



## **Terms of Reference Joint Working Group Working group 130**

# **Anti-sedimentation systems for Marinas and Yacht Harbours**

### **1. Historical background – definition of the problem**

The intention of this working group is to highlight the problems for marina and yacht harbours' operators for dredging procedures and the increasing costs as a affect of current and upcoming international regulations and legislations, basically caused by the international policy of 'the polluter has to pay'.

Based on Dutch national surveys, it seems that the majority of the pollution of the sediment in the marina's are coming form outside of the marina and their operations. At least 85% of the sedimentation is coming from outside the marina.

It is possible to reduce these extreme costs and environmentally difficult action of dredging by implementation of technical measures and processes to reduce or avoid sedimentation.

### **2. Objective**

To give guidance to marina and port authorities to define their own technical measures and processes aimed at the special circumstances of the marina and or yacht harbours to decrease sedimentation within the port or marina.

### **3. Earlier reports to be reviewed**

Among others the PIANC-reports 'Dredged Material Management Guide', 1997 and 'Dredging of marinas', 2004

International survey regarding the processes which influence the sedimentation in marinas, and anti-sedimentation methods.

#### **4. Matters to investigated**

The group shall study:

- Various standards and technical measures and processes regarding the real cause of sedimentation.
- Inventory of developed technical measures and processes to reduce sedimentation.
- Dissemination of these measures and processes to be implemented at the activities and processes of the marinas.
- Critical harbour entrances at the different water systems integrated with safety guidelines and the new guidelines for technical measures and processes for reducing sedimentation.

Considerance should be given to the effect of wind, wave and or currents in relation to these technical measures, processes and safety.

#### **5. Method of approach**

The working group shall review the problem on the basis of existing literature and research and draft clear and practical guidelines.

#### **6. Suggested final product of the working group**

A report of maximum 50 pages containing the following subjects:

- Definition of sedimentation mechanism related to different water systems
- Review of sedimentation measuring methods
- Assessment of anti-sedimentation measures
- Technical methods for implementation of anti-sedimentation measures

#### **7. Desirable disciplines of the members of the working group**

Marina and yacht harbour's operators, technical experts, representative of competent authorities from ICOMIA and PIANC.

#### **8. Relevance for countries in transition**

The subject is relevant for countries in transition as these countries try nowadays to develop a marina industry by constructing new marinas.