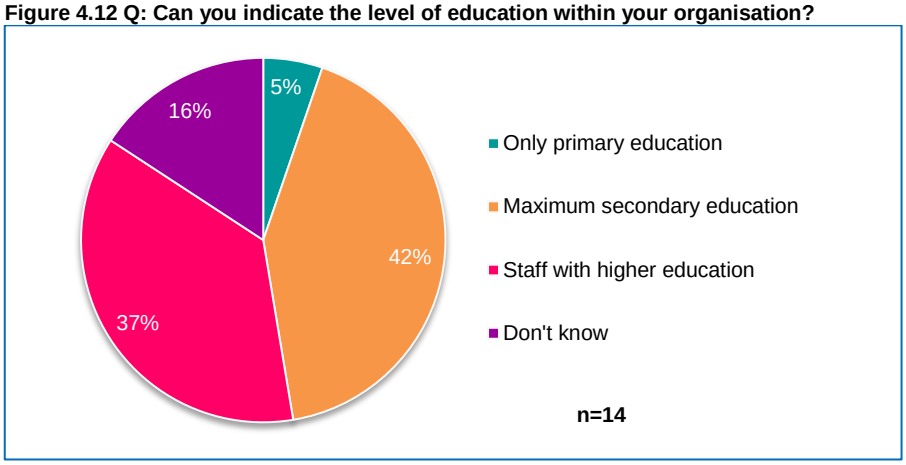
97 Ecorys sector survey 2015.
98 Ecorys sector survey 2015.
99 Interviews with charter companies.
100 Interview with charter company.
101 Interviews with stakeholders.

Figure 4.11 Q: Can you please indicate the share of the different skills levels of your staff?



Source: Ecorys sector survey 2015.

Figure 4.12 Q: Can you indicate the level of education within your organisation?



Source: Ecorys sector survey 2015.

Marinas

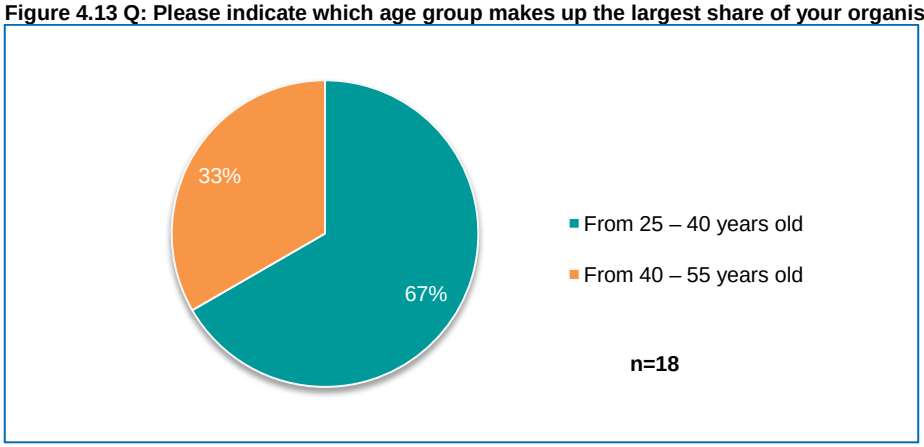
Total employment in marinas in the EU is estimated at 40,000-70,000. Using AMADEUS data as a base, correcting with the British Marine Federation study[102] and ICOMIA numbers leads to an estimate of about 70,000 persons employed. This seems to be confirmed by another UK study[103] which reports an average employment per marina of some 7 persons per marina. Combined with a total number of marinas of 10,000 in Europe this leads to a similar estimate. Yet, again making use of the ICOMIA data for the UK and average of some 4 persons per marina is reported, leading to a lower overall estimate. Also the survey results appear to point a lower estimate.[104] As a result of the above we estimate marina employment in Europe to be in the range of 40-70,000 people.

The majority of surveyed marinas (95%) employ less than 50 people.[105] The staff categories in big marinas like Marina Vilamoura in Portugal employ a variety of people: receptionists and administrative employees, boat yard and cranes employees, maintenance, blue collar workers, electricians, sailor department employees, financial experts etc.[106] The largest share of marinas'

[102] British Marine Federation (2011): UK leisure, superyacht and small commercial marine industry.
[103] British Marine federation (2007): Economic benefits of coastal marinas.
[104] Survey responses indicate employment figures for the following countries: Italy (10,000 employees), Spain (2,500 employees), Poland (1,200 employees), Portugal (750 employees).
[105] Ecorys sector survey 2015.
[106] Interviews with marina operators.

staff (67%) consists of employees in the age from 25 to 40 years old. This was also confirmed during the interviews, where marina managers stated to often hire young people, especially because of their knowledge of foreign languages. Most of the surveyed marina's employees (71%) are hired from the country where the marina is situated.[107] However, nearly one third (29%) of staff is coming from abroad.

Figure 4.13 Q: Please indicate which age group makes up the largest share of your organisations staff?

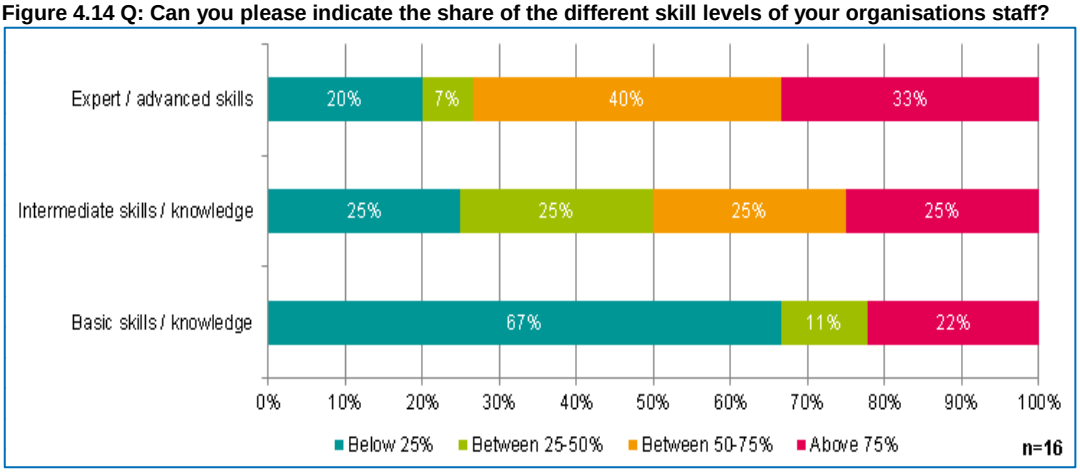


Source: Ecorys sector survey 2015.

Advanced skills have a prominent position, with almost a third of survey respondents stating having a share of expert/advanced skills staff above 75%.[108] In comparison to charter companies, interviewed marina operators were less often mentioning the lack of skill of their employees as a problem. However, in some cases the necessary skills and expertise are missing.[109] It is the case for marina managers, who often see marinas and recreational craft as they hobby, but do not have the required education and expertise in this field.[110] A possible solution to this problem could be a mandatory European marina managers training programme that would be available in across the European Union. So far there are rather short (3-days) courses offered only in United Kingdom by the British Marina Federation, so marina managers from e.g. Netherlands have to travel to United Kingdom in order to participate in this training programme.[111] The aim of such training programmes should be to make marina managers more aware of changing market trends and teach them how to manage the marina taking these trends into account.[112]

107 Ecorys sector survey 2015.
108 Ecorys sector survey 2015.
109 Interviews wit marina operators.
110 Interviews wit marina operator.
111 Interviews wit marina operator.
112 Interviews wit marina operator.

Figure 4.14 Q: Can you please indicate the share of the different skill levels of your organisations staff?



Source: Ecorys sector survey 2015.

4.3 Market conduct and performance

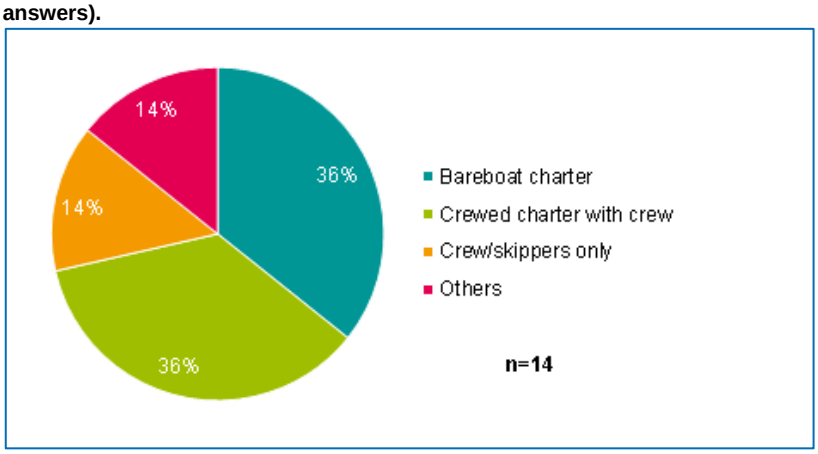
4.3.1 Business models

Business models within the services sector are as diverse as the composition of the services that are supplied to recreational boating. A more in-depth assessment of charter and marinas shows that, also within these two activities, major differences exist.

Charter

Looking at the results of our survey, the large majority of respondents provides bareboat charter (36%) and crewed charter (36%).[113] The provision of only skippers, as well as other services are provided by a minor share of survey respondents. According to Yachtsys and Yachtbrooker, 98% of charter are bareboat charters[114], which appears to be an overestimate based on interview responses and survey results.

Figure 4.15 Q: Please indicate the types of activities that your organisation carries out (multiple answers).



Source: Ecorys sector survey 2015.

[113] Ecorys sector survey 2015.

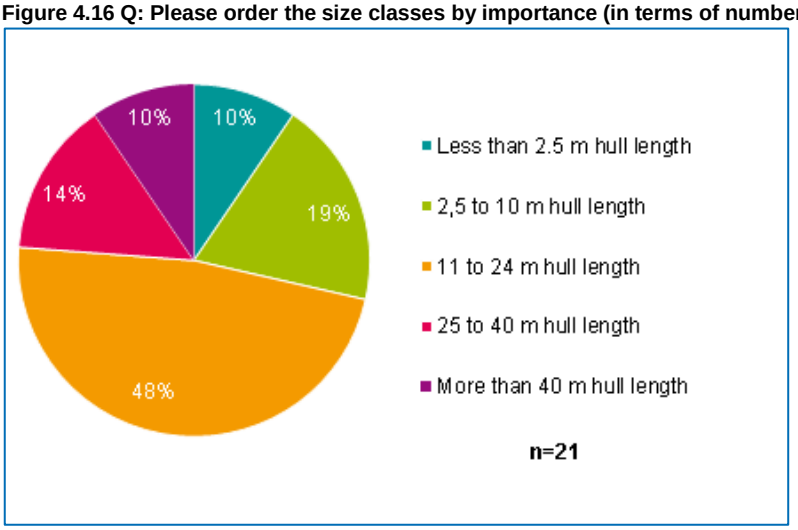
[114] http://www.yachtsys.com/images/yacht-charter-infographic.aspx.

Cruise style of travelling – an upcoming business model

Another business model which has increasing popularity is day cruises or rental of cabins on Catamarans.[115] The type of travelling is like on a Cruise ship, but a ship with a lot smaller size. Such Catamarans can have up to 12 cabins (for max. 2 persons each). They then provide a touristic offer of showing customers around e.g. Corsica (one week south, one week north). Interviewees indicate that such offers already count for substantial shares of their income.

In terms of boats there is a focus on middle-class boats. 48% of the survey responders indicated to provide charter for boats between 11 and 24 metres hull length.[116] According to interviews the average length increased before the crisis, but decreased again afterwards.

Figure 4.16 Q: Please order the size classes by importance (in terms of number of boats) in your fleet.



Source: Ecorys sector survey 2015.

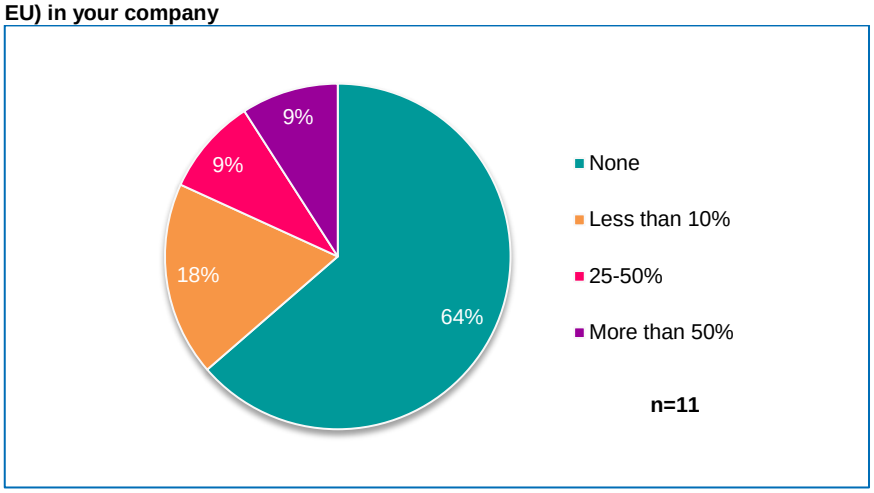
Another business model of charter companies is to invest in marinas.[117] Owning shares of marinas helps to get not only privileged access, but also to improve marinas in the way, they serve best to charter companies.

Further upcoming business models are e.g. the possibility to buy a boat, but leave it in the control of a charter company for a certain period of time.[118] During this time the owner receives a stable income and has the right to use any other boat under ownership of the charter provider for a certain amount of time per year.

Regarding the ownership of the surveyed companies, 64% of the respondents indicated that the companies ownership is in hands of European investors.[119] The remaining 36% of companies have a third country ownership of at least 10%.[120] In this case the underlying ownership structure (including the place of registry) might be (partially) outside Europe.[121]

115 Interviews with charter companies.
116 Ecorys sector survey 2015.
117 Interviews with charter companies.
118 Interviews with charter companies.
119 Ecorys sector survey 2015.
120 Ecorys sector survey 2015.
121 E.g. Dream Yachts was established in 2001 at the Seychelles, and 78% of the shareholder of TUI Group is owned by institutional shareholders which can come from other countries.

Figure 4.17 Q: Please indicate the % of third country ownership. With third country ownership we mean the % of the company which is in the hands of private persons or investors from outside the EU (non-EU) in your company



Source: Ecorys sector survey 2015.

Marinas

The ownership structure of marinas is also determining their business model. If owned by a region or municipal authority, in general marinas have a lower commercial orientation then when owned by private investors.[122]

Examples Compagnie des Ports du Morbihan and Yacht Havens Group Limited

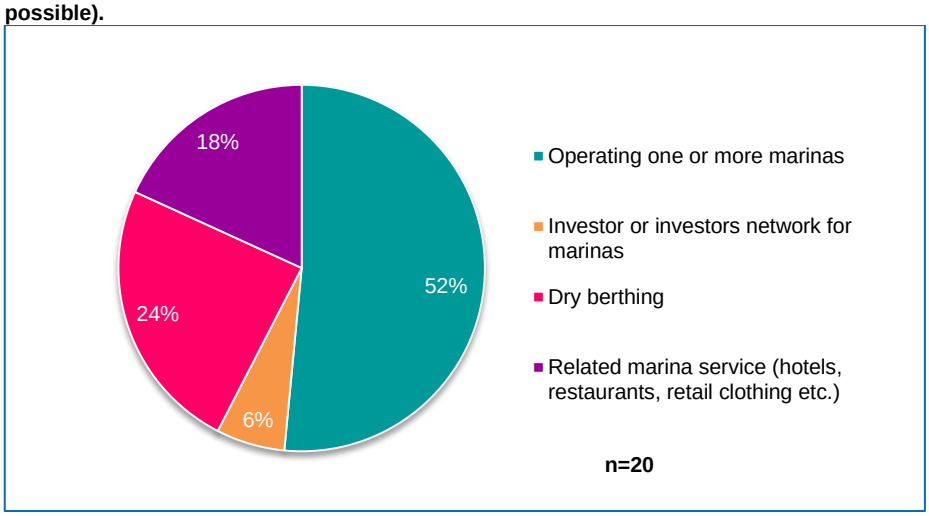
The association "Compagnie des Ports du Morbihan" is a publicly owned organisation founded in 2012, which aims at the development of nautical facilities. It owns 12 marinas and four touristic sites. Its shareholders are one region, one commune and two unions.
http://www.compagniedesportsdumorbihan.com/fr/

Yacht Havens Group Limited was established in 1972 and owns nine marina and dry stacks with over 4,000 berths which operate in the UK and the Netherlands. The business model aims at remaining in the eye of the customer a local enterprise with local staff on the ground. By owning different marinas, it is easier to learn from each other's strengths.
http://www.yachthavens.com/

Marinas main income stream is coming from berthing of vessels.[123] In addition to stand alone waterside operation, a marina may be linked to an upland project. In general, berthing rates are charged on a daily, monthly, seasonal or annual basis and depend on the size of the boat and the position within the marina.[124] Depending on the location of a marina, cash flow can be highly seasonal.[125] Depending on the size of the marina, other services than berthing, such as bars, restaurants etc. can be an integrated part of the offer.[126] According to the survey results, marina operations are obviously at the core, but related dry berthing services and hotels, restaurants etc. are provided by 40%, respectively 30% of the survey's sample.[127]

122 Interviews with marina operators.
123 Interviews with marina operators.
124 Interviews with marina operators.
125 See among others, http://www.slideshare.net/guest5c6461/the-marina-business-1379264.
126 Interviews with marina operators.
127 Ecorys sector survey 2015.

Figure 4.18 Q: Please indicate the types of activities your organisation is involved in (multiple answers possible).



Source: Ecorys sector survey 2015.

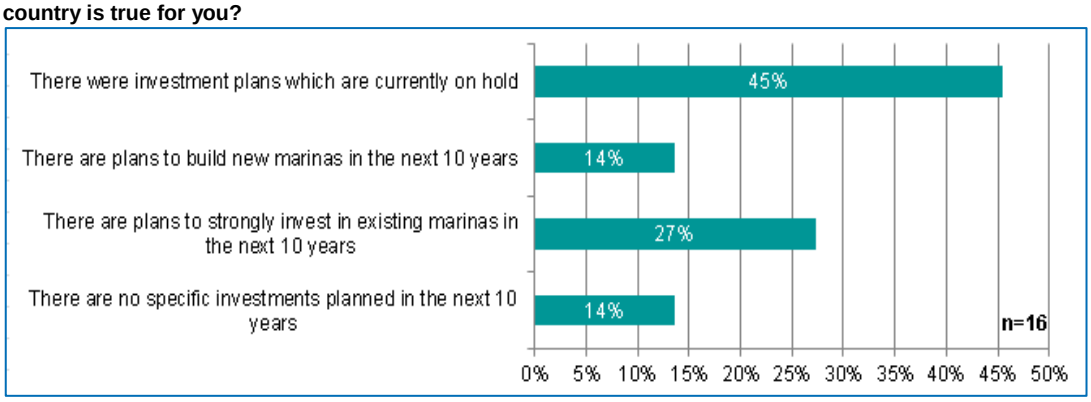
Despite the rise in interest for marina investment in the past, the survey results show that actual plans for marina investments are mainly on hold.[128] There used to be relatively high subsidies in several countries which sometimes led to over- investments.[129] An example is Greece where many marinas got built, but never finished.[130] In some cases this might be done on purpose, because marinas only have to pay taxes in Greece, once they are finished. Hence, they are used in an unfinished way. A German example of overconfidence was the Port Olpenik project. Also in Italy there is the risk of blindly creating overcapacities.[131] This is of course good for customers as it increases price competition. The businesses are then however not sustainable anymore.

At present in many countries only limited marine investment is taking place. In others there are partially enormous investments particularly with respect to environmental protection.[132] This is especially the case in southern Europe (e.g. Italy). Some of the interviewed marina operators stated that even after the economic crisis in 2008 they continued to invest in the marina in order to keep high standard, thus continuing to attract customers.

To be allowed to build a marina as well as having the permission to operate it requires concession.[133] The specific format depends on the country. In Spain concessions usually last for 20 years. This has an impact on maintenance investments: if a concession comes to an end, the holder often reduces the investment in marina's maintenance, as long as he does not know if he can keep on operating the marina.[134]

128 Ecorys sector survey 2015.
129 Interviews with stakeholders.
130 Interviews with stakeholders.
131 Interviews with marina operators.
132 Interviews with marina operators.
133 Interviews with stakeholders.
134 Interviews with stakeholders.

Figure 4.19 Q: Which of the following statements concerning investment plans on marinas in your country is true for you?



Source: Ecorys sector survey 2015.

4.3.2 *Innovation*

Though research and development (R&D) is mainly important for manufacturing, also R&D in the services sector could be relevant to adapt to the changing environment (including demand trends affecting the industry mentioned earlier). However, among industry stakeholders, the overall impression is that little has been done so far to use the advantages of IT-tools, like mobile applications, which could boost the use of services especially among the young boat users.[135]

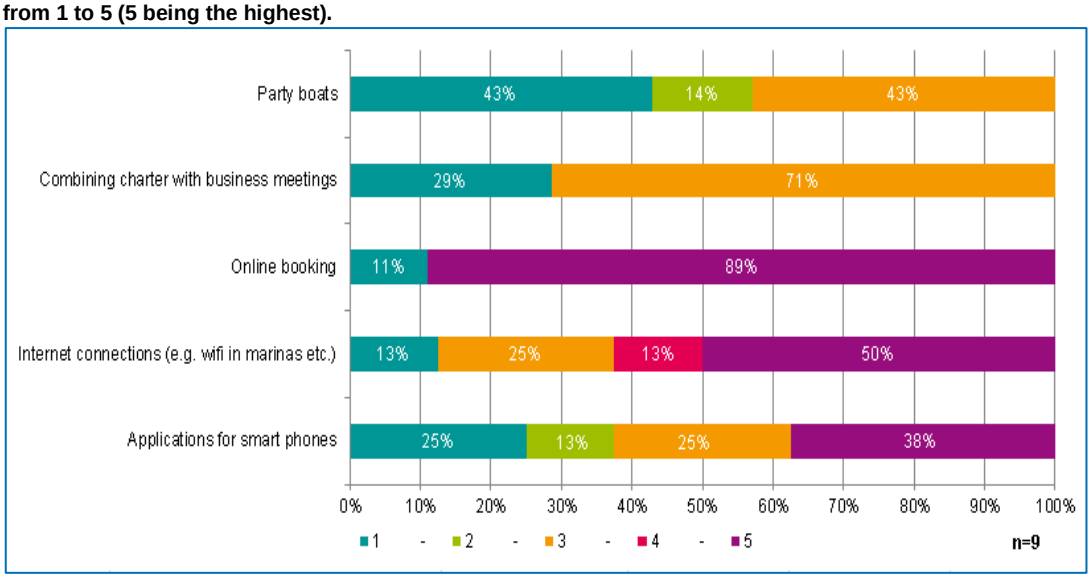
Charter

As mentioned earlier, main innovation among charter companies is the introduction of new business models, which among others include chartering boats with staff on board, such as skippers and hostesses, for events (e.g. conferences, celebrations and team building activities)[136]. As a consequence, yachts are becoming private and exclusive entertainment areas, mixing business with leisure. New ideas coming up such as “party boats” going to different party destinations every day are changing the business models of chartering companies. This gives the impression that there is a trend towards the recreational boating more as a platform for other activities than the initial boat charter. However, as mentioned earlier figures indicate that bareboat charter still remains the most important activity for charter companies.[137]

Our survey shows that the most important innovations in terms of importance for the charter business are IT tools such as online booking, applications for smart phones and wifi solutions.[138] These results are also confirmed through our interviews, where the importance of online presence of charter companies was underlined. Therefore, charter companies invest in more stable online platforms, which are intended to be more user-friendly.[139]

135 Interview with stakeholders.
136 Interview with EBI.
137 http://www.yachtsys.com/images/yacht-charter-infographic.aspx.
138 Ecorys sector survey 2015.
139 Interviews with charter companies.

Figure 4.20 Q: Please rate the following innovations in terms of importance for your business on a scale from 1 to 5 (5 being the highest).



Source: Ecorys sector survey 2015. Note: scale from Not important (1) to Neutral (3) and Very important (5).

Marinas

As marinas are competing with each other (mainly on a regional scale) an incentive is present (though not always expressed equally strong) to develop different new services.[140] Some marinas want to stand out through the use of quality labels. Labels are a possibility for voluntary standardisation and comparison across marinas, but are not yet spread out enough to be recognised by most users.[141] The most commonly used marina quality labels include the Gold Anchor Quality Scheme and Blue Flag.[142] Such quality labels promote sustainable development of marinas and the surrounding areas. The interviewed marina operators were in favour of quality labels, however they also stated that they are not equally good.[143] The Gold Anchors Quality Scheme was rated as more demanding and thus more successful in improving the environmental performance of a marina that the Blue Flag label.[144]

Gold Anchors Quality Scheme[145] and the Marina ratings the Blue Flag Programme[146]

The **Gold Anchors Quality Scheme** is a voluntary assessment programme focused on customer service and facilities of marinas and harbours. The Gold Anchor Award Scheme assists boat owners in locating suitable berthing options with identifiable standards of quality and service. In addition, the scheme helps participating marinas to improve their service and to operate to higher standards through benchmarking against measurable criteria.

Any award is a sign of a quality marina with the number of Gold Anchors increasing with the facilities and standard of service to customers, and may be compared to the hotel star rating system. The process includes a 'mystery shopping' element as well as a berth-holder questionnaire and is endorsed by the Royal Yachting Association.

140 Interview with EBA.
141 Interview with EBI.
142 Interview with marina operators.
143 Interviews with marina operators.
144 Interviews with marina operator.
145 http://www.tyha.co.uk/Downloads/TYHA_Gold_Anchor_Info_Pack_2015.pdf.
146 The Blue Flag: Eco-label for Beaches and Marinas (2007).

The **Blue Flag Programme** is a voluntary eco-label for beaches and marinas. The programme is run by the Foundation for Environmental Education (FEE), a non profit non governmental organisation with member organisations in 49 countries as of June 2007.

The Blue Flag is given to beaches and marinas that meet a specific set of criteria concerning environmental information and education, water quality, safety and services and environmental management. The programme is designed to raise environmental awareness and increase good environmental practices among tourists, local populations and beach and marina management and staff.

As of 2007 there were over 3,200 sites awarded with the Blue Flag in 37 countries including countries in Europe, in the Caribbean, Morocco, New Zealand, Canada and South Africa.

Eco-labelling, as the Gold Anchors Quality Scheme or the Blue Flag certification, is a tool that decreases information asymmetry between consumers and services providers. The certification gives boat users information that reveals the relative environmental quality of marinas. This consequently increases demand for this comparatively more desirable recreational opportunity, which can translate into higher price premiums charged by service providers. Furthermore, such a profit incentive can be expected to lead more marinas to make an effort to conform to the requirements for quality certification, in the hope that they too might be eligible for quality label.[147] If marinas are organised privately aiming at profit, ratings are very important to remain competitive. Once a marina has a good rating in a respective area, also the competitors start aiming at improving they standards. This enhances the quality of the services provided.[148] However, as there is no overview of labels available, and existing label might diverge quite strongly, this makes it more difficult for the boat users to understand them.[149]

ADAC Marina guide

The **ADAC marina guide** currently describes about 2,200 marinas in the EU. The marinas are selected according to where ADAC members are around. They then select 'relevant' ones and classify them. By relevant is meant that some marinas e.g. clubs don't want any foreign visitors. In such a case it would be useless to include them in the guide. Also, if there are 10 marinas very close to each other, the ADAC focuses on the 3-4 more important ones. In areas where there are hardly any marinas, also smaller ones are described to sufficiently cover a 'zone'. The ADAC classification has two dimensions:

- ***Spare time & food***: the question is not about what is officially part of a marina, but what is easily accessible. E.g. if there is a supermarket right in front of a marina and thus no market included, they will not punish the marina with a worse grade. The client does not care who owns a facility, as long as it is there. The ADAC does not draw an exact line on what is 'close', but indicatively it is about 500m (In large marinas it is hard to assess for an outsider who owns what, because large parts are often rented out to other providers (supermarkets, restaurants etc.);
- ***Technology and service***.

In principle the ADAC decides itself who to include and classify. Before publishing a classification it however asks the respective marina if they are ok with being included (for example in the recent publication of classifying 'all' marinas in north Brandenburg, about 45 out of 60 marinas were included, the other didn't want to for various reasons). A very small group of marinas doesn't like to be included (e.g. because they don't want tourists to come, or they don't want to get publicity).

147 Interviews with marina operators.
148 Interviews with marina operators.
149 Interview with EBI.

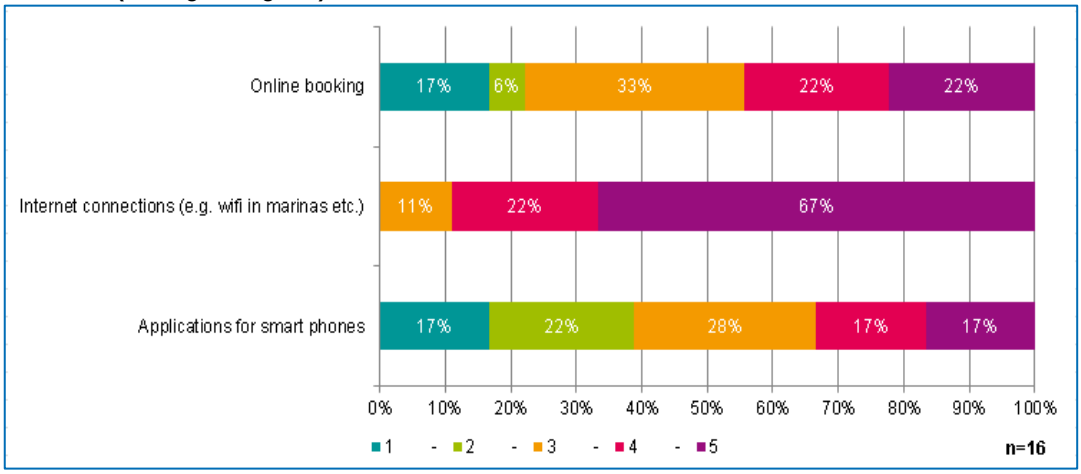
In comparison to other classifications (e.g. the stars) ADAC however does not get paid by marinas. The stars classification is more a business consulting project where marinas themselves ask to be involved and get feedback on what to improve before receiving a final number of points. Hence, they do not involve as many marinas as the ADAC.

There are certain minimum criteria to be part of a classification. If the general appearance is very bad or the jetty very old and seems unsafe, the marinas will not get classified for the other dimensions.

The guide includes also inland marinas in Austria, Germany, Switzerland (only Bodensee), France, Belgium, the Netherlands, Luxembourg (only one at the Mosel).

Our survey shows that the most important innovations in terms of importance for the marinas business are IT tools such as wifi solutions, online booking and applications for smart phones.[150] These results were confirmed by the interviewees, who stated that good wifi connection at the marina is a standard nowadays.[151]

Figure 4.21 Q: Please rate the following innovations in terms of importance for your business on a scale from 1 to 5 (5 being the highest).



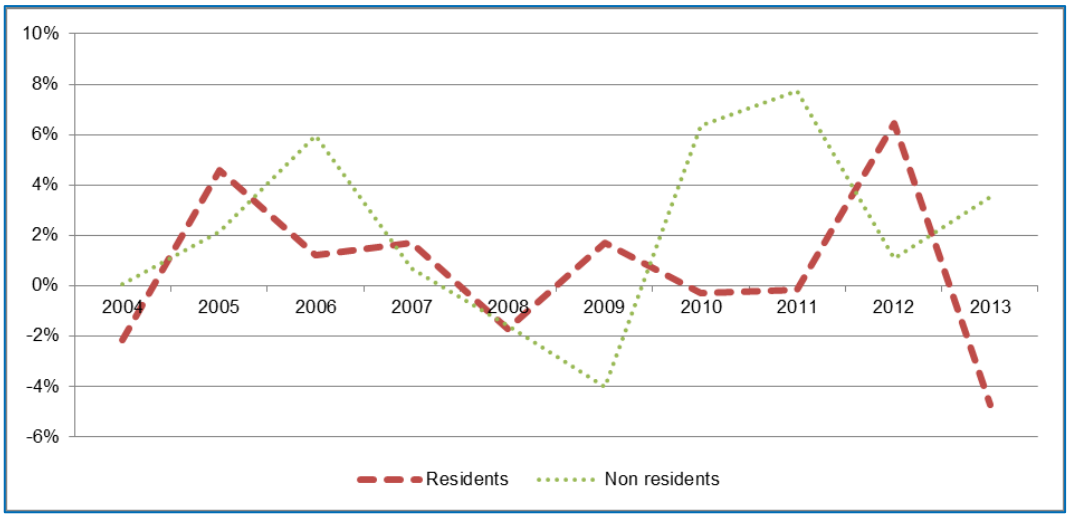
Source: Ecorys sector survey 2015. Note: scale from Not important (1) to Neutral (3) and Very important (5).

4.3.3 Market trends and performance

In general tourism demand, including recreational boating, is fluctuating greatly due to changing economic, financial and political situations. Across sea-basins, available data suggest an even higher level in demand volatility for non-resident (international EU) tourists in coastal regions. In particular, the effect of the economic crisis seems to have had a strong impact on non-residents visits in coastal tourism (more than on other EU regions in the period 2006-2009).[152]

[150] Ecorys sector survey 2015.
[151] Interviews with marina operators.
[152] Eurostat database (2012).

Figure 4.22 Annual growth rates of nights spent in coastal zones in the EU (NUTS 3) comparing residents and non-residents

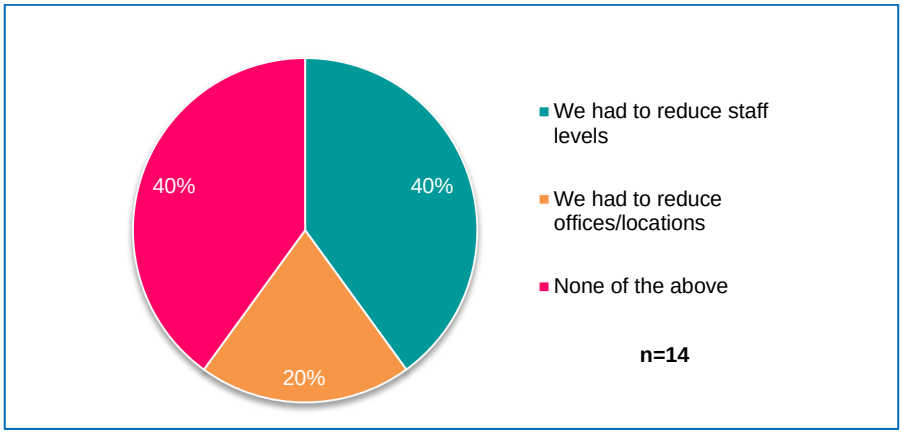


Source: Ecorys estimations based on Eurostat database (2015).

Charter

On average the overall impression of the demand for charter over the last 10 years is positive. Based on survey results, 44% of respondents perceive the development over the last 10 years (despite the economic crisis) as positive.[153] One third (33%) of surveyed companies described their business development as negative. The economic crisis has clearly had a negative effect on employment in charter companies, which could be observed in terms of staff and offices/branches reduction.[154]

Figure 4.23 Q: Which of the following statements is true as a consequence of the economic crisis in 2008?

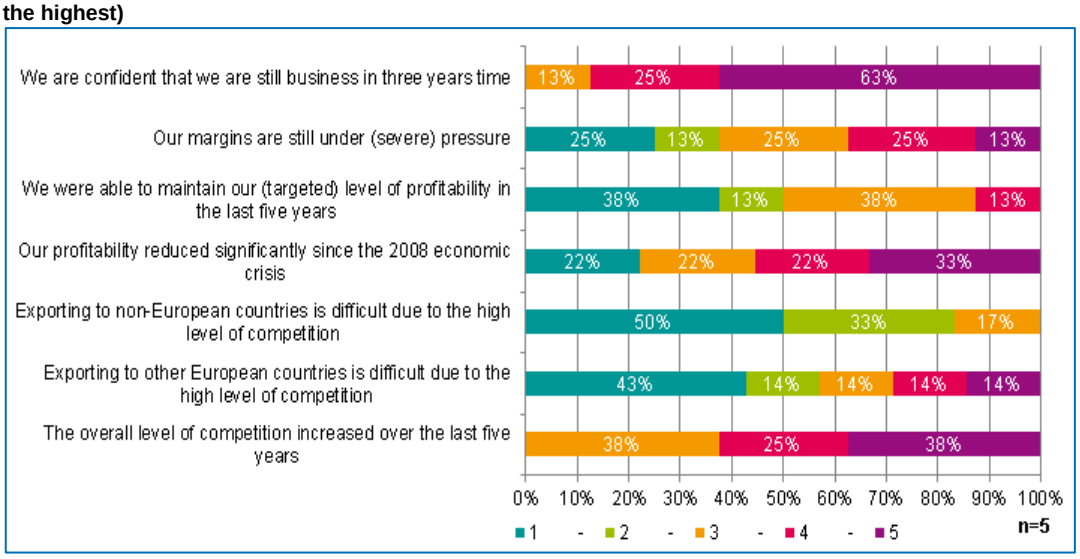


Source: Ecorys sector survey 2015.

Following on the above charter companies observe significant losses due to the crisis and an increased level of competition since then. Nevertheless all respondents expect to remain in business and about two thirds of them are absolutely sure about that.[155] They do not see competition from outside Europe as a threat tot heir business.[156] Still, according to majority of survey respondents the overall level of competition increased over the last five years.[157]

153 Ecorys sector survey 2015.
154 Interviews with charter companies.
155 Ecorys sector survey 2015.
156 Interviews with charter companies.
157 Ecorys sector survey 2015.

Figure 4.24 Q: Please respond to the following statements; agreement on a scale from 1 to 5 (5 being the highest)



Source: Ecorys sector survey 2015; Note: scale from 'I do not agree' (1) to 'Neutral' (3) and 'I strongly agree' (5).

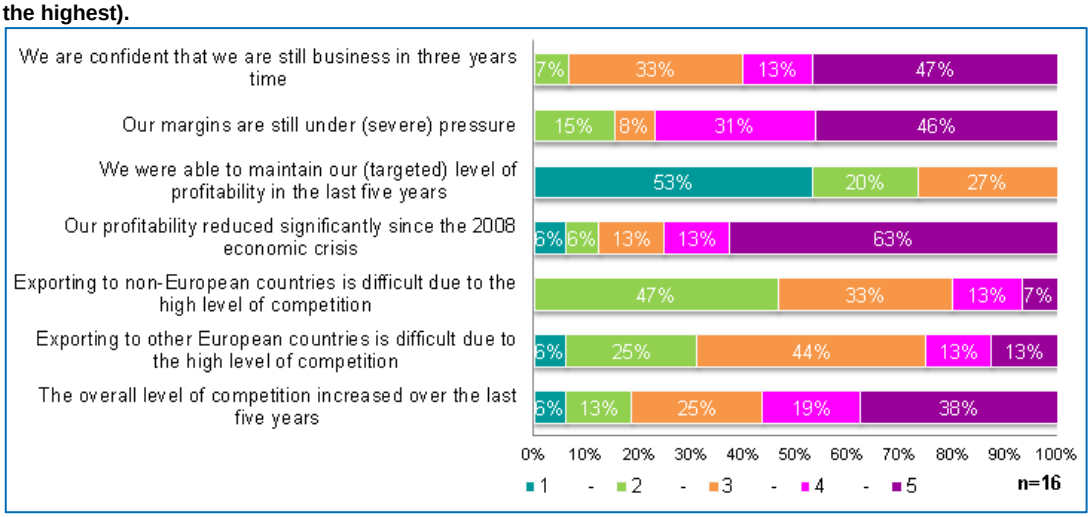
Marinas

The level of competition between marinas is in general low, although some competition at a local/regional level may occur. This is directly linked to the nature of recreational boating in view of distance from the local boat users' market, viability, nautical accessibility and variety of nautical destinations you can reach by boat. Today, marinas compete mainly on pricing, customer service (e.g. regularity and reliability of service, level of hospitality etc.), safety, cleanliness and technical equipment.[158]

The economic crisis had a clear negative effect on marinas, which could be observed in terms of staff reduction and service reduction. The crisis reduced marinas profitability and put their margins under pressure.[159] About 50% of the surveyed marinas had to reduce their staff levels and 38% had to scale down their offer.[160] Regarding the future expectations of marinas, respondents indicate that 2015 is expected to be better than 2014, but no huge improvements are expected.

[158] Interviews with marina operators.
[159] Ecorys sector survey 2015.
[160] Ecorys sector survey 2015.

Figure 4.25 Q: Please respond to the following statements; agreement on a scale from 1 to 5 (5 being the highest).



Source: Ecorys sector survey 2015; Note: scale from 'I do not agree' (1) to 'Neutral' (3) and 'I strongly agree' (5).

4.4 Framework conditions affecting the industry competitiveness

The aim of this section is to provide an overview of most relevant issues and barriers for development and further growth of charter companies and marinas. Regulations as well as other framework conditions affecting the industry competitiveness will be presented. We open the topic with a brief assessment of the survey outcomes and reflections upon them during interviews. We then go further in-depth on specific regulatory issues affecting the services industry competitiveness.

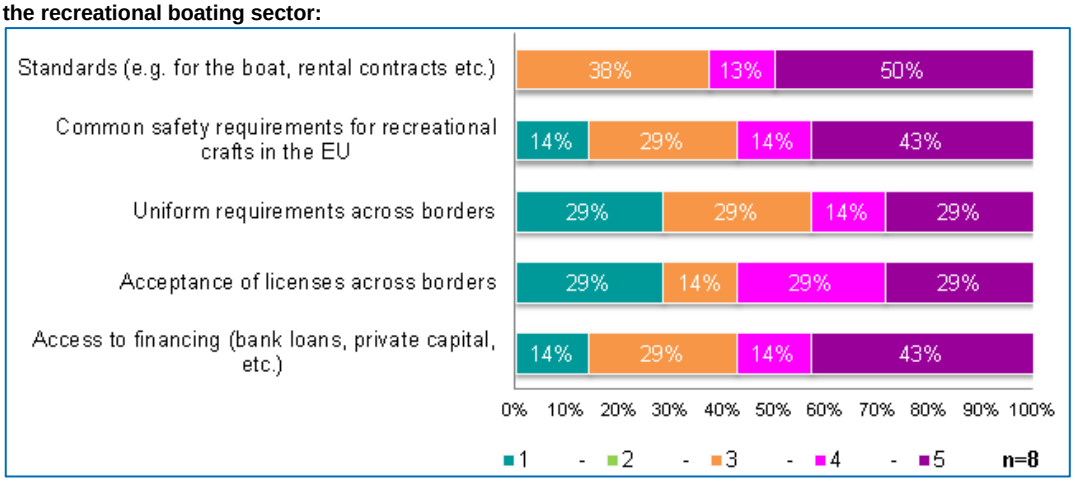
4.4.1 Brief overview of main barriers for charter and marinas

Charter

Based on the sector survey, in which an inventory was made on the relevance of certain issues for charter providers, we can see that standards (e.g. for the boat, rental contracts etc.), common safety requirements for recreational crafts in the EU and access to financing (e.g. bank loans, private capital, etc.) are perceived as the main issues. Interviews with stakeholders confirm this view, but in addition put a stronger emphasis on license acceptance and flag state rules.[161]

[161] Interviews with charter companies and marina operators.

Figure 4.26 Q: On the scale from 1 to 5 (5 being the highest) how relevant are the following issues for the recreational boating sector:



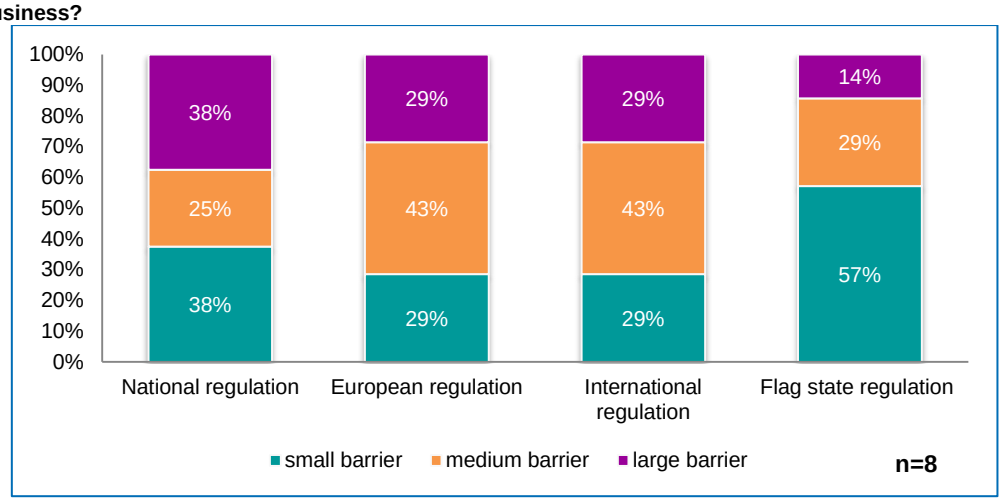
Source: Ecorys sector survey 2015; Note: scale from Not important (1) to Neutral (3) and Very important (5).

This appears to be contradicted with the outcome of the question on what regulations are seen as a barrier to the development of the business (see figure below) where flag state regulation is only seen as a minor issue and particularly national regulation is seen as a large barrier. Also European regulation and International regulation are seen as barriers which may be based on the individual perception of the respondents and biased by a misunderstanding of (the rather low number of) participants in the survey given that both international and European regulation are not seen as barriers in interviews, but the lack of harmonisation across the EU or on an international level is seen as a barrier.[162]

The issue of access to finance is not a specific one for the charter sector, but a problem that is visible in many sectors in the EU following the economic crisis of 2008. The reason why some charter companies may feel the problem more than other sectors may be on the one hand side the capital intensity of the sector as well as the location of many providers which are in Southern European Member States which were hit stronger by the crisis. Providing extra financial support through public mechanisms such as venture capital or the involvement of local charter companies into regional development programmes (e.g. Structural Funds) may support regions in their way out of the crisis. The risk is of course that an increased investment based on public support does not guarantee an increasing demand. Financing companies with risky capital investments can lead to unprofitable businesses.

[162] Interviews with charter companies.

Figure 4.27 Q: To what extent do you perceive regulations as a barrier to the development of your business?

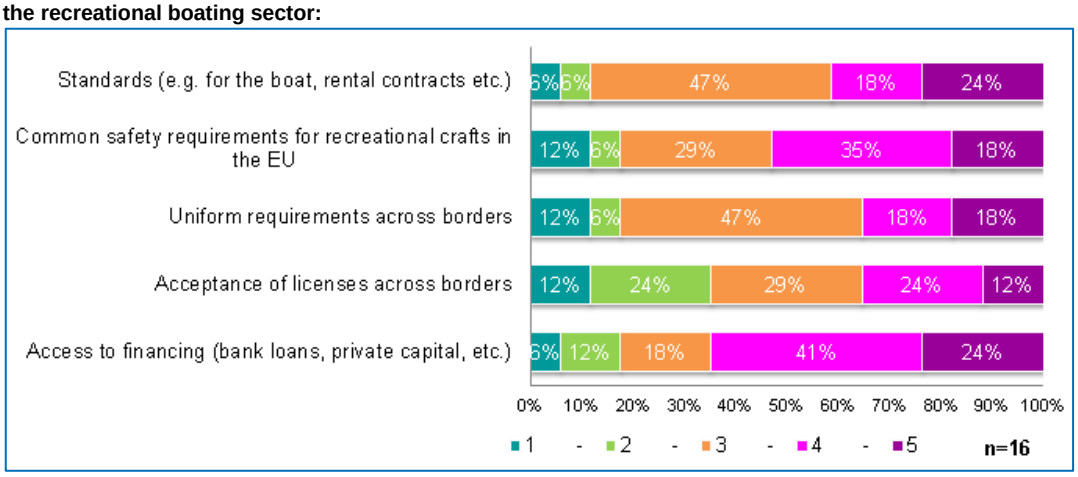


Source: Ecorys sector survey 2015.

Marinas

Comparing the outcomes of charter with those in marinas we see that the most relevant issues for the marinas also include access to financing (e.g. bank loans, private capital, etc.), but also common safety requirements for recreational crafts in the EU.

Figure 4.28 Q: On the scale from 1 to 5 (5 being the highest) how relevant are the following issues for the recreational boating sector:



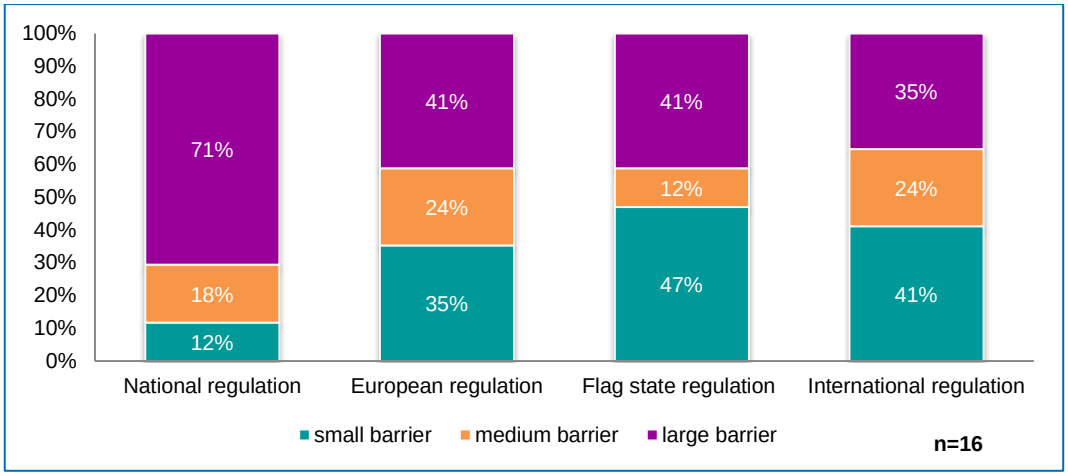
Source: Ecorys sector survey 2015; scale from Not important (1) to Neutral (3) and Very important (5).

Interviews confirm that particularly public investments into marinas have been put on hold or even cancelled following the crisis. Only investments which are seen as directly economically successful or necessary are conducted[163].

Asking for the level of regulation which form barriers for development, the strongest one mentioned are by far national regulations. This is not surprising, given the often strict regulations on maritime spatial planning and compliance with environmental regulation. Interviewees could not explain the reasoning behind the about 40% response concerning the large barrier European regulation. The only possibility is seen that this is due to European environmental directives.

[163] Interviews with marina operators.

Figure 4.29 Q: To what extent do you perceive regulations as a barrier to the development of your business?



Source: Ecorys sector survey 2015.

4.4.2 *Key regulation applicable to the whole services sector*

When speaking about key regulatory conditions for the recreational craft sector we need to distinguish between the type of user (private or professional), the type of use (transport or recreational) and the combination of origin of license, flag state of the boat and coastal state wherein the boat is used. The regulations to follow depend on the specific combination of these factors in a given situation (e.g. private user of a 7m yacht with a license acquired in Poland on a boat flagged in Croatia in national Croatian waters). However, we can distinguish between four broad categories of regulation in general relevant to the services sector and in particular to the charter industry which due to their commercial nature must comply with various different rules and regulations in order to operate legally. The four main categories are:

- International conventions;
- European regulations;
- National regulations;
- Port State regulations.

As stated above, some of the underlying requirements apply only to charter while others also apply to private yachts. In the following section we provide a brief introduction into the categories and the main aspects of them relevant to recreational boating.

International conventions

Basis of the international conventions is the United Nations Convention on the Law of the Sea[164] which distinguishes between flag states (the state where boat or ship is registered or got the permission to go on the water), the international waters and the coastal state (a state in which a boat is operating). International conventions, regulated by the International Maritime Organization (IMO), are often referred exclusively to merchant ships. In their nature they are also usually drafted with the focus on such ships. In reality, they do however also cover recreational boating[165] and may affect the use of recreational craft in an unintended form. For example, according to international law a ship is allowed to enter a coastal state to go directly to a port or to pass through the coastal state territory without having to adapt its equipment etc. according to the rules of the coastal state (it only has to comply to the flag state rules). This rule is problematic for recreational craft as by definition recreational boats usually are not used to transport persons or goods through a territory,

[164] http://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf.

[165] Universitat Politecnica de Catalunya: Study on the license requirements for pleasure boats in the European Union.

but to stay there, go swimming, visit the country, go from bay to bay etc. In such a situation the coastal state can enforce its own requirements on the boat. This issue is particular the case concerning equipment on board.

With respect to general features of the boats the basis is already provided by the **International Convention for the Safety of Life at Sea** (SOLAS)[166] from 1974. Its objective is to specify minimum standards for the construction, equipment and operation of ships, compatible with their safety. On 1 July 2002 however, some new regulations of the SOLAS convention came into force, which directly affect the recreational boat users. This is particularly the case in Chapter V[167] which refers to small, privately owned leisure craft. Therein is Regulation V/34 'Safe Navigation and avoidance of dangerous situations'[168], which concerns prior-planning for the boating trip, more commonly known as voyage or passage planning. It states that a recreational boat user should particularly take into account some points when planning a boating trip as weather, tides, limitations of the vessel, safety equipment and experience and physical ability of the crew, navigational dangers, contingency plan and information ashore.

Another Convention involving recreational boating is the **International Convention for Preventing Collisions at Sea** (COLREGs).[169] This Convention requires skippers to ensure that the correct lights and shapes are carried, to know the steering and sailing rules and the sound and light signals.

The **International Convention for the Prevention of Pollution from Ships** (MARPOL)[170] is the main international convention covering prevention of pollution of the marine environment by ships from operational or accidental causes. MARPOL also applies to recreational boats and the skippers should not discharge oil or drop garbage into the sea.

All international conventions apply to recreational craft in the EU unless they overlap with the rules of the EU legislation (e.g. Recreational Craft Directive 94/25/EC).

Relevant European policies

The **European Strategy for more Growth and Jobs in Coastal and Maritime Tourism** (2014) includes the following actions relevant for the recreational craft sector:

- Strive to close gaps in tourism data availability (in particular coastal and maritime);
- Promote a pan-European dialogue between cruise operators, ports and coastal tourism stakeholders;
- Assess the need for EU action on qualification requirements for professional yacht skippers and recreational boating;
- Assess the need for EU action on provisions for nautical tourism safety equipment[171].

Thus, the strategy stresses the importance of a competitive, smart, safe and sustainable recreational craft sector in Europe.

Worth mentioning is also the EU **Marine Strategy Framework Directive** (2007)[172], which outlines a transparent, legislative framework for an ecosystem-based approach to the management of

166 http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Safety-of-Life-at-Sea-(SOLAS),-1974.aspx.
167 https://mcanet.mcga.gov.uk/public/c4/solasv/index.html.
168 https://mcanet.mcga.gov.uk/public/c4/solasv/index.html.
169 http://www.imo.org/en/OurWork/Safety/Navigation/Pages/Preventing-Collisions.aspx.
170 https://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-(MARPOL).aspx.
171 European Commission (2014): European Strategy for more Growth and Jobs in Coastal and Maritime Tourism, p.5.

human activities which supports the sustainable use of marine goods and services. The directive aims for achieving 'good environmental status for coastal and marine ecosystems around Europe by 2020.

The most relevant directives for the recreational craft sector at European level include: the **Directive 2013/53/EU**[173] on recreational craft and personal watercraft and the **Directive 94/25/EC**[174] on the approximation of the laws, regulations and administrative provisions of the Member States relating to recreational craft. However, both documents focus on the manufacture side of recreational craft.

National regulations

According to international law, it is a Flag State's[175] responsibility to enforce the international conventions. Additionally, given that the EU is no Flag State, everyone of the 28 EU Member States has it's own Flag State national requirements, which are usually published by means of Merchant Shipping Acts, Laws and Regulations[176].

These requirements apply to ships registered in that country as well as ships entering the coastal area not covered by the International Convention which allows them to pass through or deliver persons or goods to a port. This means that Flag State rules apply also to recreational craft present in coastal waters of that Flag State. Consequently, recreational craft skippers entering a territory of another Flag State in principle have to follow the requirements of both, their Flag State as well as the coastal state.

Port State regulations

Each Member State's government, which is contracted to the international conventions, is also obligated to regulate visiting vessels that are registered in foreign countries. This regulation is done by means of Port State inspectors, which are carried out by the same surveyors that conduct Flag State inspections or sometimes by teams of inspectors, depending on the size of the country, port and Flag/Port State organizations[177].

In this respect, it is especially important to take into account the pollution, navigation, ballast and anchoring/berthing requirements.

Standards

Standards are necessary to provide users and customers' clarity on what they need to do when using a boat and what they can expect from service providers. Currently various stakeholders are working on several ISO standards for the sector. Standards necessary to overcome key barriers in the sector cover:

- Standards for the boat;
- Standards for contracts (rental);
- Standards for complaint procedures (rental);
- Standards for carry-on equipment (e.g. safety equipment);
- Standards to assure quality at marinas.[178]

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172 http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32008L0056.
173 http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32013L0053.
174 http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:31994L0025.
175 Flag State: Flag state refers to the country where a vessel is registered.
176 Manta Maritime: A guide to the mandatory rules and regulations for charter yachts, rev. 2, p.4.
177 Manta Maritime: A guide to the mandatory rules and regulations for charter yachts, rev. 2, p.4.
178 Interview with EBA.

For marinas a minimum quality ISO standard has recently been published (this is a voluntary standard). The aim of this International Standard is to provide yacht harbour operators with a practical tool to:

- promote health, safety, and respect to the environment;
- ensure the compliance with applicable laws;
- help the development of yacht harbours, surrounding spaces, and communities by sharing global practices; and
- provide nautical tourists with harmonized information and services across yacht harbours and to give them a broad choice of offers regardless of their location.[179]

The elaboration of two further standards for marinas is currently in process. They should cover medium standard and high/premium standard yacht harbours.

In addition different authorities and organisation have introduced their own standards and labels. These can be tourist oriented organisations (e.g. ADAC or the Tourism Ministry of Croatia) rating the quality level of a marina (based on technical facilities and level of quality) or organisation focusing on specific issues (e.g. the Blue Flag label).

4.4.3 Identification of framework conditions affecting the services industry competitiveness

General challenges and characteristics of maritime tourism have to be taken into account when assessing the service side of the recreational boating industry. Especially the lack and poor comparability of data, both at local, sea basin and European level, are problematic. Based on available data following market barriers have been identified.

Differences in regulation between Member States

There is a lack of harmonisation of regulation in certain aspects of recreational boating (harmonization takes place in requirements on design, construction and emission characteristics of recreational craft, but to a less extent in the use of boats), which affects the competitiveness of the industry. The EU is no “flag state” which as a consequence means that despite EU regulation, national regulations remain. While this is as such not a problem, the challenge arises when such regulation differs strongly between countries, is hard to understand for users and creates disincentives for users to move to other countries. This is due to the fact that every user has to abide with two sets of rules:

- Country of origin (where the boat was flagged);
- Country of destination (where the boat is used).

For example if a person flags a vessel in the UK it always has to follow UK rules (but not exclusively). When the same person then goes to the Netherlands it also has to follow the Dutch rules. In practice the enforcement of coastal state rules is not always very strict. However interviewees report that in some cases recreational boaters got fined for actions of which they were not aware that these were not allowed, or tools they did not have on board.. This is due to the fact that national rules are not always easily accessible, are often in the national language and in some cases even differ on a regional level (e.g. Spain). Supporting boating associations are struggling with the compilation of comprehensive information for their members. Such a situation disincentivises boaters to cross to other waters outside the flag state and keeps them in their known territories.

[179] https://www.iso.org/obp/ui/#iso:std:iso:13687:ed-1:v1:en.

Key rules of the flag state rules are the qualification of boat and skipper, the safety equipment to carry on board and the carry-on radios. According to interviewees, Member States with particularly challenging rules appear to be Spain, Portugal, Croatia (with increasing difficulties) and Greece. In France e.g. the key issue are the registration documents.

Further factors for complexity are:

- Different treatment between coastal waters and inland waterways;
- Lack of possibility to fully rely on information provided and checks exerted by chartering companies. Interviewees report that given the low regulation of charter companies, it is relatively easy to act as a charter provider or a person to link-up a person with a boat and a person who would like to rent a boat. Consequently there are no quality standards which guarantee that charter providers always provide the person renting the boat with the necessary equipment and instructions on what to do and what not.

Based on interviews with associations, marinas' are mainly struggling with coastal protection laws which hamper the investments into marina development. A reaction on the lack of harmonisation of national requirements on maritime spatial planning led to the new Directive 2014/89/EU establishing a framework for maritime spatial planning. This should be an incentive for maritime spatial planning rules/coastal planning: countries are now obliged to think about the long term development plans of their coast and marinas can plan ahead.[180]

In addition interviewees indicate that marinas' are affected by the dredging issues in order to make the marina accessible for big boats. Several countries report to have very strict regulation regarding the quality of the sludge that is stored on a safe place on land.[181] These regulations have an impact on (new) commercial marina activities.[182]

Skipper licenses

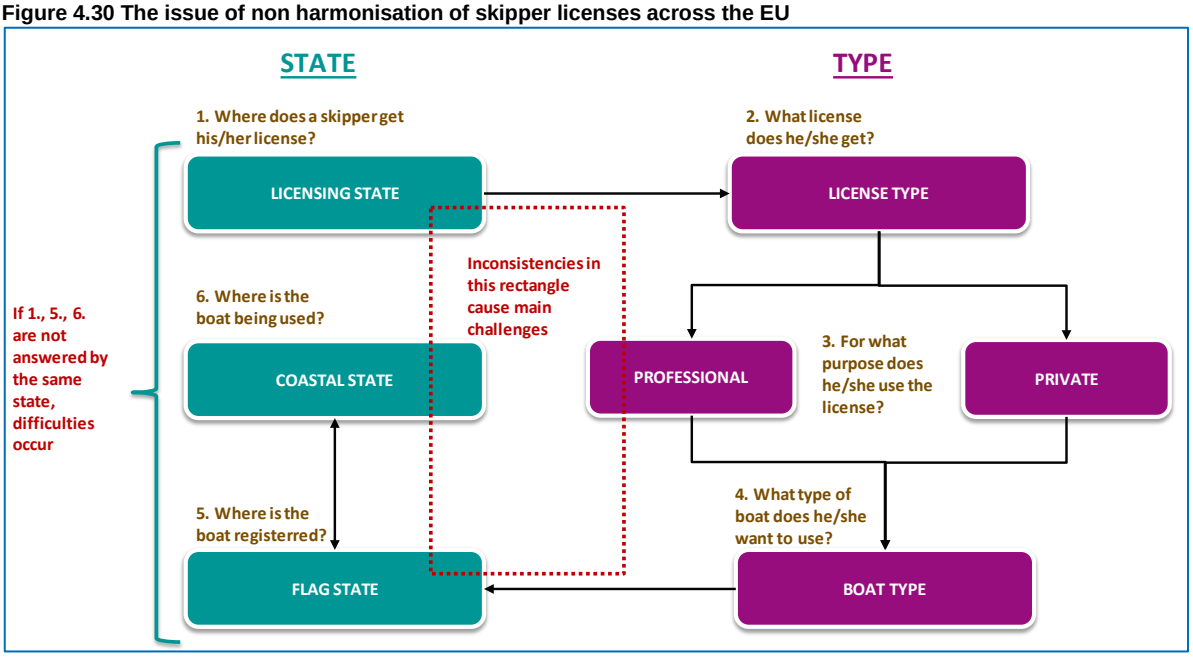
Related to the issue of flag state regulation versus coastal state regulation, skipper licenses are often mentioned as a key issue. This is even more complicated as more factors come into play. The question of skipper licenses and the assessment to which extent differences have an impact on the competitiveness of the sector depend on six determining factors. These can be phrased in the form of six questions:

1. Where does a skipper get his/her license?
2. What type of license does he/she get?
3. For what purpose does he/she intend to use the license?
4. What type of boat does he/she want to use?
5. Where is the boat registered?
6. Where is the boat being used?

Question 1, 5, 6 cover the geographic dimension in terms of the state of licensing, registration and use. Questions 2, 3 and 4 cover the type of license, use and boat. Issues occur mainly when licensing state, coastal state and flag state are not identical. The extent to which this causes difficulties depends to the individual countries involved as well as the type of use. Particularly the professional use of boats increases the difficulties. The following figure visualises the issue:

[180] Interviews with marina associations.
[181] Interviews with marina associations.
[182] Interviews with marina associations.

Figure 4.30 The issue of non harmonisation of skipper licenses across the EU



Source: Ecorys.

The ***licensing state*** is the state where individuals acquire their licenses or from whose authorities they get them. States develop their own license system, sometimes following internationally recognised minimum standards, as stipulated in the **International Certificate for Operators of Pleasure Craft**[183] **(**ICC) or de facto standards (such as widely recognised skipper licenses for professional skippers as issued by the RYA). The same counts for the acceptance of licenses from other Member States. A state itself can determine whether a license is required for recreational boating, whether as a private skipper or as a professional skipper (see following text).

The ***license type*** depends on the specific offer and requirements set out in the licensing state (see appendix 4 providing an overview on the various types of licenses per Member State). Very different forms exist, distinguishing between professional and private (amateur) application, size (and speed[184]) classes of boats, types of waters and age categories of applicants. In Spain for example the requirements are relatively high, but once having a license persons are also allowed to sail also very large boats. In Germany on the other hand it is more a 'high-standard hobby'. There are requirements and tests, but based on smaller boats. Those obtaining such a license are then only allowed to use these types of boats. Other countries don't ask for any license under a certain speed or size class (e.g. Netherlands).

Some form of harmonisation of licensing for skippers of recreational craft is provided by the **International Certificate for Operators of Pleasure Craft**[185] (also referred to as ICC, International Certificate of Competence) is defined by the United Nations Economic Commission for Europe Inland Water Committee (UN ECE IWC) in Resolution 40.[186] Governments may appoint competent authorities to issue ICC on their behalf. The ICC certifies that the holder meets the levels of competence as specified in Resolution 40. The ICC is generally accepted in countries that have ratified resolution 40, but also in some countries who have not ratified it. In a number of countries

183 http://www.unece.org/fileadmin/DAM/trans/doc/2011/sc3wp3/ECE-TRANS-SC3-147-Rev1e.pdf.
184 Or engine power.
185 http://www.unece.org/fileadmin/DAM/trans/doc/2011/sc3wp3/ECE-TRANS-SC3-147-Rev1e.pdf.
186 Ecorys et al. (2013): Study on Deepening Understanding of Potential Blue Growth in the EU Member States on Europe's Atlantic Arc.

the ICC is only valid for private skippers and not for professional skippers (sailing guests/passengers).

The following UNECE member states have adopted the **Resolution 40**[187] and thus officially accept the ICC as a proof of competence on their territory: Austria, Belarus, Belgium, Bulgaria, Croatia, Czech Republic, Finland, Germany, Hungary, Ireland, Lithuania, Luxembourg, Netherlands, Norway, Romania, Slovakia, South Africa (not a member state), Switzerland and United Kingdom.

Predecessor of the Resolution 40 was the **Resolution 14**[188]. This resolution has been signed also by states which have not yet signed Resolution 40. Signing states of at least Resolution 14 have a certain degree of harmonisation with those signing Resolution 40. The following UNECE member states have adopted the earlier Resolution 14: France, Italy and Poland. The following UNECE Member States have not accepted the Resolution 40 nor the Resolution 14: Greece, Moldova, Portugal, Spain, Russian Federation, Serbia, Sweden, Ukraine and United States.

On top of the difference in what countries have signed the Resolutions 14 or 40 there are also countries which have not signed any of them, but do recognise them for foreign license holders. This causes even bigger confusion. Citizens from these countries are only allowed to sail boats with a national license in their country, but foreigners owning an ICC are also allowed sail boats in these waters. When going abroad their citizens may have a problem, because they have not been able to acquire an ICC license in their home country and need to hope for acceptance of their national license. According to interviews, the reason for certain Member States not to sign up for the ICC is that it originally was a product of the inland water committee which was extended to coastal areas. It is therefore not everywhere taken as a serious standard for sailing on sea. Even though, in practice private persons usually have no problems in e.g. chartering a boat in another Member State demonstrating that they have a national license, it would be helpful to reduce confusion by encouraging all Member States to fully participate in the ICC scheme. A further advantage of the ICC is that it also covers countries outside the EU.

The next important factor to distinguish is the purpose of use of the acquired license. When speaking of ***private*** use of recreational craft, despite existing confusion and difficulties in individual cases, for private persons having their place of residence in the country where they got the license, it is usually no problem to sail their own boat throughout Europe. Licenses may not always immediately be recognised, but are usually accepted. In some cases there might be further issues in chartering a boat in another country, but usually an ICC is accepted (even if the country formally has not ratified the ICC[189]). Private boaters are hence more suffering from different rules regarding the boat and the equipment (safety equipment, insurances (e.g. in Germany not compulsory, but in Italy compulsory) (see further below). In some cases (when the residence is changed) there it once again might be an issue. For example, if a German with a German license and a German boat moves to Mallorca and changes his residence to Mallorca he needs to fulfil Spanish requirements and thus most probably needs to obtain a new license in Spain (based on the flag state rule).

187 UNECE (2015): International Certificate for Operators of Pleasure Craft: Resolution No. 40, see: http://www.unece.org/fileadmin/DAM/trans/doc/2015/sc3wp3/ECE-TRANS-SC3-147r4e.pdf.

188 UNECE (1979): International Certificate Concerning the Competence of Pleasure Craft Operators: Resolution No. 14, see: http://www.unece.org/fileadmin/DAM/trans/doc/2012/sc3wp3/Resolution-14-TRANS-SC3-131e.pdf.

189 E.g. a UK person with an ICC issued by the UK authorities is in general accepted to charter a boat in Greece, even thought he country has not ratified resolution 40.

If a license is acquired for a ***professional*** purpose the situation differs. There are existing standard classifications for skippers sailing vessels larger than 24m, which are regulated internationally. The International Labour organisation (ILO)[190] recognises the following relevant occupations:

- Unit Group 3152: Ships' deck officers and pilots;
- Unit Group 6222: Coastal fishery skipper;
- Unit Group 6223: Trawler skipper.

In the context of this study, the most relevant definition of occupation category is the 'Ships' deck officers and pilots', as it potentially is also relevant to yacht skippers. They command and navigate ships and similar vessels, and perform related functions on shore. Their tasks include:

(a.) *"commanding and navigating ship or similar vessel at sea or on inland waterways;*
(b.) *controlling and participating in deck and bridge-watch activities;*
(c.) *navigating vessels into and out of ports and through channels, straits and other waters where special knowledge is required;*
(d.) *ensuring safe loading and unloading of cargo and observance of safety regulations and procedures by crew and passengers;*
(e.) *performing technical supervision of maintenance and repair of ship to ensure compliance with specifications and regulations;*
(f.) *applying knowledge of principles and practices relating to ship's operation and navigation in order to identify and solve problems arising in the course of their work;*
(g.) *ordering ship's stores and recruiting crew as required and maintaining record of operations;*
(h.) *transmitting and receiving routine and emergency information with shore stations and other ships;*
(i.) *supervising other workers."*[191]

In addition, the International Maritime Organisation (IMO) adopted the **International Convention on Standards of Training, Certification and Watchkeeping for Seafarers** (or **STCW**), which entered into force in 1984. The STWC minimum standards relating to training, certification and watchkeeping for seafarers which countries are obliged to meet or exceed. Again these are valid for ships larger than 24 meters in length. Some professional skipper licenses[192] comply with the standards set by STWC.

In line with the international regulation also on a European level standardisation and recognition of professions covering skippers is happening (again for vessels in excess of 24 meters'). The Regulated Professions Database[193] includes among others the following registered professions:

- *Ship's Deck officer (inshore shipping)* (countries[194]: NL);
- *Ship's Deck officer class I* (countries: IS, IE, IT);
- *Ship's Deck officer class II / 1st mate* (countries: DK, IE, MT, NL, NO, SI, ES);
- *Ship's Deck officer class III / 2nd mate* (countries: IE, NL, NO, ES);
- *Ship's Deck officer class IV / 3rd mate* (countries: IE, NO);
- *Ship's Deck officer class V* (countries: IE, SI);
- *Ship's Executive Officer* (countries: PL);
- *Ship's Pilot* (countries: MT, NL, PL, SI);

190 ILO (2012), International Standard Classification of Occupations, http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_172572.pdf.
191 ILO (2012), International Standard Classification of Occupations, http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_172572.pdf.
192 For example the Yachtmaster certificates of the US IYT
193 The Regulated Professions Database, http://ec.europa.eu/internal_market/qualifications/regprof/index.cfm?action=homepage.
194 Countries in in which this profession is regulated.

- *Skipper, home trade* (countries: PL);
- *Skipper/deck officer fishing fleet* (countries: DK, IS, PI, PT, CH).

In the case of the Netherlands some of the mentioned professions apply for big ships of between 500 and 3,000 gross tonnage (for other countries no specifications were made regarding the size of the boat in the database).

However as mentioned above, none of the existing professional regulations specifically covers the profession of skippers on recreational craft below 24m. The requirements remain heterogeneous and qualifications obtained in one Member State are often not recognised in another[195]. While some Member States distinguish between professional and private licenses and set specific requirements to professional skippers (up and above the level required for private skippers), others do not. Whereas the ICC offers some level of harmonisation for private skippers and international regulation for professional crew on vessels larger than 24m, a standard for professional skipper sailing recreational craft does not exists[196]. This makes it difficult for professional skippers on recreational craft to work abroad or to work on vessels registered under a foreign flag.

According to interviews, this means that crews with licenses from different countries can more easily work together on the same boat, no matter what flag state the boat has, as long as the boat is larger than 24m (obviously if they then abode with the international standards). These standardisations do however not apply for boats below 24m. In addition to the length criterion of 24m, in general the ***boat type*** may also have an impact on the permission to use certain boats with certain licenses. Some countries distinguish between licenses according to boat size also below the 24m threshold (e.g. DE) while others do not. Further distinctions of licenses are according to sailing or motorboats, boats to be used only in certain waters etc.

The next defining factor is the registration of the boat. The country in which the boat is registered, is called the ***flag state.*** Boats need to follow the rules of the flag state including the license requirements for skippers to sail a boat with a specific flag. Having obtained a license, either private or professional in the country of use and using a boat registered in this country does not cause and difficulties. If a boat is however moved to the waters of another ***coastal state,*** differences in regulation occur (as already described above). This also counts for licenses meaning that e.g. a Danish license holder can easily skipper a boat with a Danish flag also in Spanish waters. He may however not be allowed to skipper the same boat having a Spanish flag.

To sum-up, we can observe that main difficulties occur when licensing state, coastal state and flag state are not identical. The issue is of even higher magnitude when the purpose of use is of professional nature. Hence, recreational craft skippers who want to conduct their profession undergo national regulations which differ across the EU. The main specificity is the linkage between licensing state and flag state and the possible occurrence of differing coastal state. According to interviews this connection between flag state and professional license creates huge problems for the sector. As the license required for a boat always depends on the flag state of a boat and not only on the type of boat or coastal state of the boat use, e.g. a German in Mallorca can sail the exact same boat with a German, but not with a Spanish flag. This causes particularly problems for charters which want to be flexible in offering boats at various locations and crews adapted to their guests.

[195] European Boating Industry (2013), Contribution to the EU tourism policy sustainable coastal and maritime tourism.

[196] Although some certificates, such as the yachting certificates issued by RYA (and others) are sometimes recongnised in various member States. See Annex 4.

There are currently ongoing projects which aim at improving recognition of professional licenses by assessing detailed differences and similarities between Member States. Such a project is for example the TRECVET[197] project (a Leonardo Development of Innovation project) that looked at three SCV qualifications from Germany, UK and Spain. It developed a methodology to break these qualifications down into their smallest parts (called Fundamental Elements or FE's) and developed a software tool that can manipulate these FEs in order to objectively compare qualifications and make them transparent. The aim of the project is to find a common denominator to accept at least partially each others licenses so that e.g. a German is allowed to sail boats in Spain falling under the German size restriction. Another source of comparison of national requirements is the GETAFIX comparison tool[198] where different licenses across the EU are compared with others. Such a comparison tool can also support the harmonisation of requirements. Currently there is however hardly any recognition and consequently many skippers provide their services 'illegally'.

Offering a coherent recognition is one angle of looking at the issue. The other is the provision of common training with coherent content across Member States. As outlined above, in the European Union we find a broad diversity in training programmes for skippers, diversity in the attributions and types of licenses for recreational boats and diversity criteria when permitting navigation without any official training.[199] The requirements for a boat license vary greatly with regard to the area of navigation, the distance from shore/shelter, the means of propulsion (sailing/motor boats), the boat's length and the engine's power.[200] Also the age limits vary from a country to another.[201] A coherent training scheme through the provision of the common training framework (CTF) or the common training test (CTT) as provided in articles 49a and 49b of the revised 2005/36/EC Directive similarly to the existing training schemes for boats larger than 24m could be a solution. However such a coherent training scheme should then still be developed for professional skippers on recreational boats as no standard as such yet exists in Europe. CTF/CTT would allow automatic recognition of skipper qualifications in the host Member States participating in this initiative. The profession of skipper for smaller boats is however currently not recognised in many Member State not yet allowing to envisage the developments of a common training framework (CTF) or common training test (CTT) as mentioned above. Usually the training on the boat for professionals and privates are the same. However in many Member States to get the permission for commercially skippering a boat, additional tasks and knowledge around the boat need to be accomplished/acquired.

Requirements on safety equipment for recreational craft

The International Convention for the Safety of Life at Sea (SOLAS) specifies minimum standards for the construction, equipment and operation of ships, compatible with their safety.[202] The 'Safe Navigation and avoidance of dangerous situations' regulation included in this Convention imposes prior-planning for the boating trip. Other regulation under this Convention concerns radars, life saving and distress signals. Another important convention involving recreational boats is the International Convention for Preventing Collisions at Sea (COLREGs), on lights, shapes, steering and sailing rules and sound and light signals.[203]

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197 https://www.trecvet.eu/. This project is followed up by the TCC-SCV project (http://www.tcc-scv.eu/wpdemo/), which will analyse and compare the skipper qualifications for small commercial vessels (up to 24 meters or 200GT) of six EU Member States and summarise its commonalities in a new European Common Core Curriculum. This Core Curriculum will then be presented in two other EU Member states to build the base of their new qualifications.

198 http://www.getafix.eu/compare.html.

199 Universitat Politecnica de Catalunya: Study on the license requirements for pleasure boats in the European Union.

200 Universitat Politecnica de Catalunya: Study on the license requirements for pleasure boats in the European Union.

201 Universitat Politecnica de Catalunya: Study on the license requirements for pleasure boats in the European Union.

202 http://www.imo.org/en/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Safety-of-Life-at-Sea-(SOLAS),-1974.aspx.

203 http://www.imo.org/en/OurWork/Safety/Navigation/Pages/Preventing-Collisions.aspx.

Yet in principle all Member States set their own rules in terms of required safety equipment on board. As shown in appendix 5 there are many similarities across Member States. Some Member States have however very different requirements. Often the regulation imposes different requirements on the type and number of equipment on board that is mandatory (ranging from anchors to life jackets, VHF radios emergency equipment etc.) and differs for the navigation area (close to shore or in different categories of offshore).[204] The exact definition of "close to shore" is in itself an issue that differs according to the Member State. In addition countries (e.g. United Kingdom and Ireland) may apply different sets of regulation for different length classes of boats. Finally differences exist regarding mandatory technical inspections.[205]

An exemplary introduction in requirements on safety equipment for recreational craft in four Member States: United Kingdom, Ireland, France and Italy (further details appendix 5)

In the **United Kingdom**, the Maritime and Coastguard Agency imposes strict rules concerning mandatory equipment on board within the Merchant Shipping Regulation. Ships are therefore required to get a Boat Safety Certificate, issued for a 4-year period. Pleasure vessels are however exempted from these requirements (concerning especially lifesaving or fire fighting equipment) under special conditions and especially for vessels of less than 13.7 metres in length. These are not exempted however of requirements deriving from the SOLAS Convention.[206]

Similar requirements exist in **Ireland**, depending on the length of the boat, but also on the area of operation of the vessel.[207]

In **France**, the French Division 240 (2008) is a normative act establishing safety and rescue equipment that is compulsory according to the navigation distance allowed.

In **Italy**, the requirements vary also according to the distance the boat is allowed to navigate, and the Capitanerie di Porto must deliver a security certificate 'Certificato di sicurezza', valid for 5 years. Five categories of mandatory safety and rescue equipment are also designated in Portugal.[208]

Existing differences cause - similarly to the license issue - difficulties in cross border use of boats. When entering the waters of another coastal state, the flag state rules need to be followed. At the same time, when staying in these waters for recreational activities, also the coastal state rules apply. This means that private skippers need to be aware of the requirements in both states and may need to purchase extra equipment to comply with the rules in the coastal state. If not having all necessary equipment, skippers may get fined. Even though the differences in requirements are seen as burdensome by the users, safety remains a sensitive issue. Finding an agreement on common standards is not always easy, particularly as the number of accidents involving recreational craft within the total number of maritime accidents is rather high.

Statistical data shows that a large number of maritime accidents are related to recreational craft.[209] For instance, in Spain, more than fifty percent of the emergencies are related to pleasure boats at

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204 Interviews with charter companies.

205 See J. Torralbo, M. Castells, Comparison of survival and safety requirements, in The international Journal on Marine navigation and Sfaety of Sea Transportation, March 2014.

206 Rya website, http://www.rya.org.uk/infoadvice/safetyinfo/Pages/pvequipment.aspx.

207 J. Torralbo, M. Castells, Comparison of Survival and Safety Requirements in European Union for Recreational Craft Inspections. A Spanish Case Study, 2014.

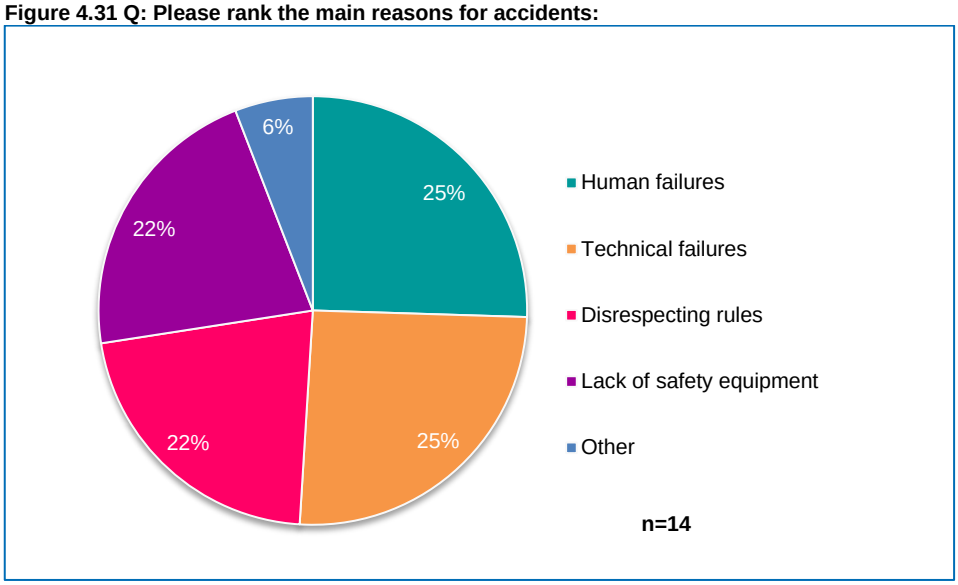
208 J. Torralbo, M. Castells, Comparison of Survival and Safety Requirements in European Union for Recreational Craft Inspections. A Spanish Case Study, 2014.

209 J. Torralbo, M. Castells, Comparison of Survival and Safety Requirements in European Union for Recreational Craft Inspections. A Spanish Case Study, 2014.

sea.[210] In the United Kingdom, the overall accident rate (based on data collected from 13 harbour authorities) for all vessels types reported in the period between 2005 and 2009 was about 1 incident per 1,000 vessel movements.[211] In this case, commercial vessels were over 10 times more likely to suffer an incident than passenger vessels (1 in 240 vessel movements compared with 1 in 3,000 for passenger vessels).[212]

Based on the survey results, the main reasons for nautical accidents are human and technical failures.[213] However, during the interviews vast majority of stakeholders stated that in most of the cases it is the human failure (lack of skills and experience) that causes nautical accidents.[214] Therefore, one of the most important aspects to ensure safety is the training of future skippers.[215] Updating and deepening their knowledge, attitudes and develop skills to accommodate and take special care in training activities related to the human factor in situations of crisis, would be some of the aspects to consider.[216]

Figure 4.31 Q: Please rank the main reasons for accidents:



Source: Ecorys sector survey 2015.

Depending on the Member State, various institutional bodies are responsible for collection of data on nautical accidents.[217] For example in Spain the data on nautical accidents is collected by the Spanish Ministry of Transport, in Netherlands it is the Royal Netherlands Sea Rescue Institution (that also provides instructions to the boaters on how to manage difficult routes) and in Portugal it is the maritime police.[218] In many countries the insurance companies are collecting information on nautical accidents.[219] To improve the safety aspects of recreational craft, the existence of studies and statistics on nautical accidents at the EU-level could provide further insights.[220]However,

[210] J. Torralbo, M. Castells, Comparison of Survival and Safety Requirements in European Union for Recreational Craft Inspections. A Spanish Case Study, 2014.
[211] http://www.phc.co.uk/downloads/latest/marine_accidents_in_harbour_waters-pilot_study_report.pdf.
[212] http://www.phc.co.uk/downloads/latest/marine_accidents_in_harbour_waters-pilot_study_report.pdf.
[213] Ecorys sector survey 2015.
[214] Interviews with charter companies and marina operators.
[215] Universitat Politecnica de Catalunya: Study on the license requirements for pleasure boats in the European Union.
[216] Universitat Politecnica de Catalunya: Study on the license requirements for pleasure boats in the European Union.
[217] Interviews with charter companies and marina operators.
[218] Interviews with charter companies and marina operators.
[219] Interviews with charter companies and marina operators.
[220] Universitat Politecnica de Catalunya: Study on the license requirements for pleasure boats in the European Union.

marina operators and charter companies interviewed were rather against a central EU nautical accident registration scheme, as this would cause additional administrative burden for them.[221]

VAT

Based on interviews with charter companies and associations, high VAT on boats is a discouraging factor for boat owners. For example, in Spain recreational boats fall under luxury product category and are taxed extra 12%. In Croatia the VAT accounts for 25% (for renting a boat).[222] This is not the case in UK, where recreational boats are not seen as luxury products and thus have lower taxes. In addition, some countries like Greece favour their citizens, who pay lower taxes for having a boat in their country of origin.

High VAT is also problematic for marinas. For example in Italy, tourist facilities like hotels pay a lower VAT rate, but marinas' are not favoured as such.[223]

Employee skills

Skills needed to work in the sector are diverse and range from 'actual on boat skills' such as skipper licenses, to technical skills in maintenance an repairing of boats, to management skills and service skills. According to Eurostat SBS about 80,000[224] persons currently work in maintenance of ships and boats. This staff is of key relevance also for the marina and charter sector.
The Maritime Skills Alliance[225] structures the required types of employees in marinas into three categories which have different skills requirements:

1. Marina manager (Yacht Harbour Manager): combination of on boat skills such as skipper licenses and managing skills;
2. Dockmaster (Operations Manager): services and management skills, understanding of technical aspects;
3. Marina operative (Berthing Assistant, Mooring Assistant, Yard Assistant): Skills on boat production and boat services, more technical skills.

In addition depending on the size and integrated offer of marinas further skills may be needed (e.g. higher maintenance skills, hotel services etc.). Marinas thereby compete with other related sectors for their staff. This includes the directly related charter and boat manufacturing sector, but also others such as tourism management. Given that marinas are sometimes located in peripheral areas, it is especially difficult to attract young people.

The charter sector competes with the marina sector for persons with on boat skills (skippers etc.). The challenges of different license regimes and flag state rules (as described above) generate additional challenges in terms of planning and optimising staff/boat combinations. The Maritime Skills Alliance[226] divides between three categories of charter staff:

1. Flotilla engineer: engine maintenance and further boat maintenance skills;
2. Flotilla host/hostess: this includes hospitality and catering qualifications similar to general hotel staff and tourism qualifications;
3. Skipper: among skippers we can further distinguish between delivery skippers, flotilla skippers, bareboat skippers and charter skippers.

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221 Interviews with charter companies and marina operators.
222 Interviews with associations.
223 Interviews with associations.
224 Eurostat SBS (2015).
225 http://www.maritimeskills.org/careers/marine_leisure/ml_quals.htm#marinaman.
226 http://www.maritimeskills.org/careers/marine_leisure/ml_quals.htm#marinaman.

Educational offers specifically designed for marinas and charter are rare. There are not many schools training people on relevant skills, especially base managers and technicians.[227] Therefore both compete with connected sectors to get the staff needed. Based on interviews with charter companies, it is difficult to find employees with high technical expertise (e.g. machine manufacturing and engineers).[228] Especially the practical skills are often missing.[229] Marinas seem to have less of a problem.[230] In addition, the role of some professions has been expanded, for example skippers are becoming more like 'guides', they need to know the region, culture, environment etc., in order to entertain the passengers on the boat.

Another skills aspect relevant for both charter and marinas are language skills. This is sometimes reflected in the origin of employees. A harmonised European situation does however not exist. The origin of employees differs depending on the country; in Croatia the majority of employed charter staff is Croatian, but in Greece, there is a high percentage of foreign employees.[231] In addition to the language skills also IT-skills are becoming increasingly important.[232]

Access to finance

As in all economic sectors, the economic crisis left its traces on the sector in terms of investments. Charter companies had to partially scale down their business or could not re-sell their boats and new marina investments were put on hold.[233] The reason is twofold: on the one hand, side public owners of marinas do not invest in the sector. On the other, private operators have increasing problems in getting access to finance as banks are more reluctant to offer credits.

Seasonality

The revenue for recreational craft services has to be made mainly during spring and summer.[234] However, loss of income during winter and autumn is not the only problem created by seasonality. At peak times of the year, facilities may be strained and small businesses unable to cope with a sudden influx of holidaymakers. The local infrastructure may also be under strain. In the Mediterranean, the wastewater and solid waste in tourist areas often exceed the carrying capacity of local infrastructures during high season.

4.5 Overall analysis: industry competitiveness and performance

In summary it is hard to get a comprehensive overview on the size, types and capacities of charter and marinas in the EU, as they are not consistently provided following a coherent definition and in a complete form covering all MS. Information can usually be found on selected areas according to specific definitions. Even though, exact numbers to measure their importance differ, it is clear at this stage that services such as charter and marinas do play a substantial role for the overall maritime and coastal tourism industry. Hence on the basis of the available information we have established our best estimates. In the next table we summarize the main elements, which determine and influence the industry competiveness.

227 Interviews with charter companies.
228 Interviews with charter companies.
229 Interviews with charter companies.
230 Interviews with associations.
231 Interviews with charter companies and marina associations.
232 Interviews with charter companies and marinas.
233 Interviews with charter companies.
234 Interviews with charter companies.

Table 4.1 Overall analysis

SCP-elements	Summary
Basic conditions market structure	
Size of the sector	• Turnover of Charter is estimated to be €6 bn for charter and almost €4 bn for marinas; • The above estimated excluded indirect activities that are linked to charter operations and marina activities.
Geographical spread	• While the highest number of boat owners is in Northern Europe (in particular Sweden and the Baltic States), the Mediterranean Sea alone attracts 70% of world charter; • Most of the marinas are located in following countries: SE, FI, UK, NL, DE, FR, IT, GR, HR.
Market players	• The structure in the chartering sector is dominated by five companies (Sunsail, Le boat and Footloose which are owned by TUI Marine, Dream Yacht Charter, Kiriakoulis) which cover about 80% of the European market; • Marinas can be distinguished broadly in private and public (municipality/regionally) owned marinas. There is a trend towards private owners that operate a chain of marinas or marinas that are organised as a network (clusters). Key private marina investors include e.g.: Compagnie des Ports du Morbihan (FR), Yacht Havens Group Limited (GB), Ste du Nouveau Port Vallauris Golfe-Juan (FR), Lamda Flisvos Marina α.ε. (GR), Pampas Marina Aktiebolag (SE), Marina Dalmacija d.o.o. (HR).
Employment	• Employment estimates show an employment of about 20,000 persons in Charter and 40,000-70,000 in marinas; • Recreational boating is characterised by a strong seasonal character. Most structural employment in charter is found in administrative, hostesses and blue collar (boar maintenance) jobs. Language skills are obviously important for charter staff. Also marinas indicate to hire staff with a specific skill-set dedicated to the operation of a marina; • Technical workforce development, leadership and management skills (in particular project management skills), IT related engineering and marketing skills are seen as main hurdles in the employment situation.
Market conduct and performance	
Business models	• Charter companies mainly operating in bareboat or crewed charters. Some new business models are coming up (e.g. renting out cabins on board of catamarans, or investing in marinas) but in terms of turnover this activity is still limited. Most chartered boats are middle-class boats (11-24 meters hull length); • Obviously the main income stream of most marinas comes from the berthing itself. Depending on the size and the character of the marina, other services than dockage, such as bars, restaurants etc. can be an integrated part of the offer. Forty percent of the marinas also offer dry dock facilities.
Innovation	• IT tools such as online booking, applications for smart phones and Wi-Fi solutions are important innovations for the recreational boating services sector.
Market trends	• Both charter companies and marina operators have been hit by the

SCP-elements	Summary
	economic crisis, although for charter companies this has partially be compensated by an increasing trends towards renting boats, rather than owning boats. Most companies had to decrease their staff levels and faced declining income; • Nevertheless, most companies are optimistic about their future prospects. Today marinas compete mainly on pricing, customer service, safety and technical equipment.
Framework conditions	
Regulatory conditions	• Lack of harmonisation of regulation (e.g. flag state rules versus rules of the country, where the boating activity takes place); • Lack of harmonisation of licensing for skipper's recreational craft; • Lack of harmonised requirement on safety equipment for recreational craft; • Differences in VAT regimes and in some case unfavourable treatment of boats (high VAT) and marinas lead to distorted market conditions on a European scale.
Other conditions	• Lack of employees with high technical expertise (e.g. machine manufacturing and engineers), in particular important for charter; • Limited access to finance for private operators, as banks are more reluctant to offer credits; • Seasonality of the services (spring and summer).

In addition to the above summary table a number of broader observations and conclusions can be made pertaining to the overall competitive position of the industry in particular the marina and charter sub-sector.

Marinas and charter companies have a different scope and scale of operation

Notwithstanding the rise in marina chains and networks, most marinas operate at a local or national scale. Main issues to them are related to difficulties in national/local regulation and local/national market conditions, although to some extent they might be influenced by national or EU regulation. It also makes it a rather fragmented market with many individual players each operating on their own regional/local boating market. Nevertheless, obviously there is a connection to the overall attractiveness of coastal region as they form part of the overall tourism package.

The charter market on the other hand is dominated by a limited number of large charter companies controlling some 80% of the charter market. They are supplemented by a large number of small companies. As a result charter companies are also impacted more strongly by a lack of harmonisation in rules across Europe. Also users of boats and boat owners are affected by diverging rules across Europe.

Harmonisation of regulation is an issue

As mentioned earlier, lack of harmonised regulation is mainly an issue for charter companies, who are hiring professional skippers, and to a smaller extend also for boaters that sail across Europe.

Key issues are related to differences in flag rules coming from where the boat is registered (which flag is sailed) and the country where the boating activity takes place. First and foremost it is the absence of clear and comprehensive information for each country in Europe which present a difficulty, in particular for private boaters who want to exercise their boating in another country. For

charter companies (and in particular the larger charter companies) a lack of information is less of a hurdle, but the impact of diverging rules is.

Most often mentioned difficulties observed in this respect are the lack of harmonisation in licensing of professional skippers and the requirement on safety equipment for recreational craft. The requirements to skippers on small commercial boats across EU Member States are different and classifications obtained in one Member State are often not recognised in another, despite the existence of the ICC (International Certificate of Competence). The problem is that not all Member States including some important boating regions recognise the ICC. In addition, there are different country requirement in obtaining a license and future training. This creates differences in the level of competence required under a license which might be relevant as human failures are quoted as reasons for accidents in more than 25% of the cases.

Further to different license requirements differences exist in requirements to technical and safety standards and equipment. Again lack of awareness creates a difficulty in knowing what is expected, in addition to some specific rules which are not logical from an non-EU perspective (e.g. having the relevant overview of requirements available in the local language on board for foreigners).

Enhancing awareness of applicable rules, mutual recognition of licenses and flag state rules, and further harmonisation (by e.g. creating a minimum standard which would then classify for mutual recognition) would be possible avenues to decrease these issues.

To a more limited extent differences in VAT regimes also create a specific behaviour in boating by choosing low tax regimes for boat registry. This is a common phenomenon for higher value vessels, which are often registered in a country outside Europe due to tax reasons. Apart from creating different conditions to boaters across Europe, VAT levels in some countries disincentive recreational boating, as boating is treated as a luxury product and luxury activity, hence impacting the growth potential of the sector.

Other market barriers

Finally some national/regional market barriers exist. To a certain extent they are valid for most countries across Europe, such as an access to finance, but on the other hand they have a strong local character (e.g. national regulation on marina development, environmental regulation etc.). Nevertheless, they have an impact, not only on the national development of recreational boating in a region or a country, but also on the wider performance of recreational boating, for example in the demand for new recreational craft.

5 Strategic outlook and recommendations

In this final chapter we present a strategic outlook for the industry and propose a number of recommendations in order to strengthen the competitive position of the industry. Section 5.1 presents a SWOT analysis in which we explicate the strengths and weaknesses of the manufacturing and services sector. We will also shed light on the opportunities and threats and develop a number of scenarios in order to build a strategic outlook for the industry over the medium and long term (section 5.2). We will conclude this study (section 5.3) with recommendations to improve the sector's competitiveness.

5.1 Presentation of the SWOT-analysis

In this section we present the SWOT analysis for both the manufacturing industry as well as the services sector. The SWOT analysis is based on the key findings in relation to the competitiveness of the industry. For the development of the SWOT analysis we assumed that the overall objective for the recreational boating industry was to increase the competitiveness and sustainability of the sector, which contributes to the EU growth objectives.[235] Regarding the SWOT it is important to notice that a distinction can be made between endogenous factors (strength/weaknesses)[236] and more exogenous factors (opportunities/threats)[237]. The latter category is (more) difficult to influence by the industry or via specific policies.

As for the previous sections, the services sector needs to be analysed on the basis of sub-sectors. SWOT for charter and for marinas are very different even though they may affect each other.

5.1.1 The manufacturing industry

In chapter 3 we concluded that the overall performance of the manufacturing industry shows different aspects. Although the overall position of the European industry was weakened by the 2008 economic crisis, the European industry still has a very strong global position. Based on the analysis we can distinguish a number of strength and weaknesses of the manufacturing industry, as well as opportunities and strength. These are summarized in the next table. The main barriers of growth (as identified in chapter 3) are included in the analysis, i.c. regulatory differences regarding standards between EU and the US, export barriers due to import tariffs in e.g. Brazil and China and the lack of access to finance for SMEs.

The SWOT analysis clearly indicates that the performance of and foresights for the manufacturing industry is still mainly positive. The sector has a strong global market position, benefits from the exposure of the high-quality 'EU-brand' and is still innovative. At the same time the sector may benefit from the growing demand in upcoming markets, the demand for environmental-friendly

[235] This objective can be derived from applicable European Commission policy documents such as (i) the Impact assessment on the recreational craft directive and (ii) the European strategy for more growth and jobs in coastal and maritime tourism.

[236] These elements are mainly related to the (internal / vertical) competitiveness drivers that have been identified in the previous analysis of the sector concerned, i.e. strengths and weaknesses for instance both as regards inputs, structure, processes and outcomes, etc.

[237] These elements are mainly related to the (horizontal) sector conditions affecting competitiveness positively or negatively, thus including regulatory conditions, but also other framework conditions such as the human capital issues, infrastructure issues and issues of access to capital, as well as exogenous factors such as technological development, changes in demand patterns and other factors, etc.

technologies and the further harmonization of standards. Nevertheless, there are a number of aspects which cause some concerns. While the industry is still recovering from the global economic crisis (lacking investments, low profitability), the business environment is changing: shrinking and shifting demand at the EU-market (changing demographics and a shift of leisure expenditure) in combination with increased pressure on manufactures' business models due to competition.

Table 5.1 SWOT - Manufacturing industry

Internal to sector	External to sector
Strengths: • The EU hosts European multinational companies, operating on the world market, with significant market power; • The 'EU brand' is strong. Customers from outside the EU prefer to buy recreational crafts from an European brand, as it represents high quality and value added; • European boat builders have clear competitive advantages in knowledge (innovation) and design. The sector is innovative and develops new high-end technologies (e.g. electric propulsion).	**Opportunities**: • Potential demand for new products and new markets in upcoming economies e.g. China and the Middle-East; • The request for (and availability of) new technologies, such as electric propulsion, which strengthens process and product innovation; • The further alignment of international regulatory framework; i.c. the further harmonization of EU and US recreational craft legislation and standards in order to reduce the entry barriers for European manufacturers to foreign markets.
Weaknesses: • Some boat builders face a lack of investment due to volatile cash flows and a shortage of funds. Investments in innovation are lacking behind; • The production of boats can either be done in serial numbers of customized build. Overall, manufactures tend to realize low productivity (and profitability) figures; • Due to specific employment needs and skill requirements, some manufacturers face technical skills shortages.	**Threats:** • Demographical changes, ageing, and changing leisure expenditures result in a changing business environment; • The 'sharing economy' results in changing customer demand, and a growing charter segment; • Increased competition from boat builders in upcoming economies, in combination with existing import barriers (e.g. China and Brazil); • External financers (e.g. banks) are still reluctant to provide credit, which creates difficulties in relation to the access to finance.

5.1.2 Services – charters

The charter sector in the EU is a strong sector with high demand within EU territories, particularly in the Mediterranean. A handful international providers capture a large share of the market supplemented by many small local providers. The charter industry is profiting from a trend towards less boat owners and more rentals. This has also helped the sector during the crisis period following the year 2008. The EU charter sector is also profiting from a very attractive sailing area, which has the potential to be well connected to hinterland activities.

New business models following the trend of higher charter demand such as cruise style chartering or skipped charter offer opportunities to further develop in the future. On the other hand, remaining regulatory uncertainties and difficulties for cross-border operation such as professional skippers license requirements, flag state rules etc. risk to hamper the development of the sector. Threats to the sector are reduced demand for second hand boats, which make it more difficult to replace older boats in the fleet as well as high capital demand.

Table 5.2 SWOT - Charter

Internal to sector	External to sector
Strengths: 1. Adaptive to demand changes: The sector is very adaptive to demand changes, shows flexibility in its offer in terms of boat size, charter models etc.; 2. Open to new initiatives: The sector has introduced various new initiatives throughout time which is also reflected in its adaptiveness to changes; 3. High demand for Europe (Mediterranean): Particularly the Mediterranean is still a very popular area which has a high demand for charter services; 4. Attractive sailing area: Linking to strength number 3, the EU is perceived as a very attractive sailing area providing a very diverse environment and a well developed supporting infrastructure; 5. Local entrance possible: Large shares of the market are controlled by a small number of companies, but at a local scale it is rather easy to enter the market.	**Opportunities**: 1. Shifting demand (from owning to rental): In recent years demand shifts have been observed from boat ownership towards rental. This creates more opportunities for charter providers to capture a larger amount of customers; 2. New business models (sharing): New business models such as boat sharing may attract other targets than the traditional chartering; 3. Cruise style of charter (renting a cabin on a chartered boat): This type of business model is getting more and more popular providing the possibility to be on a skippered yacht which covers a fixed tour (such as a cruise ship), but without any individual responsibility; 4. Mixed packages (ship/car/hotel): Mixed packages combining e.g. ship, car and hotels and all-inclusive booking reducing the organizational burden for privates have the possibility to attract new customers.
Weaknesses: 1. Skippered boats: The lack of harmonization of professional skippers licenses creates difficulties in combination with flag state rules. Consequently the charter industry often risks to operate in an illegal environment due to a shortage of skippers with the license adapted to the flag state of a certain boat; 2. Flag state regulations differ (cross border issues): As the flag state rules differ, but recreational boating means remaining also in coastal states, the obligation to fulfil both, the flag state as the coastal state rules (which differ) causes problems with cross border trafficking; 3. Rather unregulated business: While this offers easier entrance into the sector, it also carries the risk of low quality services and unreliable providers not guaranteeing safety standards or fulfilment of all regulatory requirements of a boat; 4. High-level: market dominance: The market is dominated by a small number of companies, which creates the risk of an oligopolistic situation; 5. Lack of skills/technical expertise: Only limited special training for professionals in the sector cause skills shortage and may hamper the growth of the sector.	**Threats:** 1. Less demand for second hand boats: Given the reduced number of boat owners, but the increase in charter the increased turnover of boats for charter companies may lead them to a situation where they do not manage to sufficiently sell their old boats again on the second hand market; 2. High capital demand (entrance/loans): Entering the sector requires sufficient capital as setting up a business with new boats is not cheap. This can hinder new entrants and hence cause a low level of competition.

5.1.3 *Services – marinas*

The marina segment in the EU is very fragmented, starting with the challenge of defining what a marina actually is to how many there are in the EU and how their business models look like. The overall density of marinas in Europe is good and thus provides a strong basis for recreational boating activities. Also the quality standards are rather high, despite strong differences between individual marinas. The brand 'Europe' is very helpful for the segment and 'guarantees' a certain demand from both inside EU and outside the EU. It hence "keeps" Europeans in Europe, but also attracts sailors from outside. Further integrated regional development would provide however the opportunity to better capitalise the use of marinas within maritime tourism and integrate boaters into touristic activities. New IT services such as booking apps etc. could raise the positive attitude towards the whole sector as well as particular regions. New concepts combining various interests of users (house, boat, rental) can also increase the demand. The main challenge for the marina segment however remains the rather local focus of marina development, where individual investors or public stakeholders refrain from coordination or clustering and simply develop their thoughts independently in their marinas. This leads to a fragmented situation that can not only dissatisfy customers, but also risk unprofitable 'double'-investments. Moreover, regulatory barriers for the development of marinas (in particular environmental regulations) and a lack of client orientation weaken the development of the sector.

Threats to the use of marinas are particularly the aging of users, which causes the risk of decreasing future demand, the aging of boats which causes environmental concerns and reduces the attractiveness and beauty of a marina, as well as the changes in demand. Moreover, regulatory barriers as well as geographical constraints often reduce the possibility to expand.

Table 5.3 SWOT - Marinas

Internal to sector	External to sector
Strengths: 1. Density of marina's/good network (proximity to tourist areas): Overall the density of the marina network is good in the EU which attracts many sailors to come to Europe; 2. High quality standards: The quality of marinas in the EU is relatively high, increasing the attractiveness of the brand; 3. "Europe" is a strong brand: Europe is the worlds tourism destination number 1 and also in sailing a very popular destination. The brand of "Europe" remains strong; 4. Strong internal demand: The EU internal demand remains high which guarantees stability over years.	**Opportunities**: 1. Integrated regional development (clusters): A stronger integration of marina development in the regional development can create synergies and increase overall tourism offer in the area; 2. IT services (apps): IT services are already a must in the sector. New applications facilitating the operation and the move from one marina to the other may further attract customers; 3. New user concept (house + boat + rental): New concepts combining different offers and hence providing 'all-inclusive' solutions can attract further customers which are less interested in long and detailed planning processes.
Weaknesses: 1. Local focus (sometimes "poorly organised")/fragmented/different interests: Coordination between marinas for coherent development is often lacking. Every marina follows its own development path which causes risks for the overall branding of a region; 2. Slow innovators: Innovations are often only picked-up when absolutely necessary; 3. Not always focused on clients (old-fashioned):	**Threats:** 1. Aging of users/owners: The ageing of boat owners is becoming a problem and causes challenges in accessibility in marinas; 2. Aging of boats (environmental concern + hampering demand): The ageing of boats may become an issue if sufficient recycling offer is missing; 3. Changing demand: Changing demand structures from boat owning to charter as well as different

Internal to sector	External to sector
The client orientation is missing in many marinas. The business style is often old style and is lacking a service oriented culture. There is large discrepancy between individual marinas. Some have strongly modernized their business model, while others remain in 'old' structures; 4. Regularly hurdles to develop marinas (local): Local regulatory barriers to invest in marina developments may hamper their growth potential and cause reduced competitiveness over time.	boat sizes require marinas to be adaptive. This is not always easy as sometimes bigger investments are needed; 4. Difficulty to expand: Marinas are usually in the centre of villages and hence have geographical limits for expansion.

5.2 Future industry scenarios

In order to be able to provide a strategic outlook for the industry over the medium and long term (next section) we developed four scenarios. For the development of these four scenarios we used two main market dimensions. The first dimension is the **development of external competition** to the European boating sector. This relates primarily to the (strong or weak) development of non-European manufacturers and service providers on the markets that are served by the European boating sector. The second dimension is the **development of market demand.** This relates primarily to the development of the demand in the market, not only in Europe (internal market), but also globally. These two dimensions result in four potential future 'boating worlds' in which the European recreational boating sector will operate within the time horizon of 10 to 20 years. The four scenarios are presented in the next table.

Table 5.4 Future industry scenarios

SHIPWRECK **Low market demand** **Strong competition** ***Assumptions:*** ➢ Demand stays low, both EU and global, due to ageing and other activities; ➢ Competitors from Asia and US are strong on the European and global markets.	**HIGH-WAVES** **High market demand** **Strong competition** ***Assumptions:*** ➢ Demand is booming in Europe and worldwide; ➢ Competitors from Asia and US are strong on the European and global markets.
AIRLESS **Low market demand** **Low competition** ***Assumptions:*** ➢ Demand stays low, both EU and global, due to ageing and other activities; ➢ Competitors from Asia and US are not able to develop their market share on European and global market.	**DOWNWIND** **High market demand** **Low competition** ***Assumptions:*** ➢ Demand is booming in Europe and worldwide; ➢ Competitors from Asia and US are not able to develop their market share on European and global market.

The output of these scenarios will be a qualitative foresight sketch of the boating world between 2025 and 2035. It will be applied to the SWOT as earlier developed. This will be addressed below.

Scenario 1: DOWNWIND

This promising scenario would mean a flourishing manufacturing sector with perhaps sale figures reaching before-crisis levels again. EU branding will remain strong and upcoming markets will not be able to compete with the EU market. The downwind scenario for the charter sector would mean that existing providers of charter would further expand their business. They could increase their fleet, hire more staff and offer their services to a growing number of customers. The sector would be able to play out its strength in offering an attractive sailing area to new entrants making use of new business models and mixed packages. It would however also show even stronger the current limitations hampering cross-border services. The lack of license acceptance particularly for professional skippers and the flagstate rules combined with rules of national territories could cause difficulties for the charter industry to sufficiently answer demand. Moreover, the pressure on the development of marinas would increase. Marina investments would be more profitable and hence less risky. The investments would increase. However, very strong demand could also harm the brand by overfilled marinas or sailing areas and raises challenges of keeping the quality high (also environmental quality). Marinas would need to overcome their weaknesses to serve the demand and get better attached to integrated regional planning.

Scenario 2: HIGH-WAVES

Most manufactures, except of inflatable vessels, have indicated that competition from outside the EU is currently relatively low. If competition would increase the pressure on the prices will increase further and profitability would decline. Strong competition entering a market, which is booming would be a certain kind of continuation of the current status for the charter sector. The charter sector is strong and with increased demand could keep on being profitable also with new entrants. Such entrants would provide a further offer to clients and hence may generate further innovation. The main risk lies however in the ability of the marina segment to deal with this situation. As described in the DOWNWIND scenario, marinas would be under pressure to further develop to provide the basis for charter companies. If marinas cannot provide such supply, the charter sector would not be able to serve the demand and the high competition may create too strong pressures particularly on SMEs.

Scenario 3: SHIPWRECK

Having strong competition entering the market and simultaneously decreasing demand can be seen as the worst case scenario for the charter segment as well as for the manufacturing sector. The competitors would fight for the remaining potential customers and hence go for a race to the bottom in terms of prices. Individual market players would not be able to keep up with such competition and thus exit the market. A further concentration of the segment among the remaining companies would be the consequence. For marinas a decreasing demand would mean a decreasing interest in marina development and investments into the existing infrastructure. Such decreased investments can cause long term harm to the sector as it may reduce even further future demand by ‘damaging’ the existing brand. Marinas would need to specialize and attract the remaining demand, but could maybe play out their role towards the increasing competition amongst charter companies.

Scenario 4: AIRLESS

In this last scenario competitors from Asia and US are not able to develop their market share on European and global market, which is an advantage for the European industry. The changing demographics and changing leisure activities results in lower demand and a shrinking internal market. As a consequence competition increases and it is likely that strong multinational companies, serial producing, will survive with merging and acquisition strategies. This means that SMEs will face difficulties to stay independent. However it is important to note that the demand for customized yachts will most likely remain to be stable. Low competition and low market demand is

a scenario with similar consequences to the charter sector as the HIGHWAVES scenario with the difference that it would hamper innovation. Such a situation would incentivize existing charter operators to remain in a business as usual situation aiming at keeping costs stable or reducing them and to serve the existing demand. Investments would not be attractive and charter operators would need to be creative in terms of business models to generate new demand. Marinas would reduce their investments, which has a negative impact on future demand and attractiveness of marinas.

Brief assessment of the likelihood of the scenarios

As indicated the four scenarios are based on the development of market demand and the development of external competition and reflect potential 'boating worlds' within 10 to 20 years from now. Although the main purpose of the scenarios is to identify the key impacts and main trends in the sector outlook (see next section), it is possible to say something about the likelihood of the scenarios. First of all we expect, based on our current knowledge and insights, that the **level of external competition** will further increase in the future (or at least not decrease). With regard to manufacturing we expect that the competition on the European and on the global competition will further increase, especially from the side of US manufacturers in the high-end of the market. For the Far East we expect that the increase in competition will be limited, but especially on the low-ends of the market (inflatables, but maybe also small vessels and outboard engines) the shift towards manufacturing in the Far East may continue. Also for charters (and to a limited extent for marinas) we expect some increase in the level of competition from non-European enterprises. But, due to the 'local' characteristics of the industry we expect that the magnitude less strong, compared to the manufacturing industry. In terms of the **development of demand**, we do not expect 'booming' demand but a strong shift in the market. The European population of boat owners is aging and demand is shifting towards more rental and chartering of boats. We expect that the average European demand for new boats will stay low or stable in the coming years, while for example marinas and especially charter companies will benefit from this development. At the global market we do not expect a strong increase in demand in the coming five years, as upcoming markets (like China and Brazil) currently face a delay in their economic development. For China the long expected development of a 'boating environment' (e.g. regional development and development of a network of marinas) is expected to take more than five years.

To summarize, we assess that the SHIPWRECK scenario seems a plausible scenario (at least for manufacturing) although the demand for charters and rental services may increase in the coming period. The HIGHWAVES scenario seems too optimistic in terms of demand development for manufacturing but may become plausible for segments of the services sector. The likelihood of the AIRLESS and DOWNWIND scenarios is not very high, as we expect that global competition will increase.

5.3 Outlook & recommendations

In this section we first combine the four scenarios with the SWOTs made for the manufacturing and services boating sector. This provides an outlook for the sector development and from this recommendations that address the demand side and competitiveness side can be formulated.

5.3.1 Industry outlook

The manufacturing industry

When we put the SWOT-analysis into the perspective of the four future scenarios it becomes clear that the two most extreme scenarios (shipwreck and downwind) mainly strengthen or dampen the strengths/weaknesses, as well as the opportunities and threats. In the **downwind** scenario the

strong competitive position is further strengthened (high demand for EU brand and EU technologies) and the industry is taking advantage of the strong market developments (new markets, new products). At the same time the downwind scenario softens the current weaknesses of the industry (room for investments, higher profitability, etc.). For the **shipwreck** scenario it is more is less the other way around: the low demand and the increased global competition strengthen the current weaknesses and undermine the current industry strengths. The other two scenarios have less clear impact on the overall position of the industry, as the **airless**-scenario is mainly a continuation of the status quo, while the high waves scenario offers the EU industry the opportunity to benefit from the high demand despite the higher competition. These elements are summarized in the next table.

Table 5.5 Manufacturing industry SWOT analysis

Manufacturing	Shipwreck	High Waves	Airless	Downwind
Strengths				
The EU hosts European multinational companies, operating on the world market, with significant market power.	-	=	=	++
	In case of booming demand and low global competition (DOWNWIND), the position of the EU will further be strengthened (++). Under SHIPWRECK this position is weakened (-).			
The 'EU brand' is strong. Customers from outside the EU prefer to buy recreational crafts from an European brand, as it represents high quality and value added.	-	=	=	++
	See previous strength. In case of limited global competition the European industry can strengthen their competitive position (++).			
European boat builders have clear competitive advantages in knowledge (innovation) and design. The sector is innovative and develops new high-end technologies (e.g. electric propulsion).	-	+	=	++
	Increased demand (HIGH-WAVES and DOWNWIND) will strengthen the position of the EU industry (+/++), although increased global competition will limit this impact.			
Weaknesses				
Some boat builders face a lack of investment due to volatile cash flows and a shortage of funds. Investments in innovation are lacking behind.	--	+	=	++
	Increased competition and low demand (SHIPWRECK) will have a negative impact (--) on this already existing lack of investments. Increased demand will improve this situation.			
The production of boats can either be done in serial numbers of customized build. Overall, manufactures tend to realize low productivity (and profitability) figures.	--	+	=	++
	See previous weakness. Increased competition and low demand (SHIPWRECK) will have a negative impact (--) on this.			
Due to specific employment needs and skill requirements, some manufacturers face technical skills shortages.	+	-	=	-
	Increased demand (HIGH-WAVES and DOWNWIND) will increase the skill shortages (-).Under increased competition and low demand (SHIPWRECK) the shortages will be reduced (+).			
Opportunities				
Potential demand for new products and new markets in upcoming economies e.g. China and the Middle-East.	-	=	-	++
	Under increased demand and low competition (DOWNWIND) the potential for the EU industry is high (++). Under the other scenarios the potential is reduced or difficult to grasp (= or -).			

Manufacturing	Shipwreck	High Waves	Airless	Downwind
The request for (and availability of) new technologies, such as electric propulsion, which strengthens process and product innovation.	-	=	-	++
	See previous opportunity. Under increased demand and low competition (DOWNWIND) the potential for the EU industry is high (++).			
The further alignment of international regulatory framework; i.c. the further harmonization of EU and US recreational craft legislation and standards in order to reduce the entry barriers for European manufacturers to foreign markets.	-/+	+	+	++
	The European industry has already a strong competitive (global) position and the further regulatory alignment will strengthen the market opportunities outside the EU (+). Of course this also gives opportunities for non-European competitors (especially under SHIPWRECK), but the advantages are expected to outweigh the disadvantages.			
Threats				
Demographical changes, ageing, and changing leisure expenditures result in a changing business environment.	--	+	=	+
	The scenarios of increased demand (DOWNWIND and HIGH-WAVES) may have a positive impact on this threat (+). Under increased competition and low demand (SHIPWRECK) this threat will be very serious (--).			
The 'sharing economy' results in changing customer demand, and a growing charter segment.	=	+	=	+
	The scenarios of increased demand (DOWNWIND and HIGH-WAVES) may have a positive impact on this threat (+) for manufacturing or even positive for charters and marinas. Neutral impact under the other scenarios, although this may differ per segment (manufacturing vs charters).			
Increased competition from boat builders in upcoming economies, in combination with existing import barriers (e.g. China and Brazil).	--	+	=	++
	This threat may be limited (+/++) under the scenarios of increased demand (DOWNWIND and HIGH-WAVES). Under increased competition and low demand (SHIPWRECK) this threat will be very serious (--).			
External financers (e.g. banks) are still reluctant to provide credit, which creates difficulties in relation to the access to finance.	-	+	=	+
	The scenarios of increased demand (DOWNWIND and HIGH-WAVES) will limit this threat (+), while increased competition and low demand (SHIPWRECK) will have a further negative impact (-).			

Note: the symbols reflect the assessed impact of the different scenarios on the SWOT-indicators. The symbols range from '++' (strong positive or strengthening impact) to '=' (neutral impact) and '--' (strong negative or softening impact).

It becomes clear from the table that the competitive position of the industry is to a very large extent depending on the development of the EU or global market and how the industry positions itself. At the same time we see large societal developments which can hardly be influenced (demographical changes, ageing, changing leisure patterns, upcoming sharing economy'). Considering the position of the industry and the European Commission we see potential in the following fields (which will be discussed in more detail in the next section; also *italic wording in table*):

- **Alignment of international legislation** in order to remove unnecessary barriers for international trade (given the strong competitive position of the EU); *see recommendation 1*;
- **Stimulating research, development and innovation** in order to protect or even strengthen the global competitive position of the manufacturing industry; *see recommendation 2;*

- Trying to **reduce the import barriers** for promising export markets (given the strong competitive position of the EU); *see recommendation 3;*
- Strengthening the awareness on **access to finance**, while at the same time we realize this is mainly a private / market activity (banks, private investors); *see recommendation 4.*

Charter

Given the external nature of some of the key strength and weaknesses of the EU charter industry (such as attractive sailing area, Europe as a brand etc.), the direct impact of scenarios is limited on the sector. However, in some scenarios it will be crucial to play out certain strength or to address specific opportunities more than in others. In both the **downwind** and the **high-waves** scenario high demand would continue in the sector. Consequently the strength of the EU charter industry could be fully be played out. In the case of the downwind scenario weaknesses would not be visible and play a minor role, given the lack of competition. The charter industry could capture the increasing demand. In the case of the **high-waves** scenario, there are however new competitors entering the market. Given that the weaknesses of the industry are of external nature, they do count for all providers. Hence no changes are expected. High competition from outside the EU could however reduce market shares of EU industry. Given the adaptability of the sector in the EU, it is expected that the industry could also cope with new competitors. A challenging situation would be the **shipwreck** scenario, where decreasing demand would be combined with higher competition. In such a situation it would be crucial that the sector plays out its opportunities to avoid losing remaining clients to areas outside the EU. The **airless** scenario would lead to a 'freeze' of strength. The sector would not have to face much competition, but generate new demand through pushing on its opportunities. The following table provides an overview on what strengths/weaknesses/opportunities/threats are expected to change in what direction based on the scenarios.

Table 5.6 Charter SWOT analysis

Charter	Shipwreck	High Waves	Airless	Downwind
Strengths				
Adaptive to demand changes: The sector is very adaptive to demand changes, shows flexibility in its offer in terms of boat size, charter models etc.	Important	=	Important	=
	Such adaptability is very important under low demand scenarios (SHIPWRECK and AIRLESS). The high demand scenarios (HIGH WAVES and DOWNWIND) will not impact the adaptability, but will also less require it.			
Open to new initiatives: In addition to its adaptability to changes, the sector is also open to new initiatives and has introduced various new initiatives throughout time. It hence continuously widens the scope of its potential offer wherein it remains adaptive to changes.	Very important in this scenario			-
	In situations of strong competition (HIGH WAVES and AIRLESS) as well as low demand (SHIPWRECK and AIRLESS), openness to new initiatives to revitalize the sector is crucial. High demand and low competition (DOWNWIND) on the other hand may reduce the pressure on such openness.			
High demand for Europe (Mediterranean): Particularly the Mediterranean is still a very popular area which has a high demand for charter services.	--	+	-	++
	By definition a low market demand scenario is reducing the high demand strength of the sector. This is particularly the case if also outside EU competitors are strong (SHIPWRECK), but also visible with low competition (AIRLESS). The other scenarios reflect the opposite. High demand increases the strength			

Charter	Shipwreck	High Waves	Airless	Downwind
	(HIGH WAVES). Combined with low outside EU competition this effect is even stronger (DOWNWIND).			
Attractive sailing area: Linking to strength number 3, the EU is perceived as a very attractive sailing area providing a very diverse environment and a well developed supporting infrastructure.	+	-	+	-
	Attractiveness of a sailing area is supported by strong infrastructure, but especially by untouched nature. Strong demand (HIGH WAVES and DOWNWIND) risks to reduce the attractiveness of the sailing area. Low demand (SHIPWRECK and AIRLESS) on the other hand increase it.			
Local entrance possible: Large shares of the market are controlled by a small number of companies, but at a local scale it is rather easy to enter the market.	--	=	-	++
	Entrance in the sector is costly and only profitable if sufficient demand exists. Local entrance is still possible. Under the scenario of low demand and strong competition (SHIPWRECK) it will be strongly reduced. If the demand increases, but competition increases as well (HIGH WAVES) the situation remains stable. Low demand is a problem, but if there is also low competition (AIRLESS), the impact is limited. If the demand increases, but the competition remains low (DOWNWIND), the entrance possibility on a local level strongly increases.			
Weaknesses				
Skippered boats: The lack of harmonization of professional skippers licenses creates difficulties in combination with flag state rules. Consequently the charter industry often risks to operate in an illegal environment due to a shortage of skippers with the license adapted to the flag state of a certain boat.	Increased pressure for change		Reduced pressure for change	
Flag state regulations differ (cross border issues): In principle ships have to comply with the regulations depending on their flag state. In the case of recreational boating however, where individuals do not just enter and exit coastal states, but remain longer in their water, they have to comply with both the flag state and the coastal state rules. This causes problems with cross border trafficking and reduces the willingness to do so.	In scenarios of strong competition (SHIPWRECK HIGH WAVES) from outside the EU the pressure on the regulators is to increase the attractiveness of the sailing area. Cross border acceptance facilitates the ability to operate in the EU. On the other hand in case of low competition (AIRLESS and DOWNWIND) such pressures do not exist. The pressures in both cases are lower if there is strong demand.			
Rather unregulated business: The charter business is still a very unregulated business. This offers easier entrance into the sector, but at the same time also carries the risk of low quality services and unreliable providers not guaranteeing safety standards or fulfilment of all regulatory requirements	--	++	--	-
	Low demand reduces the focus on regulating the segment (SHIPWRECK and AIRLESS). High demand and strong competition may push regulators to focus on regulating the business (HIGH WAVES). In case of high demand, but low competition on the other hand			

Charter	Shipwreck	High Waves	Airless	Downwind
of a boat. Customers have less guaranteed safety and quality of service standards.	(DOWNWIND), less changes can be expected.			
High-level market dominance: The market is dominated by a small number of companies, which creates the risk of an oligopolistic situation.	++	++	--	--
	Scenarios with stronger competition, by definition have an impact in terms of reducing the domination of a small number of companies (SHIPWRECK and HIGH WAVES). The opposite is the case for low competition scenarios (AIRLESS and DOWNWIND).			
Lack of skills/technical expertise: Only limited special training for professionals in the sector cause skills shortage and may hamper the growth of the sector.	+	++	-	+
	High competition as well as high demand scenarios positively affect the increase in skills and technical expertise given the increased demand for it. In the case of both high demand and strong competition (HIGH WAVES) this is effect is the strongest. In the case of low demand and low competition (AIRLESS) the lack of skill will remain or even worsen.			
Opportunities				
Shifting demand (from owning to rental): In recent years demand shifts have been observed from boat ownership towards rental. This creates more opportunities for charter providers to capture a larger amount of customers.	--	++	--	++
	Low demand scenarios reduce the expected further shift from ownership to rental (SHIPWRECK and AIRLESS). High demand scenarios have the opposite effect (HIGH WAVES and DOWNWIND).			
New business models (sharing): New business models such as boat sharing may attract other targets than the traditional chartering.	Very important		--	+
	Under strong competition these opportunities are very important to be used to keep the sector strong. In case of low demand and low competition new business models cannot be expected. In case of high demand and low competition some innovation will still happen.			
Cruise style of charter (renting a cabin on a chartered boat): This type of business model is getting more and more popular providing the possibility to be on a skippered yacht which covers a fixed tour (such as a cruise ship), but without any individual responsibility.	=	++	--	+
	Strong competition pushes providers to be innovative, high demand asks for new models. These can balance each other out such as in the SHIPWRECK scenario. High demand and strong competition have a strong influence on such business models (HIGH WAVES). Low competition and low demand reduce their opportunities (AIRLESS). High demand, but low competition provide the opportunity to further strengthen yourself (DOWNWIND).			
Mixed packages (ship/car/hotel): Mixed packages combining e.g. ship, car and hotels and all-inclusive booking reducing the organizational burden for privates have the possibility to attract new customers.	=	++	--	+
	For mixed packages counts the same as for the cruise style of charter (see one above).			
Threats				

Charter	Shipwreck	High Waves	Airless	Downwind
Less demand for second hand boats: Given the reduced number of boat owners, but the increase in charter the increased turnover of boats for charter companies may lead them to a situation where they do not manage to sufficiently sell their old boats again on the second hand market.	=	-	+	-
	When there is high demand for charter, also the boats need to be replaced more frequently. Therefore the second hand market can be a threat (HIGH WAVES and DOWNWIND). In the case of low demand this is less of an issue. Particularly when there is low competition also meaning lower competition in selling your boats on the section hand market leading to a more positive development (AIRLESS).			
High capital demand (entrance/loans): Entering the sector requires sufficient capital as setting up a business with new boats is not cheap. This can hinder new entrants and hence cause a low level of competition.	=	=	=	=
	High capital demand is a fixed factor and not influenced by any of the scenarios. However under more profitable scenarios such as low competition and high demand (DOWNWIND) access to such capital may be easier.			

Note: the symbols reflect the assessed impact of the different scenarios on the SWOT-indicators. The symbols range from '++' (strong positive or strengthening impact) to '=' (neutral impact) and '--' (strong negative or softening impact).

Based on this analysis we see policy potential in areas where external factors play a crucial role. These cover the scope from keeping attractiveness of the area high, reduce complexity and intransparancy and provide a framework that keeps the European charter sector competitive. More precisely this means (detailed recommenations building on these points are elaborate in the next section; also italic wording in table above):

- Ensuring **easy cross-border movement of boats within Europe**, in order to simplify boat chartering in Europe and improve the functioning of internal market; *see recommendations 5;*
- Supporting the ability of the charter sector to **keep the quality of its services high or even increase it** (e.g. through well trained staff) and thus keeping the demand for chartering high; *see recommendation 6.*

Marina

When we put the SWOT-analysis into the perspective of the four future scenarios, the **high waves scenario** most significantly impacts the strengths, opportunities, weaknesses and threats for the marinas. In this scenario the strong competitive position, as well as high market demand are further strengthened. High demand justifies higher investments and high competition leads to further quality efforts in the sector. This scenario has a strong impact in particular on the opportunities for the marinas. The other scenarios have diverse patterns. The **shipwreck** scenario with low demand and high competition is rather unrealistic. Such a scenario could only happen temporarily where competition increases due to expected (but not yet happening) increasing demand. Those with better access to capital in such a situation would be able to be better prepared for the future increase of demand. The **airless** scenario would lead overall to a negative development of the sector or to a 'freezing' of the state of play. Low demand and low competition would lead to a situation where the weaknesses are not addressed and opportunities not grasped. The **downwind** scenario is a scenario that would help existing marinas to invest in their offer. The low level of competition would however mean that the sector could 'afford' its weaknesses and would not have to adapt as quickly.

The following table summarises the impacts of the scenarios on the strength/ weaknesses/ opportunities/ threats.

Table 5.7 Marina SWOT analysis

Marinas	Shipwreck	High Waves	Airless	Downwind
Strengths				
Density of marina's/good network (proximity to tourist areas): Overall the density of the marina network is good in the EU which attracts many sailors to come to Europe.	=	++	--	+
	High demand and competition lead to higher investment in marinas and hence the density of it (HIGH WAVES). The opposite is the case for low demand and low competition (AIRLESS). High demand and low competition could trigger some more investment (DOWNWIND) mainly by existing marina investors.			
High quality standards: The quality of marinas in the EU is relatively high, increasing the attractiveness of the brand.	++	+	-	--
	Strong competition further triggers the quality standards of marinas. Strong demand however negatively impacts the quality. Therefore the best situation for quality is strong competition and low demand (SHIPWRECK). The opposite scenario has the worst impact on quality (DOWNWIND).			
"Europe" is a strong brand: Europe is the worlds tourism destination number 1 and also in sailing a very popular destination. The brand of "Europe" remains strong.	-	--	++	+
	Low outside EU competition is positive for the brand 'Europe'. Overly filled marinas are however not good for the brand. Therefore, low outside EU competition combined with not overly filled marinas is the best scenario for the brand (AIRLESS). The opposite is the worst scenario (HIGH WAVES). Between the middle scenarios the more favorable one for the brand is the high demand, but low competition one (DOWNWIND).			
Strong internal demand: The EU internal demand remains high which guarantees stability over years.	--	++	--	++
	By definition the high demand scenarios are positive (HIGH WAVES and DOWNWIND) and the low demand ones negative (SHIPWRECK and AIRLESS)			
Weaknesses				
Local focus (sometimes "poorly organised")/fragmented/different interests: Coordination between marinas for coherent development is often lacking. Every marina follows its own development path which causes risks for the overall branding of a region.	++	+	-	--
	In case of low demand, but strong competition marinas will be forced to reduce their local focus (SHIPWRECK). Also in the case of strong competition and high demand, this factor will remain positive even though less important (HIGH WAVES). Low demand and low competition have a negative impact on the local focus (AIRLESS). High demand and low competition do not trigger any change concerning this weakness (DOWNWIND).			
Slow innovators: Innovations are often only picked-up when absolutely necessary. Marinas themselves are very slow innovators.	++	+	-	--
	Strong competition forces change and pushes innovation. This is particularly paired with low demand (SHIPWRECK), but also the case to a less extent under high demand (HIGH WAVEST). Low demand and low competition trigger less innovation (AIRLESS). High demand and low competition demand no innovation			

Marinas	Shipwreck	High Waves	Airless	Downwind
	(DOWNWIND).			
Not always focused on clients (old-fashioned): The client orientation is missing in many marinas. The business style is often old style and is lacking a service oriented culture.	++	+	=	--
	The lack of client focus is similar to the slow innovators case above. The only difference is that low market demand and low competition (AIRLESS) seem to simply keep the situation stable.			
Regulatory hurdles to develop marinas (local): Local regulatory barriers to invest in marina developments may hamper their growth potential and cause reduced competitiveness over time.	=	++	--	+
	High demand requires changes in the regulatory hurdles. This is particularly the case when combined with strong outside EU competition (HIGH WAVES). In the case of strong outside competition, but low market demand no change can be expected (SHIPWRECK).			
Opportunities				
Integrated regional development (clusters): A stronger integration of marina development in the regional development can create synergies and increase overall tourism offer in the area.	+	++	=	+
	Integrated development is forced to happen under strong competition. It is further supported by high market demand (HIGH WAVES). Low demand and low competition provide no change to this situation (AIRLESS).			
IT services (apps): IT services are already a must in the sector. New applications facilitating the operation and the move from one marina to the other may further attract customers.	+	++	--	-
	IT services are an opportunity to improve the competitive situation and to capture high demand. Therefore the development of this opportunity is expected to be the highest under the HIGH WAVES scenario, followed by the SHIPWRECK scenario. The mirror scenarios have the mirror effect.			
New user concept (house + boat + rental): New concepts combining different offers and hence providing 'all-inclusive' solutions can attract further customers which are less interested in long and detailed planning processes.	+	++	--	+
	The situation for the new user concept is similar to the IT services with the difference that a high demand low competition scenario still provides a good opportunity to apply new concepts (DOWNWIND).			
Threats				
Aging of users/owners: The ageing of boat owners is becoming a problem and causes challenges in accessibility in marinas.	External issue not impacted by any scenario – demanding adaptability			
Aging of boats (environmental concern + hampering demand): The ageing of boats may become an issue if sufficient recycling offer is missing.	External issue not impacted by any scenario – demanding adapted framework conditions			
Changing demand: Changing demand structures from boat owning to charter as well as different boat sizes require marinas to be adaptive. This is not always easy as sometimes bigger investments are needed.	-	+	-	+
	Changing demand is by definition a threat when it is decreasing and less of a threat when increasing. Therefore HIGH WAVES and DOWNWIND scenarios do not provide a threat, while SHIPWRECK and			

Marinas	Shipwreck	High Waves	Airless	Downwind
	AIRLESS do.			
Difficulty to expand: Marinas are usually in the center of villages and hence have geographical limits for expansion.	+	-	+	-
	This is more of an issue when facing high demand as more investments are required (HIGH WAVES and DOWNWIND).			

Note: the symbols reflect the assessed impact of the different scenarios on the SWOT-indicators. The symbols range from '++' (strong positive or strengthening impact) to '=' (neutral / no impact) and '--' (strong negative or softening impact).

Policy potential lies in the improvement and establishment of framework conditions that cause an incentive to improve the quality of the offer from a European and sector perspective and not only from a local perspective. Specifically we see potential in the following fields (which will be discussed in more detail in the next section; also *italic wording in table above)*:

- Ensuring **easy cross-border movement of boats within Europe**, in order to improve the functioning of internal market; *see recommendation 5;*
- Supporting the ability of marinas to **keep the quality of its services high or even increase it** and thus keeping the demand high; *see recommendation 6;*
- Promoting **recycling of recreational craft vessels;** *see recommendation 7;*
- Supporting coordination of **clusters development** between marinas within Europe; *see recommendation 8.*

5.3.2 *Recommendations for further strengthening the sector's competiveness*

Here we present the specific recommendations that would support in reaching the over-arching objective for the sector to increase the competiveness and sustainability of the sector. The recommendations for further improvement presented in the table below comprise the following information:

- Category: it will be specified whether the recommendation address the market demand or level of competition or both (the two elements of the scenarios);
- Impact: the likely impact of the action will be resented;
- Actor: the main actor, who would be responsible for implementing the recommendation.

Nr.	Recommendations	Description
1.	**Increase efforts in order to align global legislation.** Due to EU's strong market position of manufacturing sector, the EC should stimulate or increase the efforts to harmonize global legislation on recreational craft. This could be achieved by a global regulatory platform in order to identify the challenges and possibilities.	• **Category**: Level of competition and global demand; • **Impact**: This action will strengthen the competitive position of the EU industry and increases business development of EU manufacturing companies on the long run; • **Actor**: European Commission in close combination the relevant authorities in other manufacturing countries worldwide.
2.	**Promote innovation and R&D.** The EU is a frontrunner with respect to innovation and technological processes e.g. in electric propulsion. In order to protect this competitive advantage, innovation and R&D (especially fundamental and experimental research) should be promoted and stimulated. This can be promoted and	• **Category:** Level of competition; • **Impact:** This action will strengthen the strong competitive position of the EU industry and increase the competitiveness of the recreational craft sector in the long run; • **Actor:** In relation to already existing funds and programs, the (European and national) sector associations are the main actors to promote this

Nr.	Recommendations	Description
	incorporated in (existing) innovation programs by the industry and via existing programs like the Horizon 2020 programs. The boating industry should be integrated more in existing programs. The focus of the R&D and innovation support can e.g. be related to: • Improving the safety of recreational crafts. Innovation in this area can include e.g. satellite weather forecast devices for boats, tracking systems for boats etc.; • Promote an environmental friendly production process, or the development of a renewable recycling system of used and abandoned crafts; • Promote market adaptations for elderly people to allow bridging seasonality.	and provide information. Specific attention needs to be paid to SMEs, as they often experience difficulties to access these programs. In line with the regulatory requirements of R&D&I support there should be a strong participation of the industry and/or research institutes. The European Commission should be involved in the prioritization, of course in close combination with the industry. *NB: Improvement of the safety of recreational crafts is expected to contribute to a reduced number of nautical accidents.*
3.	**Continue efforts to lower trade barriers to countries like Brazil and China.** Overall, trade barriers are not seen as a major issue, but to some extent European export is hindered by existing trade barriers. As indicated in chapter 3, high import tariffs in China and Brazil (regional) are experienced by the industry. It is recommended that the exact magnitude of the tariffs and the impact on sales prices are made more concrete by the industry.	• **Category:** Level of competition and global demand; • **Impact:** Lower trade barriers will strengthen the position of the EU industry in the long run; However, experiences show that this is a very delicate and political process with uncertain outcomes; • **Actor:** European Commission (DG Trade together with DG GROW) in combination with the industry (especially exporting enterprises). Especially the industry needs to identify and address the experienced trade barriers in more detail.
4.	**Strengthening the awareness on the access to finance**, especially for SMEs. Marinas and manufacturing companies, especially SMEs, still face problems attracting capital in order to make necessary investments. This is primarily a private market activity. Nevertheless, different finance options on EU level have been opened, but are still poorly used / found by industry. There is a role for (European and national) industry associations to raise awareness to industry on the access to existing structural funds, SME funds or investment funds like Horizon 2020.	• **Category:** Level of competition; • **Impact:** In the long run the better access to finance should increases the business development of SMEs and the overall competitiveness of the industry; • **Actor:** Given the fact that access to finance is primarily a private task, industry associations could increase awareness raising efforts on existing options.
5.	**Strengthening the internal market**. This can be realized by:	• **Category:** Level of competition and demand; **Actor:** Mainly the European Commission (especially task 5c and 5d) in combination with

Nr.	Recommendations	Description
	5a. Support transparency of (private) license requirements in the EU. An overview of private license requirements in each Member State should be made commonly available. The reinforcement of the Resolution 40 could be a solution. **5b. Promote mutual recognition of national professional skipper licenses across the EU.** Qualifications obtained in one Member State should be recognised in another. Possible solution is acceptance of the ICC (International Certificate of Competence) also as a professional standard across EU28 or the development of a common training framework (CTF) or a common training test (CTT). **5c. Promote (international) agreement on acceptance of flag state requirements** in coastal states. Of relevance in particular for private boaters and the charter companies. **5d. Achieving convergent approaches on taxation** (especially in the Mediterranean where 80% of charter activity is taking place).	national authorities; the industry needs to be involved in order to ensure the efficiency and effectiveness of the measures. • **Impact 5a:** This action is expected to contribute to a level playing field in the services market (especially private boaters and charter) and to have a positive effect on the cross-border tourism. • **Impact 5b:** This will make it easier for skippers to work abroad or to work on vessels registered under a foreign flag. • **Impact 5c:** The impact of this action is expected to contribute to a level playing field in the services market (especially charter) and to have a positive effect on the cross-border tourism. • **Impact 5d:** This is of particular importance for the future development of charter and provides legal/ fiscal certainty which helps attract financing and investment for the activity by decreasing its perceived activity-related risk.
6.	**Strengthen the ability of the charter** sector to keep the quality of its services high or even increase it. This can be realized by: **6a. Promote training opportunities** for future recreational craft employees (especially technical experts). In addition, educational programs should focus more on practical knowledge and skills, such as the need for knowledge on tourism and cultural aspects by skippers. **6b. Promote and create more training programmes for marina managers.** The training programs should focus on marina management and marketing (learning how to be more adaptive to marina clients' needs, innovative services and how to attract new clients). **6c. Create a best-practices sharing/ communication platform** that would enable charter and marinas to learn form others, increase the uptake of innovative services and thus improve their performance.	• **Category:** Level of competition. • **Actor:** Mainly the industry itself, where possible supported by the European Commission and /or Member States. • **Impact 6a:** This action is expected to stimulate the competitiveness of the sector through providing the required (technical) expertise and skills that the services sector is currently lacking. • **Impact 6b:** This action is expected to stimulate the competitiveness of the sector through improving the management and marketing skills of marina managers. • **Impact 6c:** This action is expected to stimulate the competitiveness of the sector through improving the performance of charter companies and marinas.

Nr.	Recommendations	Description
7.	**Stimulate the development of a European ship recycling scheme.** This scheme should cover end-of-life boats. It is an urgent matter, as the lifespan of first generation plastic boats is coming to an end and many boats will need to be demolished in the coming years. This applies also to charter boats, as they have a shorter lifespan than a privately owned boats.	• **Categor**y: Market demand • **Impact:** The likely impact of this action is expected to reduce environmental risks, increase the attractiveness of marinas and stimulate the demand for the manufacturing subsector; • **Actor:** Mainly the industry itself (this is primarily a market driven activity) where possible supported by Member States and/or the European Commission**.**
8.	**Support coordination of clusters development between marinas within Europe.** Clustering of marinas should be further promoted.	• **Category:** Level of competition • **Impact:** This action promotes exchange of good practices between marinas, thus increases the number of marinas' visitors. Consequently the competitiveness of marinas can be strengthen. • **Actor:** Mainly the marinas/industry, but it is expected that stronger support is needed from national associations and Member States (informing marinas and charter about cluster initiatives at local and European level).

Appendix 1: List of interviewees

Name	
	Associations
Mr. S. Pagani	UCINA Confindustria Nautica
Mr. A. Brinckmann	ADAC
Mr. L. Janssens	Nautibel
Mr. P. Karlson	Batunionen
Mr. R. Perocchio	Italian Marine Industry Association
Mr. B. Clark	British Marine Federation
Mr. I. Cordoba	Association de Navegantes de Recreo
Mr. B. Mader	Croatian Chamber of Economy, Tourism department
Mr. J. van den Heuvel	HISWA
Mrs. N Bigaignon	Fédération des Industries Nautiques
Mr. J. Tracht	Bundesverband Wassersportwirtschaft (BVWW)
Mr. S. Caruthers	European Boating Industry (EBI)
Ms. M. Cieniewicz & E. Tomczuk	EBA
Mr. Klok	Nederlandse Jachtenbouw Industrie (NJI)
Mr. M. Eriksson	Swedish Marine Industries Federation - SWEBOAT
Mr. N. Craine	ICOMIA
Ms. M. De Vast	TransEurope Marina's
Mr. G. Sandoval	Spanish Federation of Marina Associations
Mrs. M. Iglesias	World Wide Yachting Association (MYBA)
	Manufacturing companies
Mr. Yves Lyon-Caen	Groupe Bénéteau
Mrs. G. Vitelli	Azimut Benetti
Mr. F. Rossi	San Lorenzo
Mr. J. Vissers	Volvo Penta
Mr. D. van der Heijden	Wajer en Wajer
Mr. T. Steentjes	Vanquish Yachts
Mr. E. Johansson	Hydropower
Mr. C. Ballin	Torqeedo
Mr. R. Visser	Yamaha
Mr. J. Gerhardt	Hanse Group
Mr. P. Polesie	CIMCO/OXE
Mr. Craine	Garmin
Mr. R. Girbau	Girbau Boats
	Charter Companies
Mr. E. Allot	TUI Marinas
Mrs. J. Tucci	The Moorings
Mr. F. Bauguil	Sunsail
Mr. F. Kiriacoulis	Kiriacoulis Mediterranean
Mr. L. Bonnet	Dream Yacht Charter
Mr. B. Nielson	Sailing Holidays
	Crewing agencies
Ms. Silja	Sea Teach

Name	
	Marina's
Ms. M. Symes	Mel Symes
Mr. K. Baird	Quay Marinas
Mrs. Isolete Correia	Marina de Vilamoura S.A.

Appendix 2: Survey

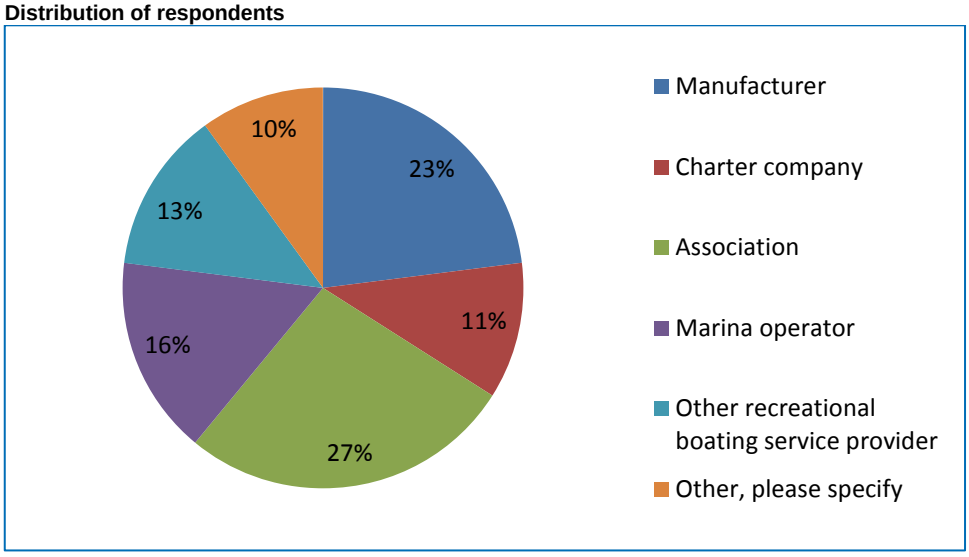
For this study we designed a web survey addressing five types of stakeholders in the recreational craft sector, namely:

- Associations;
- Marina operators;
- Manufactures;
- Charter companies;
- Other recreational craft service providers e.g. sailing schools and maintenance companies.

We have approached respondents trough various channels. First of all we used the network of associations in every EU Member State. They send out our invitations letter to their members. Secondly, we directly approached companies through our network.

The web surveys were live for 39 days and in total we reached 371 respondents that opened the web survey. 135 respondents went through the survey of which 80 reached the final question. The below figure indicates the distribution of the respondents:

Distribution of respondents



In the following table some more information on the respondents is provided

Respondents characteristics

Category	N	Geographical spread
Associations	32	Evenly spread around EU
Marina operators	20	75% from Italy
Manufacturers	29	25% from Italy, the rest evenly spread around EU
Charter companies	15	50% UK, 30% Greece, Italy France (operate in several countries)
Other	16	Evenly spread around EU

Appendix 3: Data clarification

Chapter 3 - Data availability on profit margins on selected countries 2007-2013

Country	2007		2008		2009		2010		2011		2012		2013	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Croatia	61	91	66	92	70	90	68	89	63	81	65	83	62	86
Finland	95	97	116	93	118	89	124	92	130	89	117	70	108	65
France	136	91	153	88	157	76	164	75	182	74	166	69	145	61
Hungary	23	85	23	85	46	90	45	90	43	83	52	85	48	77
Italy	533	89	610	90	660	88	699	87	696	89	657	89	549	91
Spain	45	92	51	93	56	92	58	92	54	95	55	89	44	86
Sweden	158	93	158	91	168	75	170	74	177	74	198	76	209	72

Source: Calculations based on BVD Amadeus database.

The table above shows the data availability for the profit margins. The first column of each period shows for how many companies the profit margin were available. The second column of each period shows the percentage of companies in the database for which the profit margin was available.

Croatia

For 2013, data was collected for 62 companies in Croatia. The five companies with the highest operating revenue are Ad Boats, Elan Motor Yachts, Bomi Ship, Damor and SAS-Vektor.

Finland

For 2013, data was collected for 108 companies in Finland. The five companies with the highest operating revenue are Inhan Tehtaat, Baltic Yachts, Nautor's Swan, Botnia Marin (Targa) and Bella Boats.

France

For 2013, data was collected for 145 companies in France. The five companies with the highest operating revenue are SPBI, Construction Navale Bordeaux (both subsidiaries of Bénéteau Group), Dufour Yachts (insolvency procedure since 2013?), Fountaine Pajot and Chantiers AMEL.

Hungary

For 2013, data was collected for 48 companies from Hungary. The five companies with the highest operating revenue are Pedro Boat, Style-Yacht, South Coast Composite, Schäfer Yacht and Hódy Sport.

Italy

For 2013, data was collected for 549 companies from Italy. The five companies with the highest operating revenue are Ferretti, Monte Carlo Yachts (subsidiary of Beneateau Group), Overmarine Due, Sessa Marine and Arimar.

TYG was the third third largest company, but dissolved in 2014. Mano Marine was the fifth largest company, but dissolved in 2010.

Spain

For 2013, data was collected for 44 companies from Spain. The five companies with the highest operating revenue are Artemis Racing (Spain), Mecanicas Bolea, Astilleros Astondoa, Zodiac Española and SASGA Yachts.

Sweden

For 2013, data was collected for 209 companies for 2013. The five companies with the highest operating revenue are Nimbus boats, Hallberg-Rassy, Windy Scandinavia, Storebro Boats and Linder Aluminiumbåtar.

Appendix 4: Overview of skippers licenses

There are a series of different licenses which can be acquired across the EU. The specific licenses offered depend on the country. The necessity of carrying a license when skippering a boat also depends on the flag state (and coastal state) as described in chapter 4.4.3.

In terms of the user of such licenses we have to distinguish between professional and private. This is however not always clearly reflected in the existing licenses. In principle all licenses can be obtained by private skippers but are not always required, they are not always required to operate a boat. The compulsory requirement is often dependent on the speed or power of a vessels and the length (or gross tonnage). These limits differ strongly per country[238].

In many countries there are specific licenses required for skippers who sail professionally with passengers on board on vessels that are smaller than 24 meters. In many cases they are related to the distance from the closest port where sailing activity takes place and experience levels. A good example is presented for the UK in the below text box. In addition, specific licenses/proof may be required for operating radio-navigation equipment, radar, sea survival, first aid, medical fitness etc.

Text box: Professional skipper licences: example of the UK

Professional Yachtsmen are required to hold certain qualifications. The table below summarises the manning requirements that apply on UK flagged vessels up to 200 tonnes and carrying up to a maximum of 12 passengers.

Area of Operation	Limitations	Minimum Qualification for Skipper on board a Power Vessel	Minimum Qualification for Skipper on board a Sail Vessel	Minimum Crew Requirement
Area Category 6	Vessel under 24m, within 3 miles from nominated departure point in favourable weather and by daylight	RYA Powerboat Level 2 and 12 months relevant experience OR RYA Day Skipper Power	RYA Powerboat Level 2 and 12 months relevant experience OR RYA Day Skipper Sail	A 2nd crew member who can assist the skipper
Area Category 5	Vessel under 24m, within 20 miles from nominated departure point in favourable weather and by daylight	RYA Day Skipper Power & Shorebased & 12 months relevant experience	RYA Day Skipper Sail & Shorebased & 12 months relevant experience	A 2nd crew member who can assist the skipper
Area Category 4	Vessel under 24m, within 20 miles of	MCA/RYA Advanced	MCA/RYA Yachtmaster	A 2nd crew member who can

[238] For a good overview see the recent (13 february 2014) overview of the regulatory state-of-play on boat licenses as prepared by EBA on a survey in different EU countries ("140213 Update on boat license_ICC_v3MC.pdf" available at www.norboat.no)

	a safe haven in favourable weather and by daylight	Powerboat Cert. of Competence & 2 years relevant experience OR MCA/RYA Yachtmaster Coastal Power	Coastal Sail	assist the skipper
Area Category 3	Vessel under 24m, within 20 miles of a safe haven	MCA/RYA Advanced Powerboat Cert. of Competence & 2 years relevant experience OR MCA/RYA Yachtmaster Coastal Power	MCA/RYA Yachtmaster Coastal Sail	A 2nd crew member who can assist the skipper
Area Category 2	Vessel up to 200 tonnes, within 60 miles of a safe haven	MCA/RYA Yachtmaster Offshore Power	MCA/RYA Yachtmaster Offshore Sail	An experienced crew member
Area Category 1	Vessel up to 200 tonnes, within 150 miles of a safe haven	MCA/RYA Yachtmaster Offshore Power & MCA AEC & STCW'95 Medical Care	MCA/RYA Yachtmaster Offshore Sail & RYA Diesel & STCW'95 Medical Care	A MCA/RYA Yachtmaster Coastal Sail OR Power
Area Category 0	Vessels up to 200 tonnes, unrestricted by area	MCA/RYA Yachtmaster Ocean Power & MCA AEC & STCW'95 Medical Care	MCA/RYA Yachtmaster Ocean Sail & RYA Diesel & STCW'95 Medical Care	A MCA/RYA Yachtmaster Offshore Sail OR Power

Source: http://www.stormforce.biz/information-pages/resources/professional-skippers.html#.VIRlQ_6FOUl

Whereas for private skippers the ICC in practice often is accepted, even though Resolution 14 and/or 40 is formally not always recognised, key difficulties arise when professionally sailing a boat with another flag than the country where the license is obtained. Professionals need to either get the license of the flag state of the boats they want to sail or seek official acceptance of their license as an equivalent or perform additional exams and tests. For example RYA states that their professional licenses are accepted in many other countries but that professional skippers need to check this with the relevant maritime authorities in the country[239]. According to the GETAFIX 2012 survey the acceptance of license from another country is a major challenge for professional skippers in many cases. Examples stated in the survey are: the UK does not accept the Belgian Officer 500gt, Italy does not recognise the German SportHochSeeschiffer, in Portugal it is seen as basically impossible to get a foreign license accepted, Spain does not accept the RYA Commercial Yachtmaster, in France the MCA/RYA is accepted for certificates obtained in France but not for the

[239] http://www.rya.org.uk/coursestraining/professional/Pages/Whereyoucanwork.aspx

same certificate obtained elsewhere without having done an additional test on French maritime law and language etc[240].

The following table provides an overview on licenses issued per EU Member State. It also states the authority (which in most cases is a user association) and the specifications of the license.

MS	Issuing authority (of the license)	Skipper licenses	Brief description of the license	ICC acceptance	Sources of information
AT	Oesterreichischer Segel-Verband (OESV)	International Certificate for Operators of Pleasure Crafts	Different categories depending on the area of navigation authorised: 20 nautical miles, 200 nautical miles, or 3 nautical miles for a day or return trip. These licences are only for sailing craft. Age limit for licences: 18 16 for boats with less than 4,4 kW 12 for boats with electromotor less than 500 W	adopted resolution 40; ICC is recommended and accepted	http://www.rya.org.uk/infoadvice/boatingabroad/icc/Pages/eocrequired.aspx; Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
AT	Oesterreichischer Segel-Verband (OESV)	Befähigungsausweis zur selbstständigen Führung von Motoryachten im Fahrtbereich	Different categories depending on the distance authorised to travel: 20 Nm, 200 Nm, or 3 nautical miles for a day or return trip. These licences are only for sailing craft		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
AT	Oesterreichischer Segel-Verband (OESV)	Befähigungsausweis zur selbstständigen Führung von Motoryachten im Fahrtbereich	No distance restriction, but only for sailing craft		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
AT	Motorboot - Sportverband fuer Oesterreich (MSVOE)	International Certificate for Operators of Pleasure Crafts	Different categories depending on the area of navigation authorised: 20 nautical miles, 200 nautical miles, or 3 nautical miles for a day or return trip. These licences are only for motorized craft Age limit for licences: 18 16 for boats with less		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia

[240] Survey results GETAFIX

MS	Issuing authority (of the license)	Skipper licenses	Brief description of the license	ICC acceptance	Sources of information
			than 4,4 kW 12 for boats with electromotor less than 500 W		
AT	Motorboot - Sportverband fuer Oesterreich (MSVOE)	Befähigungsausweis zur selbstständigen Führung von Motoryachten im Fahrtbereich	No distance restriction, but only for motorized craft		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
AT	Motorboot - Sportverband fuer Oesterreich (MSVOE)	Befähigungsausweis zur selbstständigen Führung von Motoryachten im Fahrtbereich	Different categories depending on the distance authorised to travel: 20 Nm, 200 Nm, or 3 nautical miles for a day or return trip. These licences are only for motorized craft		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
BE	Federale Overheidsdienst Mobiliteit en Vervoer, Maritiem Vervoer/ Service public fédéral Mobilité et Transports, Transport maritime	Algemeen Stuurbrevet/ Brevet de conduite général	For vessels up to 100 GT and for travels in the international sea only	adopted resolution 40; ICC is required for vessels over 15m in length or capable of more than 20km/h (approx 11 knots), otherwise not required; there is also no objection for Belgian authorities to accept a certificate issued by authorities of another country	http://www.rya.org.uk/infoadvice/boatingabroad/icc/Pages/eocrequired.aspx; http://www.unece.org/fileadmin/DAM/trans/doc/2014/sc3wp3/ECE-TRANS-SC3-2014-12r1e.pdf; http://www.boatability.co.uk/rya-leisure-courses/icc-boat-licence/; Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia

MS	Issuing authority (of the license)	Skipper licenses	Brief description of the license	ICC acceptance	Sources of information
BE	Federale Overheidsdienst Mobiliteit en Vervoer, Maritiem Vervoer/ Service public fédéral Mobilité et Transports, Transport maritime	Certificate of yachtsman (coastal navigation) or Certificate of yacht navigator (ocean navigation)	Two categories depending on the size of the vessel (up to 100 GT or up to 500 GT). The Yachtsman is limited to 50 NM from a refuge.		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
BG	Морска Администрация (Република България) Bulgarian Maritime Administration	Водач на кораб (Skipper of seagoing vessel)	For vessels up to 20 GT and only for internal waters and territorial sea	adopted resolution 40	https://en.wikipedia.org/wiki/International_Certificate_of_Competence#Implementation_of_Resolution_40; Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
BG	Морска Администрация (Република България) Bulgarian Maritime Administration	Свидетелство за шкипер на кораб за спорт и развличение (Certificate for skipper of pleasure craft)	For vessels up to 20 GT and only for internal waters and territorial sea		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
BG	Морска Администрация (Република България) Bulgarian Maritime Administration	Международно свидетелство за водач на кораб за спорт и развличение (International certificate for operators of pleasure craft)	For vessels up to 20 GT but without restriction on the area of navigation		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
CY				has not adopted resolution 40 and does not accept ICC	http://www.norboat.no/file/0f326ef445be68362413787c85529ae8/140213%20Update%20on%20boat%20license_ICC_v3MC/
CZ	State Navigation Administration (Státni plavební správa)	Mezinarodni průkaz vůdce rekreaèního plavidla	Two categories whether they are for coastal waters or for inland waters	adopted resolution 40	https://en.wikipedia.org/wiki/International_Certificate_of_Competence#Implementation_of_Resolu

MS	Issuing authority (of the license)	Skipper licenses	Brief description of the license	ICC acceptance	Sources of information
					tion_40; Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
CZ	The Ministry of Transport of the Czech Republic (Ministerstvo dopravy České Republiky)	Průkaz způsobilnosti k vedení rekreační jachty	Three categories depending on the authorisation to sail in coastal areas, in the maritime areas or without restrictions		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
DE	Deutscher Segel-Verband	Internationales zertifikat für führer von sport und freizeitfahrzeugen auf den seeschifffahrtsstrassen (Sportboot-Führerschein See)	Certficate used only for inland waters, and for sailing craft only River Rhine: > 5 HP compulsory Other inshore waterways: > 15 HP compulsory	adopted resolution 40; ICC acceptable for inland waters for vessels up to 15m in length; over 15m in length ICC is acceptable for zones 1 and 2 waterways only.	http://www.rya.org.uk/infoadvice/boatingabroad/icc/Pages/eocrequired.aspx; http://www.unece.org/fileadmin/DAM/trans/doc/2014/sc3wp3/ECE-TRANS-SC3-2014-12r1e.pdf; Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
DE	Deutscher Segel-Verband	Internationales zertifikat für führer von sport und freizeitfahrzeugen in küstengewässern bis 12/30 seemeilen (Sportküsten Schifferschein) and Internationales zertifikat für führer von sport und freizeitfahrzeugen in alle küstengewässern (Sporthochsee Schifferschein)	Three categories depending on the distance authorised to travel: 12 Nm, 30 Nm, > 30 Nm. These certificates are given only for sailing craft		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia

MS	Issuing authority (of the license)	Skipper licenses	Brief description of the license	ICC acceptance	Sources of information
DE	Deutscher Motoryachtverband	Internationales zertifikat für führer von sport und freizeitfahrzeugen auf den seeschifffahrtsstrassen (Sportboot-Führerschein See)	Certficate used only for inland waters, and for motorized craft only River Rhein: > 5 HP compulsory Other inshore waterways: > 15 HP compulsory		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
DE	Deutscher Motoryachtverband	Internationales zertifikat für führer von sport und freizeitfahrzeugen in küstengewässern bis 12/30 seemeilen (Sportküsten Schifferschein) and Internationales zertifikat für führer von sport und freizeitfahrzeugen in alle küstengewässern (Sporthochsee Schifferschein)	Three categories depending on the distance authorised to travel: 12 Nm, 30 Nm, > 30 Nm. These certificates are given only for motorized craft		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
DK	Søfartsstyrelsen (Danish Maritime Authority)	BEVIS FOR DUELIGHEDSPRØVE I SEJLADS FOR FRITIDSSEJLERE	For driving a boat over 15 meters in length and for speed boats requires a license, but not for driving other boats up to 15 meters length; For small yachts (up to 30 GT) and in internal waters and territorial sea only	has not adopted resolution 40 and does not accept ICC	http://www.dma.dk/PleasureCruising/Sider/PleasureCrusing.aspx; http://www.rya.org.uk/infoadvice/boatingabroad/icc/Pages/eocrequired.aspx; http://www.sailing-guide.eu/en/boating-coxswain-licence-documents; http://www.marifuture.org/Publications/Newsletters/getafix_newsletter_april2012.pdf; Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia

MS	Issuing authority (of the license)	Skipper licenses	Brief description of the license	ICC acceptance	Sources of information
DK	Søfartsstyrelsen (Danish Maritime Authority)	YACHT MASTER	For driving a boat over 15 meters in length and for speed boats requires a license, but not for driving other boats up to 15 meters length; 1st and 3rd class, depending on the distance travelled: without restrictions for the first and in international sea only for the 3rd.		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
EE	Eesti Maanteeamet/ Estonian Road Administration	RAHVUSVAHELINE VAIKELAEVAJUHI TUNNISTUS (merel ja sisevetel) / INTERNATIONAL CERTIFICATE OF COMPETENCE FOR OPERATORS OF PLEASURE CRAFT (valid for sea and inland waters)	For vessels up to 30 GT, and only for travels in the international sea; The licence is not necessary when you operate: 1. Motor boat with engine up to 25 kW on day time and not farther as 5 nm from shore; 2. Sailing boat with sails up to 25 m2 on day time and not farther as 5 nm from shore	has not adopted resolution 40	Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
ES	Dirección General de la Marina Mercante	Patrón de navegación basica	For vessels up to 7m in length and with engine power up to 15 kW and at a distance up to 6Nm from mainland or island coast	has not adopted resolution 40, but ICC is recommended. However, ICC is not a recognised qualification for Spanish flagged vessels	http://costabrava.angloinfo.com/information/lifestyle/sports-and-leisure/sailing-and-boating/; http://www.rya.org.uk/infoadvice/boatingabroad/icc/Pages/eocrequired.aspx; Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
ES	Dirección General de la Marina Mercante	Patrón de embarcaciones de recreo	For vessels up to 30 GT, and only in the internal waters and territorial sea		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
ES	Dirección General de la Marina Mercante	Patrón de yate	For vessels up to 100 GT and for travels in the international sea only		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and

MS	Issuing authority (of the license)	Skipper licenses	Brief description of the license	ICC acceptance	Sources of information
					18/09, Croatia
ES	Dirección General de la Marina Mercante	Capitán de yate	For vessels up to 500 GT and without restriction on the area of navigation		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
ES	Comunidad Autonoma Pais Vasco, Cantabria, Galicia, Andalucia, Murcia, Valencia, Cataluña, Baleares, Canares, Ceuta y Melilla	Patrón de embarcaciones de recreo	For vessels up to 30 GT, and only in the internal waters and territorial sea		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
FI	Merenkulkulaitos - Sjöfartsverket	Kansainvälinen huviveneen kuljettajan pätevyyskirja/International certificate for operators of pleasure craft	Three types, namely: for motor yachts, for sailing vessels or for coastal waters. All types apply for vessels up to 100 GT and allow to travel in international sea Minimum age required is 15	adopted resolution 40, but does not require ICC, sufficient skill and age will suffice	http://www.rya.org.uk/infoadvice/boatingabroad/icc/Pages/eocrequired.aspx; https://en.wikipedia.org/wiki/International_Certificate_of_Competence; Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
FR	Ministère de l'Écologie, de l'Énergie, du Développement durable et de l'Aménagement du territoire, Directions départementales des affaires maritimes	Le permis de plaisance	Two categories depending on the distance allowed to travel (option Eaux interieures – inland waters) for yachts allowed to travel up to 3 Nm from mainland and island coast and option cotiere (coastal) for yachts allowed to travel in internal waters and territorial sea) and two extensions (Grande plaisance fluviale for travels up to the international sea, and Hauturiere for larger yachts up to 100 Gt and allowed to travel without	only adopted resolution 14, resolution 40 under consideration, ICC recommended for most inland waters only	http://www.rya.org.uk/infoadvice/boatingabroad/icc/Pages/eocrequired.aspx; http://www.marifuture.org/Publications/Newsletters/getafix_newsletter_april2012.pdf; Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia

MS	Issuing authority (of the license)	Skipper licenses	Brief description of the license	ICC acceptance	Sources of information
			restriction on the area of navigation)		
FR	Services navigation de Lyon, Paris, Lille, Toulouse, Strasbourg et la direction départementale de l'Équipement de la Loire-Atlantique	Le permis de plaisance	Two categories depending on the distance allowed to travel (option Eaux interieures – inland waters for yachts allowed to travel up to 3 Nm from mainland and island coast and option cotiere (coastal) for yachts allowed to travel in internal waters and territorial sea) and two extensions (Grande plaisance fluviale for travels up to the international sea, and Hauturiere for larger yachts up to 100 Gt and allowed to travel without restriction on the area of navigation)		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
GR	Port Authority			has not adopted resolution 40 and does not accept ICC	http://www.theca.org.uk/news/greektax#Arrival; http://www.iytworld.com/index.php/courses/recreational/international-certificate-of-competency; http://www.norboat.no/file/0f326ef445be68362413787c85529ae8/140213%20Update%20on%20boat%20license_ICC_v3MC/
HR				adopted resolution 40, accepts other countries' certificates, including ICC	Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia

MS	Issuing authority (of the license)	Skipper licenses	Brief description of the license	ICC acceptance	Sources of information
HU	General Inspectorate of Transport	International Certificate of Competence for Pleasure Craft	Different categories depending on the area of navigation authorised: IV (up to 3 Nm, and up to 6m with engine power up to 8 kW or more if additional examination in radio service is taken); III (up to 12 Nm); II (up to 200 Nm) and I (no limitation)	adopted resolution 40	https://en.wikipedia.org/wiki/International_Certificate_of_Competence#Implementation_of_Resolution_40; Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
IE	Irish Sailing Association (ISA)	ISA Day Skipper Certificate	For small yachts (up to 30 GT), both sailing and motorized craft, and for travels in internal waters and territorial sea	adopted resolution 40, but does not require ICC	http://www.rya.org.uk/infoadvice/boatingabroad/icc/Pages/eocrequired.aspx; Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
IE	Irish Sailing Association (ISA)	ISA Helmsman's Certificate	For small motorized yachts (up to 30 GT) and for travels in internal waters and territorial sea		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
IE	Irish Sailing Association (ISA)	ISA National Powerboat Certificate + Coastal Endorsement	For small yachts (up to 30 GT) and for travels in internal waters and territorial sea		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
IE	Irish Sailing Association (ISA)	ISA Yachtmaster Coastal	For larger yachts (up to 500 GT), and for travels in international sea		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
IE	Irish Sailing Association (ISA)	ISA Yachtmaster Offshore	For larger yachts (up to 500 GT), and without restriction on the area of navigation		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
IT	Uffici delle Capitaneria di porto	Patente per imbarcazione da diporto	Different categories depending on the area of navigation authorised and the size of the vessel: up to 12 Nm and for vessels up to 24 m in length, no limitation for vessels up to 24 m in length, or no limitation in size or distance) Not necessary for vessels up to 10m, or for	only adopted resolution 14, ICC recommended for coastal waters, and accepts those issued by foreign Governments or by foreign competent	http://www.unece.org/fileadmin/DAM/trans/doc/2014/sc3wp3/ECE-TRANS-SC3-2014-12r1e.pdf; http://www.rya.org.uk/infoadvice/boatingabroad/icc/Pages/eocrequired.aspx; http://www.marifuture.org/Publications/

MS	Issuing authority (of the license)	Skipper licenses	Brief description of the license	ICC acceptance	Sources of information
			sailing within/below 6 miles from coast line and powered less than 40,8 HP	bodies	Newsletters/getafix_newsletter_april2012.pdf; Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
IT	Uffici della Motorizzazione civile	Patente per imbarcazione da diporto	Only for vessels up to 24 m in length and traveling up to 12 Nm Not necessary for vessels up to 10m, or for sailing within/below 6 miles from coast line and powered less than 40,8 HP		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
LI	Susisiekimo Ministerija, Valstybine vidaus vandenu laivybos inspekcija / Ministry of Transport and Communications, State Inland Waterways Navigation Inspectorate	Motorinio pramoginio laivo laivavedžio tarptautinis kvalifikacijos liudijimas / International Certificate of Competency of the Navigator of Motor Recreational Craft	For motorized vessels up to 30 GT and only for internal waters and territorial sea	adopted resolution 40, an ICC is required	http://www.oceanpro.co.uk/icc.html; Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
LI	Lietuvos buriuotojų sajunga/ Lithuanian Yachting Union	Burinio pramoginio laivo laivavedžio tarptautinis diplomas / International Certificate for Operators of Pleasure Craft	For vessels up to 30 GT and only for internal waters and territorial sea		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
LT				adopted resolution 40, an ICC is required	http://www.unece.org/fileadmin/DAM/trans/doc/2014/sc3wp3/ECE-TRANS-SC3-2014-12r1e.pdf; http://www.oceanpro.co.uk/icc.html

MS	Issuing authority (of the license)	Skipper licenses	Brief description of the license	ICC acceptance	Sources of information
LU				adopted resolution 40	https://en.wikipedia.org/wiki/International_Certificate_of_Competence#Implementation_of_Resolution_40
MT	Transport Malta	Nautical Licence	Only valid within the territorial waters of Malta and required for vessels with a power of over 30hp	has not adopted resolution 40, but ICC accepted as proof of competency in international waters and recommended especially for motorized craft	http://malta.angloinfo.com/information/lifestyle/sports-and-leisure/sailing/; http://www.rya.org.uk/infoadvice/boatingabroad/icc/Pages/eocrequired.aspx
NL	VAMEX	Vaarbewijs / Internationaal Certificaat van Competentie	Two different types depending on the distance allowed to travel: up to 1 Nm from mainland and island coast in internal water and territorial sea, or in international sea. It is mandatory only if the size is larger than 15 meters or the speed us more than 20 km/hrs	adopted resolution 40; ICC required for inland waters for vessels over 15m in length or capable of more than 20km/h (approx. 11 knots), otherwise not required	http://www.rya.org.uk/infoadvice/boatingabroad/icc/Pages/eocrequired.aspx; Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
PL	Polski związek zeglarski	Zeglarz jachtowy	Only in internal waters and territorial seas and up to 1 Nm from mainland or island coast, and only for sailing craft; Mandatory only for vessels with a hull length over 7,5 m or a motor boat with an engine power over 10 kW	has not adopted resolution 40, but ICC is recommended	http://www.rya.org.uk/infoadvice/boatingabroad/icc/Pages/eocrequired.aspx; Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia

MS	Issuing authority (of the license)	Skipper licenses	Brief description of the license	ICC acceptance	Sources of information
PL	Polski związek zeglarski	Sternik jachtowy	Only in internal waters and territorial seas, and only for sailing craft; Mandatory only for vessels with a hull length over 7,5 m or a motor boat with an engine power over 10 kW		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
PL	Polski związek zeglarski	Jachtowy sternik morski	Only for maritime areas, and only for sailing craft; Mandatory only for vessels with a hull length over 7,5 m or a motor boat with an engine power over 10 kW		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
PL	Polski związek zeglarski	Kapitan jachtowy	Without restrictions concerning the distance travelled, but just for sailing crafts; Mandatory only for vessels with a hull length over 7,5 m or a motor boat with an engine power over 10 kW		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
PL	Polski Zwiazek Motorowodny i Narciarstwa Wodnego	Sternik motorowodny	Only in internal waters and territorial seas and up to 1 Nm from mainland or island coast, and only for motorized craft; Mandatory only for vessels with a hull length over 7,5 m or a motor boat with an engine power over 10 kW		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
PL	Polski Zwiazek Motorowodny i Narciarstwa Wodnego	Starszy sternik motorowodny	Only in internal waters and territorial seas, and only for motorized craft; Mandatory only for vessels with a hull length over 7,5 m or a motor boat with an engine power over 10 kW		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia

MS	Issuing authority (of the license)	Skipper licenses	Brief description of the license	ICC acceptance	Sources of information
PL	Polski Zwiazek Motorowodny i Narciarstwa Wodnego	Morski sternik motorowodny	Only for maritime areas, and only for motorized craft; Mandatory only for vessels with a hull length over 7,5 m or a motor boat with an engine power over 10 kW		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
PL	Polski Zwiazek Motorowodny i Narciarstwa Wodnego	Kapitan motorowodny	Without restrictions concerning the distance travelled, but just for motorized crafts; Mandatory only for vessels with a hull length over 7,5 m or a motor boat with an engine power over 10 kW		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
PL	Polski Zwiazek Motorowodny i Narciarstwa Wodnego	Motorzysta motorowodny	Only in internal waters and territorial seas, and only for motorized craft; Mandatory only for vessels with a hull length over 7,5 m or a motor boat with an engine power over 10 kW		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
PL	Polski Zwiazek Motorowodny i Narciarstwa Wodnego	Mechanik motorowodny	Only in internal waters and territorial seas, and only for motorized craft; Mandatory only for vessels with a hull length over 7,5 m or a motor boat with an engine power over 10 kW		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia

MS	Issuing authority (of the license)	Skipper licenses	Brief description of the license	ICC acceptance	Sources of information
PT	Instituto Porutuário e dos Transportes Marítimos (IPTM)	A Carta de Navegador de Recreio	Four different categories (Carta de marinheiro, Patrao local, Patrao de costa, and Patrao de alro mar), depending on the size and power of the vessel and the distance they are allowed to travel. The first category applies only to vessels up to 7m in length and with engine power up to 15 kW, and at a distance up to 6 Nm. The next three categories are for yachts up to 30 GT, allowed to travel in internal waters and territorial sea, for yachts up to 100 GT, allowed to travel in international sea, or for yachts up to 500 GT, that have no distance restriction respectively.	has not adopted resolution 40, but ICC is recommended, and sailing licences issued by another EU Member State is automatically valid and accepted	http://portugal.angloinfo.com/lifestyle/sports-and-leisure/sailing/; http://www.rya.org.uk/infoadvice/boatingabroad/icc/Pages/eocrequired.aspx; http://www.marifuture.org/Publications/Newsletters/getafix_newsletter_april2012.pdf; Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
RO	Autoritatea Navala Romana (Romanian Maritime Authority)	International Certificate of Competence for Pleasure Craft	Four types, in relation to the distance that the vessels can travel: only in internal waters and territorial sea, only 6 Nm from the coast, only 12 Nm from the coast, or without restriction on the area of navigation	adopted resolution 40, any ICC licence is automatically recognised in Romania	http://www.yachtingpleasure.ro/index.php/utile/brevete-navigatie-agrement; https://en.wikipedia.org/wiki/International_Certificate_of_Competence#Implementation_of_Resolution_40
SE	Nämnden för Båtlivsutbildning (NFB)	Förarintyg för Fritidsbåt	Only for vessels up to 30 GT and only for travels up to 6Nm from mainland or island coast in internal waters and territorial sea	has not adopted resolution 40 and does not accept ICC	http://www.rya.org.uk/infoadvice/boatingabroad/icc/Pages/eocrequired.aspx; Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
SE	Nämnden för Båtlivsutbildning (NFB)	Intyg-Bätpraktik and Bätmekaniker-	Only for vessels up to 30 GT and only for travels in internal waters		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and

MS	Issuing authority (of the license)	Skipper licenses	Brief description of the license	ICC acceptance	Sources of information
		Intyg	and territorial sea		18/09, Croatia
SE	Nämnden för Båtlivsutbildning (NFB)	Kustskeppar-Intyg	Only for vessels up to 100 GT and only for travels in international sea		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
SE	Nämnden för Båtlivsutbildning (NFB)	Utsjöskeppar-Intyg	Without restriction on the area of navigation, and for vessels up to 500 GT		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
SE	Nämnden för Båtlivsutbildning (NFB)	Seglarintyg	Three categories depending on several criteria. The first category covers vessels up to 7m in length and with engine power up to 15 kW, and only for distances up to 1 Nm from mainland or island coast in internal waters and territorial sea. The second category covers vessels up to 100 GT traveling in internal waters and territorial sea. The last category covers vessels up to 500 GT, but has no distance limitations		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
SI	Ministrstvo za promet, Uprava Republike Slovenije za pomorstvo	Potrdilo o opravljenem preizkusu znanja za upravljanje colna	Only for vessels up to 7m in length and with engine power up to 7.35 kW, and up to a 6Nm distance from mainland and island coast in internal waters and territorial sea	has not adopted resolution 40	Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
SI	Ministrstvo za promet, Uprava Republike Slovenije za pomorstvo	Potrdilo o usposobljenosti za voditelja colna	Only for travels in internal waters and territorial sea, and for vessels up to 30GT		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
SI	Ministrstvo za promet, Uprava Republike Slovenije za pomorstvo	Potrdilo o usposobljenosti za mornar-motorist	Without restriction of the area of navigation, but for vessels up to 100 GT		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia

MS	Issuing authority (of the license)	Skipper licenses	Brief description of the license	ICC acceptance	Sources of information
SI	Ministrstvo za promet, Uprava Republike Slovenije za pomorstvo	Poveljnik jahte z bruto tonažo do 500 BT	Without restriction of the area of navigation, but for vessels up to 500 GT		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
SK	Ministry of Transport, Posts and Telecommunications, Maritime Office	Certificate of Competency for skippers of marine pleasure craft	Different categories depending on the area of navigation authorised: C (only coastal navigation up to 12 Nm from land or island coast, up to 4° Beaufort wind force, and up to 6m with engine power up to 8 kW or more if additional examination in radio service is taken); B (sea navigation, up to 200 Nm from land or island coast); and A (ocean navigation, with no limitation)	adopted resolution 40	https://en.wikipedia.org/wiki/International_Certificate_of_Competence#Implementation_of_Resolution_40; Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
UK	Maritime and Coastguard Agency (MCA)	Master	Two categories depending on the size of the yacht (up to 500 Gt or up to 3000 Gt). No restriction applies to the distance travelled	adopted resolution 40	http://www.rya.org.uk/infoadvice/boatingabroad/Pages/boatingabroadpaperwork.aspx; http://www.marifuture.org/Publications/Newsletters/getafix_newsletter_april2012.pdf; Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
UK	Maritime and Coastguard Agency (MCA)	Chief Mate	For yachts less than 3000 Gt and without restriction to the distance travelled		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
UK	Maritime and Coastguard Agency (MCA)	Officer of the Watch	For yachts less than 3000 Gt and without restriction to the distance travelled		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
UK	Maritime and Coastguard Agency (MCA)	Chief engineer	Four different categories, all for yachts up to 30 Gt and without		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and

MS	Issuing authority (of the license)	Skipper licenses	Brief description of the license	ICC acceptance	Sources of information
			restriction to the distance travelled		18/09, Croatia
UK	Royal Yachting Association (RYA)	International Certificate for Operator of Pleasure Craft	Two different types of certificate allow vessels to travel in coastal waters only. The two types are determined by the power of the vessel: up to 10m (first category) and up to 24m, or 80 Gt, and sail up to 24 m or 80 Gt (second category)		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
UK	Royal Yachting Association (RYA)	Day Skipper Shorebased Certificate, Day Skipper/Yachtmaster Offshore Shorebased Certificate, and Yachtmaster Ocean Shorebased Certificate	Three types of certificate depending on the distance allowed to travel: in internal waters and territorial sea only (the first type) or in international water (second and third type)		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
UK	Royal Yachting Association (RYA)	Powerboat Level 2	For vessels traveling in internal waters and territorial sea		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
UK	Royal Yachting Association (RYA)	Advanced Powerboat Certificate of Competence	For vessels up to 30 GT, and only in the internal waters and territorial sea		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
UK	Royal Yachting Association (RYA)	Day Skipper Certificate of Competence	For vessels up to 100 GT and for travels in the international sea only		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
UK	Royal Yachting Association (RYA)	Coastal Skipper Certificate of Competence	For vessels up to 500 GT and for travels in the international sea only		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia
UK	Royal Yachting Association (RYA)	Yachtmaster Offshore Certificate of Competence	For vessels up to 500 GT and without restriction on the area of navigation		Official Gazette No. 27/05, 57/06, 80/07, 3/08 and 18/09, Croatia

Appendix 5: Safety equipment on board

MS	Requiring national authority	Requirements for safety equipment on board	Sources of information
AT	Bundesministerium für Verkehr, Innovation und Technologie	- Lifejacket for each person on board - Lifebuoy with line attached - Anchor with line - Fire fighting equipment - First aid kit - Compass - Signal horn - Additional lines	https://www.land-oberoesterreich.gv.at/Mediendateien/Formulare/DokumenteAbt_Verk/Merkblatt_Binnenschifffahrt_181113.pdf http://www.marinafuehrer.adac.de/reviere/oesterreich
BE		- Radar reflector - Lifejacket for every person on board - Lifesaving signals: flares, lifebuoy - Navigation equipment: navigation lights, compass, plummet, day shapes & sound signalling equipment - Long line - Fire fighting equipment - First aid kit - Anchor	http://mobilit.belgium.be/nl/scheepvaart/pleziervaart/vaartuig/uitrusting http://www.marinafuehrer.adac.de/reviere/belgien/
CZ	Ministry of Transport	- Anchor - radio system - devices for sound and light signalization - independent backup light system - a fire-proof container for dangerous solid wastes - another for “leftovers” - and one for oily tissues, steel ropes, towing and thrower ropes - ship hook - gangplank - pharma box - binoculars - emergency instructions - long-distance light that could be used from the “cockpit”	http://www.mdcr.cz/en/HomePage.htm VYHLÁŠKA Ministerstva dopravy ze dne 14. záøí 1995 o zpùsobilosti plavidel k provozu na vnitrozemských vodních cestách
DE	Bundesministerium für Verkehr und digitale Infrastruktur	Mandatory equipment - Compass - Plummet - Recent maps of the water navigation area	http://www.bsh.de/de/Produkte/Infomaterial/Sicherheit_auf_dem_Wasser/Sicherheit_auf_dem_Wasser.pdf

MS	Requiring national authority	Requirements for safety equipment on board	Sources of information
		- Radar reflector - VHF radio - Logbook - Life jackets - Distress flares - Lifelines with carabineer - Lifebuoy with line - Horn - Lighter	
DK	Danish Maritime Authority L – the Construction and Equipment	Mandatory equipment - Boats equipped with paddles should be equipped with spare paddles - A bucket - Approved lifejacket for each person on board - Sound signal equipment - Navigation lights - Watertight electric torch - Lifebuoy - Anchor - Life raft - Hand flares - Black anchor ball - Compass with light - Radar reflector - Hand lead - Nautical charts - First aid kid - fire extinguisher - Lifelines and harnesses - Toolbox	http://www.dma.dk/SiteCollectionDocuments/Legislation/Medd%20L/2006/L%20VI-01102006.pdf
ES		Mandatory equipment based on distance from shore 1. Unlimited 2. Up to 60 nm 3. Up to 25 nm 4. Up to 12 nm 5. Up to 4 nm 6. Up to 2 nm 7. Protected water Mandatory equipment: - Life raft: 1 2 3 - Lifejackets: all - Lifebuoy:1 2 3 4 - Parachute flares: 1 2 3 4 - Hand flare: all except 7 - Buoyant smoke 1 2 3 4 - Fire extinguisher: all	Torralbo, J. & M. Castells (2014) Comparison of survival and safety requirements in European Union for Recreational Craft Inspections. A Spanish Case Study.

MS	Requiring national authority	Requirements for safety equipment on board	Sources of information
		- Fire bucket: 1 2 3 4 - Scoop: all except 7 - Extractor fan: all - Bilge pump: all - Gas detector: all - Rudder emergency: all - First aid kit: all - Mooring lines: all - Anchor lines: all - Navigation lights: all - Nautical charts: 1 2 - Fog horn: all - Bell: 1 2 3 4 - Logbook: 1 - Radar reflector: 1 2 3 4	
FR		Two categories: - Coastal (<6 nm) - High Sea (>6 nm) Requirements: - Foghorn - Mooring buoy - Life jacked (one per person on board) - Harness (one per person on board) (only cat . 2) - Life buoy with light - Two long lines - System facilitation recovery of man over board - Strong bucket with lanyard attached - First aid box - Bailer - Dead man's cord - Fire extinguisher - Compass - A pump for inflatable dinghies	http://www.vaarbewijs.nl/buitenland.html#duitsland http://www.marinafuehrer.adac.de/reviere/frankreich/
HR		Mandatory equipment - Anchor with line or chain - Long mooring lines - Maintenance kit for the outboard engine - Spare parts for the engine - Lifejacket for each person on board - Lights - First aid kit - Signal horn - Nautical maps - Fire extinguisher	http://www.marinafuehrer.adac.de/reviere/kroatien/

MS	Requiring national authority	Requirements for safety equipment on board	Sources of information
IE	Maritime Safety Directorate	<13.7m: SOLAS >13.7m: additional requirements Mandatory equipment - Radar reflector - Lifesaving signals - Navigation lights, day shapes & sound signalling equipment Longer than 13.7m (class XII boats) - Life buoys per each two persons on board - Lifebuoy with long line - Life jacket for each person on board - Distress flares - Life raft and grab bag - Fire fighting equipment - Training manual for onboard safety - Maintenance instructions for safety equipment - Fire extinguishers - Manual fire pump (hand operated)	http://www.iws.ie/_fileupload/advice/code_of_practice.pdf Torralbo, J. & M. Castells (2014) Comparison of survival and safety requirements in European Union for Recreational Craft Inspections. A Spanish Case Study
IT		Mandatory equipment based on distance from shore 1. Unlimited 2. Up to 50 nm 3. Up to 12 nm 4. Up to 6 nm 5. Up to 3 nm 6. Up to 1 nm 7. Up to 300 m 8. Inland water Mandatory equipment: - Life raft: 1 2 3 - Lifejacket: 1 2 3 4 5 6 7 8 - Life buoy: 1 2 3 4 5 6 7 8 - Buoyant smoke: 1 2 3 4 5 - Compass 1 2 3 - Watch: 1 2 - Barometer: 1 2 - Binoculars: 1 2 - Nautical charts: 1 2 - Hand flare: 1 2 3 4 5 - Parachute flare 1 2 3 4 - First aid kit 1 2 - Navigation lights: 1 2 3 4 5 - Fog horn/bell: 1 2 3 4 - Navigation equipment: 1 2 - VHF: 1 2 3 - Radar reflector: 1 2	Torralbo, J. & M. Castells (2014) Comparison of survival and safety requirements in European Union for Recreational Craft Inspections. A Spanish Case Study.

MS	Requiring national authority	Requirements for safety equipment on board	Sources of information
		- EPIRB: 1 - Bilge pump: 1 2 3 4 5 - Fire extinguisher	
NL		- Day shapes & sound signalling equipment: red light, red flag and signal horn - Navigation lights, - Black ball (day time) and white 360 light (at night) for anchoring - Black cone, a day sign for sailing vessels that use their engine at the same time. - At the Westerschelde: o Radar reflector o A recent map of the waterway is	http://www.marinafuehrer.adac.de/reviere/niederlande/
PL	Polish Ministry of Transport, Construction and Maritime Economy	In most of the cases: 1 pneumatic life rafts fitting all the passengers; 2 life rings (on the ocean: 4); life jackets for every passenger. In addition (in some cases): 12 parachute rockets, 1 orange lifesmoke.	http://www.pya.org.pl/files/1/prawo/rozporzadzenia/50b617e2102a0.pdf
PT		Mandatory equipment based on distance from shore 1. Unlimited 2. Up to 200 nm from safe harbour 3. Up to 60 nm from safe harbour and 25 nm offshore 4. Up to 6 nm from the coast and 25 nm offshore 5. Sheltered Mandatory equipment: - Life raft: 1 2 3 4 - Compass: all - Lifejacket: all - Lifebuoy: all - Hand flares: all - Parachute flares: 1 2 3 4 - Buoyant smoke: 1 2 3 4 - Safety harness: 1 2 3 - Bilge pump: all - Access ladder on board: all - Sextant: 1 2 3 4 - Rader reflector: 1 2 3 4	Torralbo, J. & M. Castells (2014) Comparison of survival and safety requirements in European Union for Recreational Craft Inspections. A Spanish Case Study. http://liveinfo.lagosnavigators.net/httpdocs/bureaucracy/application-to-visiting-yachtsmen/portuguese-safety-equipment-standards-for-yachts/

MS	Requiring national authority	Requirements for safety equipment on board	Sources of information
		- Horn/bell: all - Anchor: all - VHF with DSC: 1 2 3 4 - Portable VHF: 1 2 3 - EPIRB: 1 2 - NAVTEX: 1 2 - HF: 1 2	
SE		Mandatory equipment: - Anchor - Life jacket for each person on board - Fire extinguisher - Paddle	http://www.marinafuehrer.adac.de/reviere/schweden/
SI		Mandatory equipment: - Lifejacket for each person on board - Anchor with long line - Hand flares - Paddles - Bilge pump - Navigations lights - First aid kit	http://www.marinafuehrer.adac.de/reviere/slowenien/
SK	Ministry of Transport	- Anchor - radio system - devices for sound and light signalization - independent backup light system - a fire-proof container for dangerous solid wastes - another for “leftovers” - and one for oily tissues, steel ropes, towing and thrower ropes - ship hook - gangplank - pharma box - binoculars - emergency instructions - long-distance light that could be used from the “cockpit”	http://ertico.com/partnerships/slovak-republic-ministry-transport-construction-regional-development/
UK	Maritime and Coastguard agency	<13.7m: only SOLAS applies >13.7m: additional requirements Mandatory for all: - Radar reflector - Lifesaving signals - Navigation lights, day shapes & sound signalling equipment Additional requirements for vessels > 13.7m (class XII vessels)	http://www.rya.org.uk/SiteCollectionDocuments/cruising/Web%20Documents/Regulations%20and%20Safety/Equipment%20for%20Pleasure%20Vessels.pdf https://www.gov.uk/gover

MS	Requiring national authority	Requirements for safety equipment on board	Sources of information
		- Maritime radio (depends on area of operation: at sea and rivers mandatory, at lakes etc. probably not) - MF/HF radio (also depends on area of operation) - Distress flares - Life raft and grab bag - Fire fighting equipment - Equipment to deal with man over board situation (life ring, buoy) - Strong bucket with lanyard attached - Boarding ladder	nment/uploads/system/uploads/attachment_data/file/460848/MGN_538.pdf http://www.marinafuehrer.adac.de/reviere/grossbritannien/ https://www.gov.uk/government/organisations/maritime-and-coastguard-agency

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