

HENRY

Hydraulic Engineering Repository

Ein Service der Bundesanstalt für Wasserbau

Article, Published Version

Fröhle, Peter

Marinas in German Coastal Areas

Die Küste

Zur Verfügung gestellt in Kooperation mit/Provided in Cooperation with:
Kuratorium für Forschung im Küsteningenieurwesen (KFKI)

Verfügbar unter/Available at: <https://hdl.handle.net/20.500.11970/101620>

Vorgeschlagene Zitierweise/Suggested citation:

Fröhle, Peter (2008): Marinas in German Coastal Areas. In: Die Küste 74. Heide, Holstein: Boyens. S. 404-410.

Standardnutzungsbedingungen/Terms of Use:

Die Dokumente in HENRY stehen unter der Creative Commons Lizenz CC BY 4.0, sofern keine abweichenden Nutzungsbedingungen getroffen wurden. Damit ist sowohl die kommerzielle Nutzung als auch das Teilen, die Weiterbearbeitung und Speicherung erlaubt. Das Verwenden und das Bearbeiten stehen unter der Bedingung der Namensnennung. Im Einzelfall kann eine restriktivere Lizenz gelten; dann gelten abweichend von den obigen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Documents in HENRY are made available under the Creative Commons License CC BY 4.0, if no other license is applicable. Under CC BY 4.0 commercial use and sharing, remixing, transforming, and building upon the material of the work is permitted. In some cases a different, more restrictive license may apply; if applicable the terms of the restrictive license will be binding.



Marinas in German Coastal Areas

By PETER FRÖHLE

Contents

1. Introduction	404
2. Characteristics of German Marinas	404
3. User Requirements	406
4. Actual Trends and Future Developments	408
5. References	410

1. Introduction

Pleasure boat navigation is one important part of maritime tourism which is, with a main focus on the coastal areas, very important for the tourism and vacation industry in Germany as well as world-wide. The demand for pleasure boat berths for motor boats and yachts is increasing in many areas. This demand comes from permanent owners, boat charterers and – especially in the Baltic Sea region of Germany – from yachtsmen on vacation needing guest berths.

The strongly increasing demand of pleasure boat berths in Germany after re-unification in 1990 has caused an exceptional development of pleasure boat navigation and of marinas at the Baltic Sea Coast of Mecklenburg-Vorpommern. This also applies to other parts of the German Baltic and North Sea Coast. In many regions along the coast, a wide variety of efforts are taking place to develop existing potentials in maritime tourism.

The success of a marina is depending on the level of fulfillment of the needs and requirements of the users of a marina. These requirements can be very specific for the different users and regions. At the German North Sea coast and particularly at the German Baltic Sea coast maritime tourism is characterized by day sailing trips and marina hopping.

Trends in the development of the marina business in Germany are focussed on increasing marina size and quality of berthing facilities; the demand for luxury five star marinas is another factor to be considered.

2. Characteristics of German Marinas

Fig. 1 gives a brief overview on important pleasure boat areas in the northern part of Germany. The most important and most frequently used areas are located directly at the sea shores and around the islands (area I: North Sea; area II: Baltic Sea) or in the tidal estuaries; here, the Lower Elbe from Cuxhaven to Hamburg is very much in demand.

In 2008, more than 44,000 berths in more than 360 marinas were available at the German coastal areas of the North Sea and the Baltic Sea. The majority of marinas and berths can be found in the Baltic Sea, i.e. approx. 30,000 berths in 250 marinas and pleasure boat berthing areas. The average number of berths per marina is slightly higher in the Baltic than in the North Sea.



Fig. 1: Important pleasure boat areas in northern Germany (I: North Sea, II: Baltic Sea, 1: Elbe, 2: Alster, 3: Lake Ratzeburg, 4: Lake Schwerin, 5: Mecklenburger Lakes), after DWIF (2005)

A detailed compilation of marinas and number of berths for the various coastal areas in Germany is given in Tab. 1. It shows, that the vast majority of marinas and berths can be found in the Baltic Sea.

On an average each marina has approx. 120 berths, which is comparatively small in the international context. Approx. 50 % of the marinas have between 60 and 500 berths for permanently docked boats and guests. 50 % of all berths in the North and Baltic Sea can be found in marinas with more than 200 berths, and 80 % of all berths are in marinas with more than 85 berths. The largest marinas are the Marina 'Hamburger Yachthafen' and the 'Ancora Marina' in Neustadt. The 'Hamburger Yachthafen' features approx. 2,000, the 'Ancora Marina' approx. 1,400 berths.

Table 1: Compilation of berthing capacity of marinas and pleasure boat harbours in Germany (data source: <http://wtg.vivawasser.de/>)

North Sea Area	Berths	Baltic Sea Area	Berth
Ems/Dollart	273	Flensburger Förde	2,237
Ostfriesische Inseln – Ems	2,160	Schlei/Eckernförde	4,017
Weser und Jade	3,295	Kieler Förde	4,721
Elbmündung	1,321	Fehmarn-Sund	2,809
Elbe – Glückstadt	3,334	Lübecker Bucht	5,702
Elbe – Hamburg	1,906	Wismar-Bucht/Poel/Rerik	1,016
Außenalster	382	Warnemünde/Rostock	2,436
Helgoland	800	Fischland/Darß	1,474
Nordfriesische Inseln	816	Rügen	2,823
		Greifswald/Usedom/Haff	2,715

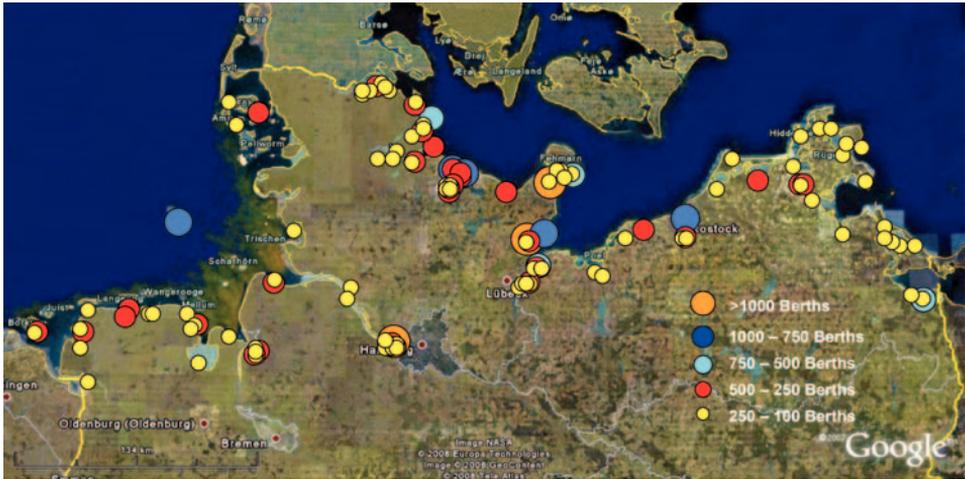


Fig. 2: German marinas with more than 100 berths

The main international sailing events and regattas are held in Kiel (Kieler Woche) and in Warnemünde (Hanse Sail), where the infrastructure for this kind of events is available.

An overview on the geographical distribution of large marinas and berthing facilities with more than 100 berths is given in Fig. 2.

According to the operators, marinas in Germany can be separated into three classes:

- municipally operated marinas (permanent rental and guests berths)
- club marinas (club members and a few guest berths)
- privately operated marinas

A comprehensive survey on the structure of all marinas in Germany is not available. Based on investigations for Schleswig-Holstein (dwif 2005), one can assume that approx. 40 % of the marinas are operated privately, approx. 40 % are club marinas and approx. 20 % are operated by municipal authorities.

An aerial view of a typical marina at the coast is given in Fig. 3.

3. User Requirements

The acceptance of a marina, and, hence, its commercial success is strongly dependant on the compliance with user's needs. These requirements are differing widely, depending on the area and its potentials and on the special interests of the yachtsmen. For further clarification, the University of Rostock (WEICHBRODT, 2002) has carried out an investigation to define the special needs and requirements of yachtsmen with a focus on marinas in the North and Baltic Sea. For this investigation, a questionnaire was developed and distributed through a publication in the German sailing journal "Yacht". It includes the following topics:

- Location of the marina:
 - position of the marina within the harbour network of the region
 - compatibility with different harbour usages
 - attractiveness, environmental conditions



Fig. 3: Aerial view of the marina Kühlungsborn, Baltic Sea Coast of Mecklenburg-Vorpommern (approx. 400 berths)

- Technical requirements:
 - simplicity and safety of approach
 - acceptable wave height inside of the harbour (comfort and safety)
 - maneuvering space, water depths
 - freeboard of footbridges/pontoons, dimensions of berths etc.
 - mooring systems
- Infrastructural requirements:
 - accessibility of the marina by yacht and by car
 - equipment of the berths (water, electricity, telephone/internet access)
 - service and supply facilities

Based on the evaluation of the returned questionnaires it was shown that many of the results – especially with respect to equipment and requested facilities – generally match other international studies on user requirements (e.g. PIANC, 1991). Trend-setting results have been mainly obtained for the marina location and for the requested technical requirements and infrastructure.

As one example for special requirements, the preferred sailing distance between two marinas is shown in Fig. 4. Approx. 80 % of all yacht owners prefer that sailing distance to be less than 20. This result indicates clearly that it is necessary to establish a narrow network of marinas in order to meet the needs of and attract yacht owners.

Another interesting result of this survey is shown in Fig. 5. Despite the fact that many boat owners are presently using berths in comparatively big marinas, it seems that a majority would prefer a comparatively small marina if they had the choice (WEICHBRODT, 2008). This indicates a possible trend to small, natural marinas with a familial touch. This trend can also be derived from other results of the survey.

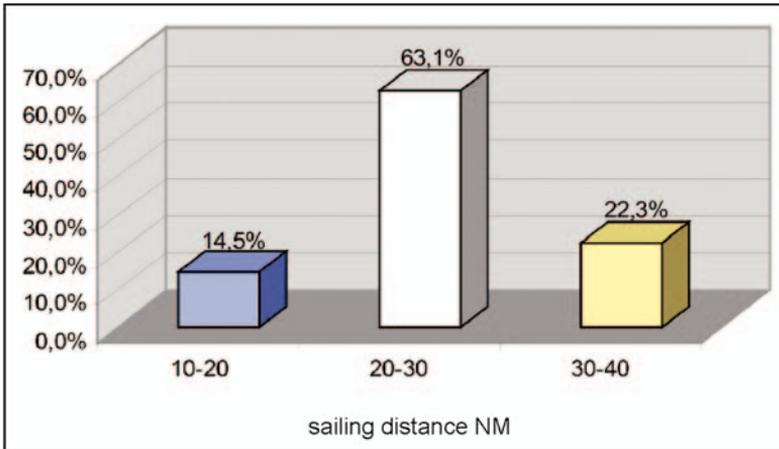


Fig. 4: Preferred sailing distance between marinas (WEICHBRODT, 2002)

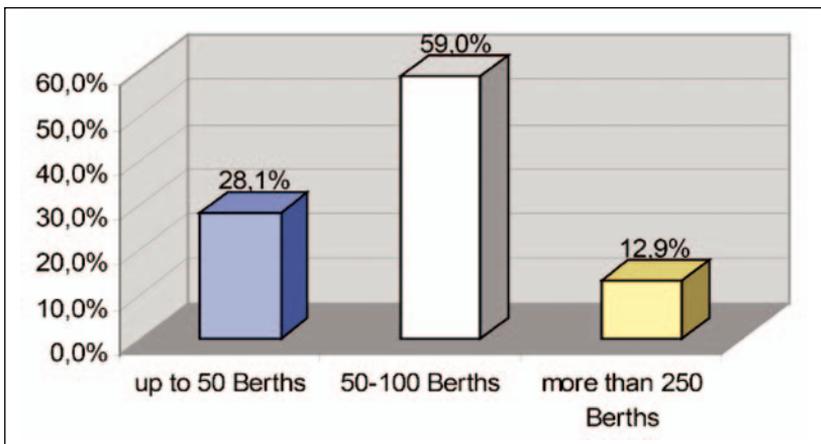


Fig. 5: Preferred number of berths in a marina (WEICHBRODT, 2002)

4. Actual Trends and Future Developments

Actual trends in the development of existing marinas and their maritime infrastructure are mainly connected to the improvement of technical facilities and of the infrastructure (FRÖHLE, 2005). The trend to more comfortable sailing and motor yachts with increasing boat sizes (length and especially width) is obvious also in Germany (e.g. DWIF, 2005; PLANCO, 1997). As an example, results of an actual survey on the average length over width ratio of modern sailing yachts and motor boats are depicted in Fig. 6.

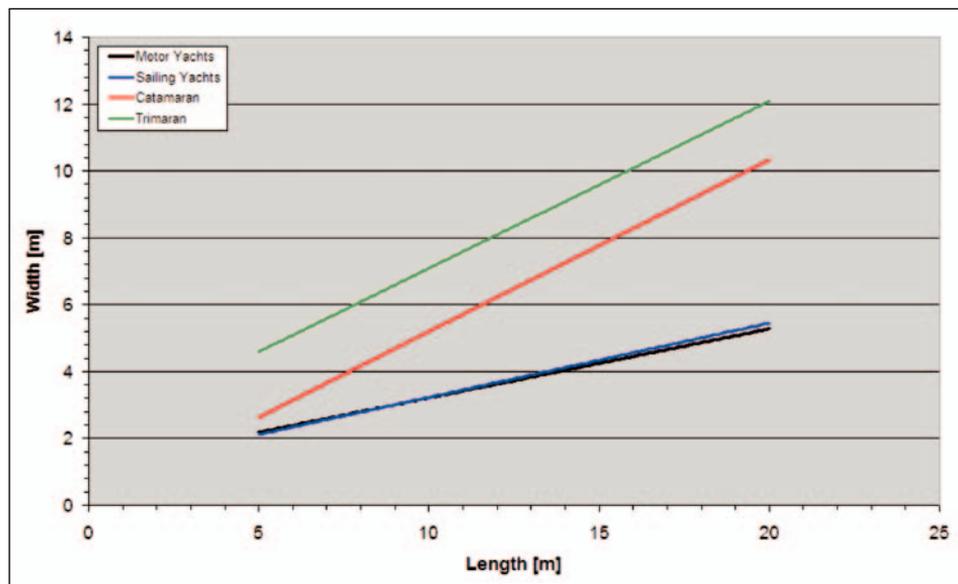


Fig. 6: Average width over length ratio of modern sailing and motor yachts

Presently, the main focus for planning and design of new marina facilities is on the improvement of the marina network, especially in the German Baltic Sea, since the requirements of the yachtsmen clearly indicate that it is – at least in Germany – necessary to create a comparatively narrow network of marinas at the coasts and tidal estuaries to strengthen water sports and in particular yacht sport. An isolated marina does not seem to be too attractive for yacht tourism. Travelling from one to the next and the next is more interesting and attractive. A detailed survey of possible new marina sites in Mecklenburg-Vorpommern has been performed by PLANCO (2004). A suggestion for new sites can be seen in Fig. 7.

Major issue in connection with the extension of the marina network is the possible encroachment of marinas as well as pleasure boat traffic on the environment, in particular on nature protection areas and animal sanctuaries. Possible adverse effects on the natural development of the mainly sandy coastlines and on coastal and flood protection in the adjacent areas are another concern.

Comfort and infrastructure of a marina as well as its technical equipment are described using the MQM (Maritime Quality Management) classification, which has been developed by IMCI (International Marina Certification Institute). Classification of quality levels is characterized using 1 to 5 blue stars. Main criteria for the assessment of marinas are related to the sectors: formalities and communication, safety, sanitary facilities, service, food & recreation, management, environment and waste management, dry-storage & winter-storage.

Another focus, related to the planning of new marinas, is the possible construction of so-called Mega Marinas for Mega Yachts. An example is the Marina Baltic Bay, intended to be built in Kiel as the first harbour for mega yachts at the Baltic Sea. Whether there is a strong demand for Mega Yacht Marinas in Germany as assumed by the planners seems not to be clear at the moment. It is obvious that so far the longest sailing and motor yachts which are plying German coastal waters are significantly less than 20 m long.

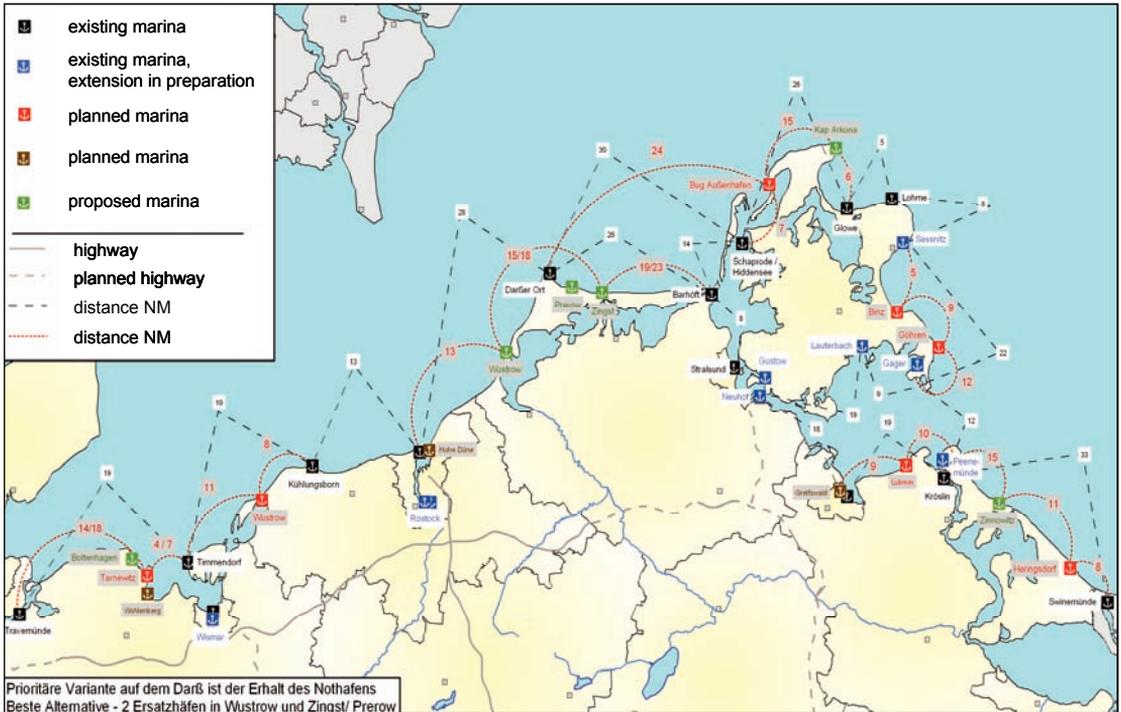


Fig. 7: Existing and recommended marinas in the marina network at the Baltic Sea Coast of Mecklenburg-Vorpommern (PLANCO, 2005)

5. References

- DWIF: Studie Wassersporttourismus in Schleswig-Holstein, Hrsg. Ministerium für Wissenschaft, Wirtschaft und Verkehr des Landes Schleswig-Holstein, Kiel, 2005.
- FRÖHLE, P.: Planung von Sportboothäfen und Marinas – Ausgewählte küstenwasserbauliche Aspekte. In: Proc. HTG-Kongress: Tagungsband zum Kongress. Bremen, 2005.
- PIANC, PERMANENT INTERNATIONAL ASSOCIATION OF NAVIGATION CONGRESSES: Guidance on facility and management specification for marine yacht harbours and inland waterway marinas with respect to user requirements, Working Group No. 5, Bulletin No. 75, Brüssel, 1991.
- PLANCO: Standortkonzept für Sportboothäfen an der Ostseeküste Mecklenburg-Vorpommerns, Hrsg. Ministerium für Bau, Landesentwicklung und Umwelt Mecklenburg-Vorpommern, Schwerin, 1997.
- PLANCO: Standortkonzept für Sportboothäfen an der Ostseeküste, Hrsg. Ministerium für Arbeit, Bau und Landesentwicklung Mecklenburg-Vorpommern, Schwerin, 2005.
- WEICHBRODT, F.: Umnutzung von Hafenbrachen für die Sportbootschifffahrt, Jahrbuch der Hafenbautechnischen Gesellschaft, Band 53, Hamburg, 2002.
- WEICHBRODT, F.: User Requirements & Volume of Pleasure Boat Traffic as Basic Criteria for Planning and Design of a Marina, 2008.