



# MarCom Annual Report 2007

## 1 General

### Meetings

In 2007 MarCom organised two commission meetings in Belgium - Brussels on 1st + 2<sup>nd</sup> of February and in Finland – Helsinki on 20th + 21st of September.

### Change of MarCom-chairmanship

At the February meeting, MarCom said good-bye to Mr. Dik Tromp, who chaired MarCom for eight years from 1995. For his contribution to the work of PIANC in general and to the work of MarCom in particular, Mr. Tromp was honoured as Honorary member of PIANC during the 2007 AGA meeting in Cochin.

Mr. Caude succeeded Mr. Tromp as MarCom chairman; Mr. Caude chaired MarCom for the first time in the September 2007 meeting.

### Change of MarCom-membership

In the September meeting MarCom welcomed Mr. Jean-Bernard Kovarik from France as the representative from AIPCN/France National Section; he recently moved from Port of Rouen to the transportation Ministry. Mr. Kovarik replaced Mr. Caude as MarCom member.

## 2 Presentations

At the September meeting the following reports were presented to MarCom:

- **WG 42 Implementation Manual for Life Cycle Management of Port Structures** – Mr. H.J. Verhagen presented a new final draft report of WG42; he explained the additions since the presentation last year in Barcelona.
- **WG 48 Guidelines for Port Constructions, related to Bow Thrusters** – Mr. M. Sas and Mr. H.J. Verheij gave a presentation of the contents of a first draft of the WG report.

In both occasions MarCom gave recommendations how to go on with the work; however none of the draft reports could be finalized yet. As a consequence no working group report have been sent to PIANC HQ for publication in 2007.

### **3 Progress of MarCom Working Groups**

#### **42 Implementation manual for life cycle management of port structures**

The final draft report was presented to MarCom in the September meeting; MarCom expects to send the final report to PIANC HQ for editing and publishing early 2008.

#### **43 Minimising Harbour Siltation**

Just before the end of 2007 the final draft was sent to the secretary of MarCom; the draft report will be discussed in the February meeting in 2008. Provided that MarCom approves this issue, the report will be sent to Brussels early 2008.

#### **45 Post-Earthquake Actions for Restoration of Port Structures**

Although the co-chair Mr. Sugano presented the contents of the draft report to MarCom in the September 2005 meeting, less progress was achieved in 2006. After having tried to revive the work it has been decided to abolish the working group and to ask the chairman to use the undertaken work as an article for the PIANC magazine.

#### **46 Maritime Freight Transshipment**

In 2007 the TOR were still under discussion. MarCom discussed several proposals related to the subject:

- a draft TOR “Design principles for port terminals related to maritime freight intermodality”; this proposal combines the old TOR of WG46 “Maritime Freight Transshipment” ; the review of WG9 “Design of Modern Terminals” and the draft TOR “Design principles for Port Terminals”
- “Set of PIANC guidelines for the structural and functional design of specialized terminals of maritime ports”

MarCom discussed the proposals and came to the conclusion, that the work for a new group should concentrate on general lay-out of port terminals; using existing experience; including the terminal boundaries which are linked to intermodal facilities. MarCom decided to abolish the WG 46 and to set up an Expert Group to work out a plan/write a TOR.

#### **47 Selection of breakwater types and their optimum safety level**

MarCom accepted the working group proposal to adjust the TOR: leaving out the analyses of safety levels for existing ports. Presentation of the draft report, scheduled for the MarCom meeting of September 2007, was postponed, because of lack of sufficient case studies to address the selected types of breakwaters. Presumably the draft report can be discussed in the course of 2008. The title of the Working Group was changed in: “Selection of breakwater types and their optimum safety level”.

#### **48 Guidelines for Port Constructions, related to Bowthrusters**

A first draft of the report was presented in the September 2007 MarCom meeting; the final draft report is foreseen for September 2008. After finalizing the report for bowthrusters, the working group will be invited to propose a TOR for other propulsion systems.

#### **49 Vertical + Horizontal Dimensions of Fairways**

The working group 49 is going satisfactory; the draft report is expected late 2008. IALA requested to contribute to the work because of the relation between Aids to Navigation and the design of a channel. The working group will consider the request and ask for an IALA expert participation.

#### **50 General Principles for the design of Maritime Structures**

The working group 50 started with a Kick Off in November 2006; there seemed to be little progress, because the topic to be addressed is a difficult one. However this matter will be further discussed in MarCom February 2008 meeting.

### **51 Water Injection Dredging**

The working group held their Kick Off meeting in spring 2006; the working group is progressing according to the plan.

### **52 Criteria for the (un)loading of containerhips**

This Working Group started with a Kick Off in November 2006. Some questionnaires will be sent out in order to collect data about the movements of vessels during the (un)loading process.

### **53 Recommendations with regard to the design and construction of maritime structures in Tsunami prone areas**

A third meeting of the working group was held in November 2007 together with an international workshop on Coastal Disaster Prevention. A draft report is expected early 2008.

### **54 Use of hydro/meteo information to optimise safe port access**

Mr. O'Brien from Australia is the chairman. The first meeting was held in September 2007. A draft table of contents was prepared. MarCom suggested deleting the words "to optimise" from the title and substituting "in" or "for". The WG will consider the idea in their second meeting in March 2008.

### **55 Safety aspects of berthing operations of oil and gas tankers**

Mr. Thoresen from Norway is the chairman. The Kick Off meeting was organised in July 2007 in Brussels. A representative of the Oil Companies International Marine Forum (OCIMF) is a member of the WG.

### **56 Application of geotextiles in waterfront protection**

Mr. Voskamp from The Netherlands was appointed as chairman and the first meeting was organised in September 2007.

### **57 Stability of pattern placed revetment elements**

Mr. H.J. Verhagen is the chairman of this group; Kick Off meeting was organised in April 2007; the framework of the report will be ready for discussion in January 2008.

## **4 New Working Groups**

MarCom discussed proposals for TOR of the following subjects:

- Berthing velocities and Fender Design
- Cruise terminals and facilities
- Design of container terminals related to maritime freight transshipment (see WG46)
- Classification of rocks and soils to be dredged (update MarCom report nr. 6)
- Design manual Hydraulic Fills
- Proposal on Coastal Structure Asset management

If MarCom decides to go on with these subjects, a TOR will be prepared and presented to ExCom for approval.

## 5 Special Activities

### **Educational Package on Breakwaters**

A lot of information is available on a special area on the PIANC website (only accessible for teaching staff). The interest for the information is growing, as can be concluded from the growing requests for access. The package is expanding, but unfortunately the contributions from other parties are quite limited. This subject should be treated on a more generic way by EXCOM.

### **PIANC Dictionary**

MarCom member Mr. H.J. Verhagen informed MarCom about the layout of the dictionary; he will write a proposal on what subjects should be in the dictionary; to be discussed in February 2008 meeting.

### **Port Masterplans**

The results were discussed on the MarCom session during the PIANC 2006 congress in Portugal; continuation of the subject will be discussed later (linked with Design Principles for Port Terminals; see above: chapter 3 under WG46).

### **List of relevant organisations and disciplines**

A list of organisations and disciplines, relevant to each working group, can assist the work and also can assist the reader of the working group report. MarCom decided to create a pilot for WG57.

### **WG36 Catalogue of Prefabricated Elements**

The Spanish National Section offered to maintain the catalogue, which will be made available on the PIANC website. MarCom further discussed the possibility to send updates for the catalogue. Once a year MarCom will decide which new elements will be added to the catalogue.

### **MarCom Action Plan 2006 - 2010**

MarCom finalised the new MarCom Action Plan.

## 6 MarCom Technical Visit

Part of the programme of the MarCom meeting in Helsinki September 2007 was a technical visit by MarCom members to the Vuosaari Harbour Project - near Helsinki; especially the design and construction of the new port was explained. Project Director mr. Mäkinen explained design and construction stages of the new Vuosaari Harbour. Construction works were in schedule and start-up of the new harbour will be in November 2008. Strict environmental aspects have affected to technical solutions, for example road and railway connections were built in tunnels. Removing TBT from seabed and beneficial use of these contaminated sediments in harbour structures was explained. As a result of restrictions to noise pollution an approximately 1 km long and 13 m high noise barrier had to be built on the east border of the harbour between NATURA 2000 nature area and harbour. According to environmental permission also light emissions to nature areas had to be reduced. Because of this a new type of lighting tower had to be designed. Totally 70 pieces of these 40 m high lighting towers were installed on the harbour area. More information about the Vuosaari Harbour Project is available on web pages ( <http://www.vuosaarensatama.fi/en/index.html> ).



**the Vuosaari Harbour Project**



**MarCom members visited Vuosaari on 21 September 2007**