



Marina Designer Training Program



Following the idea initiated by RecCom and discussed in PIANC ExCom 3-2009, the Marina Designer Training Programme (MDTP) was finally approved during ExCom I-2012. A certain time was spent to ensure the correct logical framework for this completely new initiative. For better focus and concentrated efforts on this matter, RecCom set up a specific 'MDD Sub-Committee', originally composed by Mr **E. Ciralli**, Mr **J. Cox** and Mr **M. De Jong**.

The Sub-Committee is charged with all the activities to define the main aspects of the initiative.

Main Reasons for the Programme

Modern marinas have to solve needing and have to offer a very wide range of services to boats (sometime, large ships), to their owners, yachtsmen and other users, as well as to citizens. In fact modern marinas are piece of waterfronts and mutual influence between the urban zone and the Recreational Navigation Infrastructure (RNI) can be enormous.

Often RNI have to integrate solutions to solve or mitigate conflicts in high human pressure wet zones, ports, urban and industrial waterfronts, very sensitive or attractive environments, in sea or inland fresh waters.

The case of RNI projects is often the most challenging one in waterborne transport, for the complex crossing interests involved, and under certain points of view, these could help in rehabilitation of abandoned areas and waterfronts.

For the above reasons RNI planning and design is nowadays more and more a complex discipline involving knowledge in several areas of specialist expertise:

- waterfront and urban planning
- transport infrastructures
- sustainability and environmental impacts
- hydraulic engineering
- coastal/ocean engineering
- civil and structural engineering
- architecture and lighting
- landscaping
- mechanical and electrical engineering
- material technologies
- economics
- marina management
- tourism

However, only few opportunities exist for specific post-academic training courses for architects/engineers and nowhere in the world there is a specific programme for 'marina designer' training which is internationally recognised. Typically, practitioners of marina design must specialise 'on the job', beyond the general study areas of coastal engineering, civil/structural design, architecture or other.

In spite of the advanced and unique knowledge and experience required to safely and properly design marinas or marina systems, the typical marina design can sometimes be done by engineers and non-engineers with no specific knowledge of, for instance, the ocean climate or the operation of a recreational boat, or architecture, landscaping, environmental dynamics.

On the other hand, the specialists in coastal engineering often assume responsibility for non-engineering related aspects of a project, with evident lack in knowledge of urban planning, architecture, landscaping, environment, economics, tourism, etc.

In the USA, for instance, such action technically violates the rules for professional engineering licensing since statutes dictate that engineers may only practice in areas of competence. Similar rules exist worldwide. Regardless, because of a lack of training and experience, the unsuspecting end user may receive a sub-standard consulting product.

The Marina Designer Training Program

PIANC RecCom, being aware that planning and design of RNI had a lack of professional training at an international level, started the specific 'PIANC Marina Designer Training Program'. The program should help professionals involved in this field to obtain basic elements and sufficient knowledge about the planning and design of a marina to assure a safe and properly designed facility, taking into consideration aesthetics, landscaping, environmental and urban sustainability.

In short, it deals with the quality and best practice in planning and design of such infrastructures and related pieces of waterfront.

As it easy to understand the skilled Marina Designer has not to be an expert in each of the several different disciplines involved: he has to lead working groups of experts in different fields, being strongly aware of the need involved, ensuring the client of the best result for his project.

The advantage to communities and end users is to obtain the best confidence in technicians and their quality level, expectations of reasonable performance, in an environment-friendly way.

PIANC RecCom assumes the responsibility of developing and organising the MDTP training courses, testing and, in a further phase, they could start a professional certification and maintenance programme.

For this matter, RecCom works through a permanent sub-committee (Marina Designer Training Programme, MDTP, sub-committee), which focuses on the initiative for recruiting and involving recognised experts lecturers, to oversee the process and assure that the standards achieve international acceptability.

Typical MDTP Courses

MDTP courses have to be an effective training in marina planning and design. Before all they have to be well received and accepted from attendees.

The MDTP Courses always involve truly reknowned international experts as lecturers/trainers and these are held with the typical PIANC approach: "expert professionals talking to professionals". The atmosphere is nice and friendly. The style is that of a working group on the job, with a strong interaction between trainers and attendees.

The training course is typically a postgraduate one, preferably – but not only – for engineers, architects and other professionals involved with the marina market.

The classroom ideally should be of 15-20 candidates for each course. The course is normally scheduled only when a sufficient number of requests from potential attendees is received.

Courses can be arranged with different lengths and arguments treated:

- full courses (44 hours or more): lectures ranging in the whole fields of RNI planning and design (urban and transport planning, several branches of engineering and architecture, economics, management, and so on);
- courses of two or three days: focusing more in a group of disciplines that are chosen and indicated with applicants;
- short courses (one full day) or seminars (one half day): dealing with specific single aspects and/or arguments of RNI planning and design.
- Possibly, interesting technical visits are arranged.