RecCom
PIANC WG 149

GUIDELINES FOR MARINA DESIGN

TERMS OF REFERENCE

1. Historical background - Definition of the problem

At present, it is recognized that marina planning and design is a complex and interdisciplinary practice.

After several decades of technicians planning and designing recreational navigation infrastructures, we can now say that this discipline has gained a certain maturity status. In this sense the "marina designer" is becoming recognized as a distinct professional figure.

Skilled professionals, as technicians that treat these matters for the first time, need updated "codes of practice". Furthermore, these "codes of practice" need to consider the most recent developments - super and mega-yachts presence, changes of boats dimensions ratios, widening of age range of users, disability access, boat yards, villages for urban functions, sustainability criteria.

Although several guidelines of this kind have been produced by different Organisations all over the world, mostly with regard to national or regional importance, an internationally-generated guideline has not yet been produced.

In furthering PIANC's mission of providing expert guidance and technical advice on waterborne transport, PIANC can fill this gap by generating guidelines for marina designers utilizing international standards.

2. Objective of the study

To produce the PIANC guidelines for marina design, this document will keep in consideration all the PIANC publications on recreational navigation produced until now, updating the relative points of view. Additionally, the most used guidelines produced by other organisations all over the world will be collected, analysed, and criticised. The compilation of these efforts will result in the production of a practical, useful and easy-to-consult document for the desk of marina planners, designers and technicians.

3. Earlier reports to be reviewed

All previously completed PIANC publications on recreational navigation, including the work completed to-date by WG17.

4. Matters to be investigated

The typical matters for marina planning and design, for instance: siting and site surveys; layouts and dimensional criteria; basin protection and shoreline structures; water area conditions, basin flushing and silting; berthing systems and characteristics; loading and stability criteria; fuelling and other boat utilities; land area services, utilities and facilities; launching facilities; boatyards; and dry stacks storage systems.

5. Method of approach

Typical interdisciplinary method of working groups studies. The WG will organise the job in phases, for example:

a) Collect all useful information (PIANC documents, other guidelines)
b) Define the table of contents and organise the Group for specific tasks
c) Integrate the known items with the most recent arguments to be treated
d) Define the best format for obtaining an easy-to-use document

6. Suggested final product of the Working Group

The guidelines will have the format of a typical PIANC Report. Suggestions will be made to the Editing office for the best presentation, aiming for the best easy-to-use document format.

7. Desirable disciplines of the members of the Working Group

Technical and professional experts in planning and design of marina infrastructures. The members will be engineers, architects, urban and transport planners, environment specialists, all other professionals familiar with such field of expertise.

8. Relevance for countries in transition

The usefulness of such a document for countries in transition is evident. Obtaining a certain standardisation of services offered to boats and their owners is a desired goal. These international guidelines can help in this sense meanwhile increasing the best practice culture.

WG 149 – Guidelines for Marina Design

Report of PIANC RecCom Working Group 149

(Plan of the entire report – in bold Parts already published)

PART 1 – CHAPTERS: PUBLISHED

1 - Scope and General (Elio Ciralli, Esteban Biondi, Sip Meijer, Thomas Pehlke)

2 - Recommended Design Approach (Mike Chemaly, Esteban Biondi, Sip Meyer)

3 - Surveys and Investigations (Alfonso Capote)

4 - Vessels Characteristics (Simon Burchett, Thomas Pehlke, Oscar Siches)

PART 2 – CHAPTER: PUBLISHED

5 - Marina Protection and Coastal Aspects (Jack Cox, Elio Ciralli)

PART 3 – CHAPTERS:

6 - Master Plan Development

7 - Layout of Water Areas

8 - Layout of Land Side Facilities

PART 4 – CHAPTERS: PUBLISHED

9 - Design Criteria and Loading Conditions (Thomas Pehlke, Marisa Ackhurst, Sip Meijer)

10 - Berthing Systems (Thomas Pehlke, Kathleen Bernaert, Simon Burchett, Sip Meijer)

11 - Utilities (Esteban Biondi, Tim Mason, Sip Meijer, Elio Ciralli, Carlo Conti)

12 - Materials (Thomas Pehlke, Wally Mosher, Terence Browne, Tim Beckett)

13 - Aids to Navigation (Sip Meijer, Oscar Siches)

14 - Emergency Equipment (Elio Ciralli, Oscar Siches, Thomas Pehlke)

PART 5 – CHAPTERS:

15. Disabled Access

16. Superyacht

17. Operations and Maintenance

18. Environmental Issues and Sustainability

19. Architecture and Landscaping

20. References, Standards and Bibliography