

IHB File No. TA-6/Trieste

CIRCULAR LETTER 55/1999  
29 November 1999

**COURSE ON "HARBOUR AND COASTAL MANAGEMENT FOR  
HARBOUR AND COASTAL SURVEYORS"  
AT THE INTERNATIONAL MARITIME ACADEMY (IMA),  
TRIESTE, ITALY**

Dear Sir,

The International Maritime Academy (IMA) in Trieste has informed the IHB, on behalf of the Italian Authorities, that a course on "Harbour and Coastal Management for Harbour and Coastal Surveyors" has been scheduled in 2000.

This course is a new edition of the previous one (1999) "Port and Coastal Hydrography" where more time is devoted to Coastal Management. The syllabus is based on the FIG/IHO Standards of Competence for Hydrographic Surveyors (Category B Level). The course will run from 1 May to 29 September 2000.

This first course is intended for twelve students from all countries. Government authorities responsible for Hydrography are requested to forward their candidates' applications to the International Maritime Academy (IMA), via Eduardo Weiss 15, 34127 Trieste, Italy (Telephone: +39 040 350829, Fax: +39 040 350322 and E-mail imoima@imoima.org) **through the ITALIAN EMBASSY in their country**, with a copy to the International Hydrographic Bureau. **Nominations not submitted through an Italian Embassy, will not be accepted**, and therefore will not be taken into consideration for the selection. **Nominations must reach the IMA by 1 March 2000 at the latest.**

The support provided by IMA will cover travel expenses, local transport in Trieste, accommodation and food. **Money for other personal expenses (pocket money) must be provided by each STUDENT'S NATIONAL AUTHORITY. (See Annex 2, page 3).**

The IHB considers this course compatible with the IHO Strategic Plan.

As for previous IMA courses dealing with hydrography, IMA will address specific requests to certain IHO Member States seeking lecturers. The IHB urges Member States to support the IMA as they have done in the past.

Information on the course programme and logistics are provided in Annex 2. A copy of the Nomination Form is also attached (Annex 3).

On behalf of the Directing Committee,  
Yours sincerely,

Rear Admiral Giuseppe ANGRISANO  
President

Annex 1 -	Distribution list	
Annex 2 -	Course Details & Logistics	(in English only)
Annex 3 -	Nomination Form for Participation & Acceptance Form	(in English only)

**DISTRIBUTION LIST**

1. All IHO Member States (including suspended countries)
2. IHO Non-Member States:
  - Bulgaria
  - Georgia
  - Israel
  - Jordan
  - Kenya
  - Lebanon
  - Malawi
  - Malta
  - Mauritius
  - Mexico
  - Myanmar, Union of
  - Namibia
  - Palestine Authority
  - Panama
  - Tanzania
3. International Maritime Organization, London, UK.
4. EC DGVII Maritime Transport – Head of Division Mr. W. De Ruyter.
5. International Maritime Academy, Trieste, Italy.
6. Italian Ministry of Foreign Affairs, Directorate General for Cooperation to Development, Rome, Italy.
7. Italian Ministry of Foreign Affairs DGCS Ufficio XIII, viale Tiziano 80 – Rome, Italy
8. Friuli-Venezia Giulia Region, Assessore Regionale ai Trasporti – Avv. W. Santarossa, via Giulia 75/1, 34125 Trieste, Italy.
9. President of the Province of Trieste, Piazza Vittorio Veneto 4, 34132 Trieste, Italy.
10. President of Trieste Port Authority, Punto Franco Vecchio, 34135 Trieste, Italy.
11. University of Trieste – Magnifico Rettore, Piazzale Europa 1 (Rettorato), 34100 Trieste, Italy.
12. President of Trieste Chamber of Commerce, Piazza della Borsa 14, 34100 Trieste, Italy.

## **DETAILS OF THE COURSE**

### **Background**

#### **Requirements for the Course**

The course on Harbour and Coastal Management is aimed at Harbour and Coastal Surveyors working for services and bodies responsible for the management of coastal and port areas, the aims of which are:

- safeguarding the environment
- the promotion of the safety of coastal navigation and the prevention and monitoring of marine pollution
- the development of maritime transport through the knowledge and the modern management of the port basins and their access.

The above-mentioned activities are generally carried out by Government Technical Services and/or local authorities responsible for the management of the coastal areas and the Harbour Masters' Offices or Ports.

The Surveyors from these technical services are sometimes not adequately trained. The course is designed to overcome this shortfall.

#### **Course Aim and prospective users**

The course is designed to address the needs of the authorities which require personnel specialized in harbour and coastal surveys, capable of performing the following:

- bathymetric surveying and underwater research
- topographic and geodetic surveying in coastal areas
- tidal measurements and establishment of Tidal Datum
- follow the natural evolution of the coasts
- follow the coastal processes of siltation and erosion
- assist maritime works and marine geologists with the necessary bathymetric, oceanographic and topographic surveying
- assist oceanographers in the collection of oceanographic samples and measurements
- control dredging operations
- control pollution monitoring
- conduct hydraulic surveys
- implement suitable maritime signals
- update nautical charts and publications pertaining to coastal and harbour areas and disseminate any amendment relevant to the safety of navigation
- organize a coastal operative unit

#### **Attendees (entry standards)**

The course is open to personnel from authorities responsible for the management of coastal areas and for the functioning of the ports and hydrographic offices. Applicants must hold at least a Higher School Certificate and have a good knowledge of the English language, both spoken and written.

## Number of participants

In order to ensure the maximum efficacy, the course should not be attended by more than 12 trainees.

## Language

The course will be conducted in the English language.

## Course Certificate, diploma

The syllabus is based on the Standards of Competence for Surveyors at Category B Level as defined by the FIG/IHO Advisory Board. Upon successful completion of the course, a document will be issued by IMA certifying that the holder has successfully completed the course.

## COURSE OUTLINE

The duration of the course will be 5 months (22 weeks). Lessons will be, generally, 7 hours per day, from Monday to Friday, for a total number of 815 hours. The course has been subdivided into the following 7 modules. Every module contains specific segments which are developed taking into consideration the requirement of the course and the time allocated.

The program includes complementary activities such as visits to Port Services (dredging works, buoyage pilotage, operative offices and VTS) and final tests.

### Modules

### Hours

<b>GENERAL INTRODUCTION .....</b>	<b>4</b>	<b>5. Nautical sciences.....</b>	<b>44</b>
<b>1. Basics .....</b>	<b>72</b>	5.1 Aids to navigation in coastal waters .....	16
1.1 Mathematics and Statistics .....	16	5.2 VTS and VTMS .....	10
1.2. Physics and Applied Physics .....	26	5.3 Information to Mariners .....	8
1.2 Computers .....	30	5.4 Electronic Cartography .....	10
<b>2. Surveying.....</b>	<b>260</b>	<b>6. Legal aspects.....</b>	<b>36</b>
2.1 Geodesy.....	36	6.1 Product liability .....	12
2.2 Horizontal and Vertical Control.....	48	6.2 Contracts .....	8
2.3 Positioning .....	26	6.3 Law of the Sea.....	8
2.4 Cartography.....	24	6.4 delimitation zones .....	8
2.5 Computer assisted Cartography.....	12	<b>7. Specialism Subjects .....</b>	<b>108</b>
2.6 Photogrammetry and air Photogrammetry.....	10	7.1 Dredgers and dredging operations.....	24
2.7 Preparation Surveys.....	20	7.2 Obstruction surveys.....	20
2.8 Bathymetry .....	40	7.3 Buoyage and beaconing technology .....	12
2.9 Tides and Water levels .....	12	7.4 Hydraulic surveys.....	12
2.10 Survey boats and equipments .....	12	7.5 Marine information systems .....	16
2.11 Automated survey systems .....	20	7.6 Pollution monitoring .....	12
<b>3. Field Practice.....</b>	<b>160</b>	7.7 Organization of a survey operative unit.....	12
3.1 Planning, execution, processing of harbour and coastal surveying practical project, comprehensive of land and sea surveying			
<b>4. Environmental Sciences .....</b>	<b>68</b>		
4.1 Meteorology .....	16		
4.2 Coastal oceanography .....	18		
4.3 Waves, beaches and maritime structures	16		
4.4 Marine geology and sedimentology.....	18		

## **LOGISTICS**

**Accommodation:** Twin-bedded rooms (two students per room) for the entire period of the course.

**Food arrangements:** breakfast, lunch and dinner will be provided by IMA.

Health and accident insurance will be provided.

Pocket money and other personal expenses will be at the charge of the organization to which the student belongs.

Assistance in obtaining a visa may be provided by IMA, but should be the responsibility of the national organization.

Prepaid air tickets will be made available at a selected air company (will be communicated by IMA) in the country.

**Note: The air ticket will have to be refunded in case of non-completion of the course**

**COURSE ON HARBOUR AND COASTAL MANAGEMENT FOR  
HARBOUR AND COASTAL SURVEYORS**

From 1 May to 29 September 2000

**NOMINATION FORM FOR PARTICIPATION**

A completed nomination form should be submitted to the Director of the International Maritime Academy,\* Trieste, Italy **THROUGH THE ITALIAN EMBASSY** \*\*, with a copy to the IHB Monaco\*\*\*. Nominations should be made as early as possible, using a separate form for each nomination, indicating clearly the Government's priority if more than one participant is nominated:

1. FAMILY NAME .....
- FIRST NAME .....
- OTHER NAME .....
2. Mailing address .....
- .....
- .....
- Telephone .....
- Fax .....
- E-Mail .....
3. Nearest airport where air travel will commence and terminate:  
Name of airport .....
- Location .....
4. Date of birth .....
5. Sex:     Male            Female
6. Place of birth .....
7. Nationality .....
8. Passport No. ....
9. Date and Place of Issue .....

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\* International Maritime Academy, via Eduardo Weiss 15, 34127 Trieste, Italy. (Fax: +39 040 350322. e-mail: <imoima@imoima.org>)  
\*\* **The nominations not transmitted through an Italian Embassy will not be accepted and will not be considered.**  
\*\*\* International Hydrographic Bureau, BP445, MC 98011 MONACO CEDEX, Principality of Monaco. (Fax: +377 93 10 81 40; e-mail: <info@ihb.mc>)

10. Person to notify in case of emergency:

Name.....

Address .....

.....

Telephone .....

Fax .....

E-Mail.....

11. Present position and description of duties.....

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12. Educational background.....

.....

.....

13. Previous experience .....

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Nominee's signature .....

**The above-mentioned person is nominated as our first/second possible participant in the course**

Name and signature of Government official authenticating this nomination.....

Title .....



**ACCEPTANCE FORM**

I hereby accept the invitation of the International Maritime Academy (IMA) to participate in the Course on "Harbour and Coastal Management" (1 May to 29 September 2000).

I confirm that:

1. I will refrain from engaging in political, commercial and any activities other than those governed by the course programme;
2. I will advise the Academy immediately if I am unable to attend the course; and
3. I will travel to Trieste, Italy and return to my home country at the end of the course, as appropriate, by the route designated by the Academy.

Signature of Participant .....

Name of Participant.....  
(Printed)

Address.....  
.....  
.....

Date .....