DRAFT REPORT OF THE XXIInd MEETING OF THE FIG/IHO INTERNATIONAL ADVISORY BOARD ON STANDARDS OF COMPETENCE FOR HYDROGRAPHIC SURVEYORS

New Delhi, India, 7-13 April 1999

1. Location and attendance

The XXIInd Meeting of the FIG/IHO **International** Advisory Board was held at the "India International Centre", New Delhi, from 7 to **13** April 1999. The following were present:

Captain Hugo Gorziglia (IHO) (Chairman)

Mr. Svante Astermo (FIG) (Vice-Chairman)

Mr. Razali B. Ahmad (FIG)

Mr. Gordon Johnston (FIG)

Lt. Cdr. Steve Shipman (IHO)

Rear Admiral K.R. Srinivasan (IHO)

Dr. David Wells (FIG)

Captain Federico Bermejo (Secretary) (IHB)

Cdr. S. Mittal , **Indian Navy**, attended the meeting as programme coordinator and assistant to the Board.

The Chairman introduced **and welcomed** Mr. Gordon **Johnston**, new member of the Board appointed by FIG.

2. Opening of the meeting and adoption of the Agenda

Radm Srinivasan, AVSM, host of the **meeting**, welcomed the Board. Vice Admiral Harinder Singh AVSM, Deputy Chief of Naval Staff, Indian Navy, inaugurated the meeting, stressing the importance of the Board's mission.

The Chairman opened the meeting and the Agenda was adopted with some minor amendments.

3. Administrative arrangements

A conference room and secretarial facilities were provided by the National Hydrographic Office, India. The host member of the Board and the programme coordinator explained the Administrative arrangements and social events scheduled.

4. Matters arising from previous meetings

4.1 Inter-sessional activities

The Chairman and members of the Board report on various inter-sessional activities, among which are the following:

- Contribution of the Board to the IHO Strategic Plan in relation to Education and Training
- The meeting of the Royal Institution of Chartered Surveyors, February 1999, in which the future of surveying and land surveying, along with other subjects related to education and training were discussed;
- The General Congress of FIG
- The presentation of the A. Board's activities to every FIG Congress
- The efforts of the Hydrographic Society in establishing closer contact with the Board
- The implementation of the Free International Course in Hydrography by the National Hydrographic School in Goa, India

The Board considered also the request from the IHB concerning its participation in the establishment of Standards for Nautical Cartographers. It was agreed that the need of establishing Standards for Nautical Cartographers exists but the task should be carried out by other bodies. However, the Board is ready to provide assistance to the task that at present is being developed by IMA (Trieste) with Draft Standards for Cartographers to be provided by RAdm Srinivasan, member of the A. Board, for discussion at the XXIII I.A.B. Meeting..

4.2 Courses pending

The Board discussed the pending recognition of the "Course in Hydrography" from the University of Plymouth (UK). It was felt that the course was not offering enough nautical background for a Category A course. Therefore, recognition was granted at Category B (Option 1) and a letter will be sent to the relevant authorities encouraging the increase of that subject so that recognition at Category A may be awarded in the future.

4.3. Standards

The Chairman informed the Board that a letter had been sent on 3 September 1998 to the Heads of several H.O. and other institutions requesting their comments on the present Standards. Some of the comments were relevant and will be considered in the next edition of the Standards.

5. Review of Courses

5.1 Long Course in Hydrography of the U.K. Royal Navy Hydrographic School

This course is intended to replace the present Long Course in 2001. Some concerns of the Board about this course were amply addressed by the representative from RNHS and the course was awarded recognition at Category A with Option 6, in combination with the Basic Course and 4 years of practical experience.

5.2 Free Course in Hydrography of the National Hydrographic School, Goa, India

The Board reviewed this course and decided to recognize this course as meeting the requirements for a Category B course and fulfilling with Options 1, 2, 3 and 5. The Board recognized officially the interest and effort made by the Government of India and the National Hydrographic School for organizing this new course freely open to international community, addressing the educational needs of countries less developed in hydrographic surveying.

5.3 Advanced Course in Hydrography of the Japanese Maritime Safety Agency

The Board was helped in the reviewing of this course by Dr. Sasaki (Japan MSA) who provided clear explanation about some subjects. Recognition was awarded to this course at Category A with Option 1. The Board also included some recommendations about the addition of more time to some items of the syllabus.

5.4 International Hydrographic Management and Engineering Program of the Naval Oceanographic Office (USA)

The Board appreciated the contribution of Mr. Robert Bullard and Mr. Julian Higgins (NAVOCEANO) to the reviewing of this course, which was awarded recognition at Category B with Option 1.

5.5 Course in Hydrography of the St. Petersburg Naval Academy (former Frunze Naval Academy)

Following the recommendations given by the Board after the XXIst meeting, the above institution resubmitted the course, with an almost complete new presentation. The Board decided to award recognition against the 7th edition of the Standards at Category A level and Specialism in Surveys for Nautical Cartography upon reception of clarification on some specific subjects. The Academy was also encourage to make the necessary changes to match the 8th edition of the Standards.

6. Presentation of future courses

Two courses in preparation were presented to the Board:

- Course in Hydrography of the University of New Brunswick (Canada)
- Course in Hydrography of the Canadian Hydrographic Service.

The Canadian Hydrographic Service (CHS), supported by consortia partners, made a presentation to the Board outlining a distance education Category B initiative using the world wide web and also providing for practical field sessions. During the presentation, activities which have been under development for the past year focusing on 1) the student - addressing education and training styles; 2) the instructor - developing and delivery course material and 3) the infrastructure - support people, process and technology, were highlighted. The initiative which involves academic institutes, industry and CHS will implement a pilot web site during the autumn of 1999, which will allow the Board members an opportunity to take a representative course and then provide feedback.

The CHS will make a formal submission to the Board at its next meeting.

The Board also identified possible future submissions from Hamburg Polytechnics, Bordeaux Port (France), University of Technology of Bandung (Indonesia), SHOA (Chile), H.O. of Colombia, H.O. of Venezuela, H.O. of Cuba, NAVOCEANO (USA) and Course on Port Hydrography (IMA, Trieste)

7. Review of the Standards of Competence

7.1. Levels of knowledge

The Board felt that the present levels of knowledge laid down in the Standards require more precision, in order that the maximum guidance may be given to the preparation of submissions. It was agreed to review the classification and definition of the 3 levels in accordance with Bloom's taxonomy. It was also agreed that the members of the Board will review the Level of Knowledge of the present Essential Subjects before the next meeting. (see Appendix I for Board's members only). Changes to the Standards resulting from this reviewing will be reflected in the next 9th edition.

7.2. Essential Matters

The Board felt that subject Essential 7 of the Syllabus - Nautical Science- was very important for a hydrographer and that its present lay out in the syllabus should be reviewed. Accordingly, it was agreed to re-draft this chapter, which will be included as Basic 4, under 4 main headings, as follows:

- 1 Vessels, characteristics and handling
- 2 Safety at Sea
- 3 Navigation and pilotage
- 4 Hydrographic Operations

The work of developing each of the above subjects will be shared by the members of the Board. (see Annex I, for A. Board's members only)

It was also agreed that an Appendix providing guidance on tasks to be carried out as nautical background should also be drafted.

7.3 Optional Units

The Board agreed that no additional Options were required at present, but that a revision should be carried out throughout all options. The task of revision will be shared by the Board members. (see Annex I, for A. Board's members only)

8. Membership

The Board considered again the possibility of participation of The Hydrographic Society to the work of the Board. It was agreed that the President of THS will be reminded the letter addressed to him by the

Board's Chairman after the XXIst meeting in which the Board suggested various options to make this cooperation possible.

9. Date and venue of the next meeting

It was decided to accept the kind invitation of the Chairman, Captain Gorziglia, to host the next meeting in Valparaiso (Chile) from 12 to 18 April 2000

The Secretary of the Board informed that the International Maritime Academy of Trieste and the H.O. of South Africa may also be the next host institutions for 2001.

10. Close of the meeting

There being no other points to discuss, the meeting adjourned at 1300 on 13 April 1999

REVIEWING OF BASIC 4 (former ESSENTIAL 7)

1) Vessels: characteristics and handling - Wells and Astermo

2) Safety at Sea - Srinivasan and Shipman

3) Navigation and Pilotage - Gorziglia and Bermejo

4) Hydrographic Operations - Razali and Johnston

Appendix - Guidelines for Nautical Experience - Gorziglia and Bermejo

GENERAL REVIEWING OF THE LEVELS OF KNOWLEDGE OF ESSENTIAL MATTERS

1) E1 and E5 - Shipman and Astermo

2) E2 and E6 - Gorziglia and Tatsuno

3) E4 and E8 - Razali and Johnston

4) E3 - Wells and Bermejo

REVIEWING OF OPTIONS

1) Option 1 - Gorziglia

2) Option 2 - Srinivasan

3) Option 3 and 4- Razali and Jonhston

4) Option 5 - Astermo

5) Option 6 - Shipman

6) Option 7 - Wells

FIG/IHO INTERNATIONAL ADVISORY BOARD ACTION ITEMS FOLLOWING XXII MEETING NEW DELHI, INDIA, 07-13 APRIL 1999

ACTION ITEM DA <u>TE</u>	ACTION	DUE DAY COMPLETED	REAL COMPLETED
I Notes of Appreciation			
 a) Deputy Chief of Naval Staff of Indian Navy Vice Admiral Harinderm Singh 	HG	15 MAY	′ 20 ABR
 b) Chief Hydrographer to the Government of I Rear Admiral K.R.Srinivasan 	ndia HG	15 MAY	20 ABR
II Meeting Minutes			
a) Draft to BM for comments	FB	30 MAY	O4 MAY
b) Reply from BM to FB	ALL	05 JUN	
c) Final Draft to HG for approval	FB	10 JUN	
d) Final Minute with action items to BM		15 JUN	
e) Minutes to IHB-FIG-THSf) Minutes to	HG	20 JUN	
* Institutions with recognized courses	FB	10 JUL	
* Institutions submitting courses	FB	10 JUL	
* Institutions with courses under revision	FB	10 JUL	
III Courses Review			
a) Letter to Plymouth	HG	15 MAY	′ 20 ABR
Reply from Plymouth	PLYM		
* If Category "B", Issue Certificate	HG/FB	i	
* If Category "A" send reply to BM	HG		
BM replies to HG Grant Recognition if appropriate	ALL HG		
Issue Certificate	HG/FB	!	
b) Letter to Royal Navy Hydrographic School	HG	, 15 MAY	′ 20 ABR
Issue Certificate	HG/FB		ZOTIDIC
c) Letter to Japan Hydrographic Department	HG	15 MAY	′ 20 ABR
Issue Certificate	HG/FB		-
d) Letter to National Hydrographic Office India	ı HG	15 MAY	′ 20 ABR
Issue Certificate	HG/FB	}	
e) Letter to NAVOCEANO, USA	HG	15 MAY	′ 20 ABR
Issue Certificate	HG/FB		
f) Letter to Hydrographic Department Russia	HG	15 MAY	′ 20 ABR
Reply from Frunze Academy	FRUN	<u>ZE</u>	
Reply to BM for comments Reply from BM to HG	HG ALL		
Grant Recognition if appropriate	HG		
Issue Certificate	HG/FB	3	
IV Standards			
a) Prepare errata page for M-5 and circulate t	0		
BM and holders of M-5	FB	30 JUN	
b) Letter of thanks to all institutions providing		00 0011	
Comments in relation to M-5 Edition 8 th	HG		30 MAY 26
APRIL			
c) Review and prepare new Nautical Science			
Content for the Syllabi as agreed.	ALL	30 OCT	
* Vessel Characteristics and handling	SA/DV		
* Safety at Sea	SR/SS	30 OCT	

* H: * Aj d) Pre nev Syll	* Navigation and Pilotage * Hydrographic Operations * Appendix II and Check List Prepare new wording for Items (1) and apply new definitions of knowledge level (2) to Syllabus, as agreed. * E1 and E5 * E2 and E6 * E4 and E8 * E3	HG/FB GJ/RA HG/FB	30 OCT 30 OCT 30 JAN	
		ALL (1) ALL (2) SA/SS HG/TT GJ/RA DW/FB	30 OCT 30 JAN 30 OCT/JAN 30 OCT/JAN 30 OCT/JAN	
e)	Review of Options * Option 01 * Option 02 * Option 03 * Option 04 * Option 05 * Option 06 * Option 07	ALL HG SR GJ/RA GJ/RA SA SS DW	30 JAN 30 JAN 30 JAN 30 JAN 30 JAN 30 JAN 30 JAN	
c) d) e) f) g) h) i)		HG HG HG HG HG HG	30 MAY 30 MAY 30 MAY 30 MAY 30 MAY 30 MAY 30 MAY 30 MAY 30 MAY 30 MAY	05 MAY 26 APRIL
VI a) b)	Miscellaneous Letter to SHOA Chile related to XXIII Meeting Email or Diskette with relevant informations of the Board (ToR, ToP, M-5, List Courses, List Members, Historical info, Revision form,	HG	30 APR	26 APRIL
۵\	and others.)	FB	30 MAY	OC ADDII
c) d)	Letter to CHS Canada related to presentation Send Draft Nautical Cartographic Course to	HG	30 MAY	26 APRIL
e)	all BM. (Prepared by Trieste IMA) Send Draft Standards of Competence for	FB	?	
,	Nautical Cartographers to BM Letter to IHB related to Standards for Nautical	SR	30 DEC	
f)	Cartographers	HG	30 MAY	21 APRIL
g)	Circulate Draft Agenda and TimeTable for XXIII I.A.B. Meeting	HG/FB	30 JAN	

LIST OF CURRENT MEMBERS OF THE ADVISORY BOARD

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Secretary	MC 98011 Monaco Cedex	
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