

**REPORT OF THE 32nd MEETING OF THE FIG/IHO/ICA
INTERNATIONAL ADVISORY BOARD ON STANDARDS OF COMPETENCE
FOR HYDROGRAPHIC SURVEYORS AND NAUTICAL CARTOGRAPHERS**

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1. Venue and attendance

The 32nd meeting of the FIG/IHO/ICA Advisory Board was held from 20 to 25 April 2009 at the “Circolo Militare” in Genoa, Italy, hosted by the Hydrographic Institute of the Italian Navy.

The following were present:

Mr. Johnston (Chairman) (FIG)
Dr. Tsoulos (Vice-Chairman) (ICA)
Dr. Surace (Vice-Chairman) (IHO)
Capt. Bermejo (Secretary) (IHB)

FIG Members	IHO Members	ICA Members
Dr. Mahmud	Capt. Armstrong	Mr. Furness
Mr. Neale	Cdre. Nair	
	Dr. Egge	

Mr.Greenland (FIG) apologized for not being able to attend the meeting.

2. Reception at the Italian Hydrographic Institute

The Board was received at the Italian Hydrographic Institute by its Director, Rear Admiral Solari, who welcomed the Board and wished the members a successful meeting.

The Chairman thanked Rear Admiral Solari for his words and a short visit was organized to the premises of the Hydrographic Institute.

On Thursday 23, Mr. Faccioli (CODEVINTEC) and Mr. Banchini (BLOM CGR) gave presentations of their respective commercial firms.

3. Opening of the meeting Agenda and Administrative Arrangements

The meeting started at 11:00 in the conference room of the “Circolo Militare”. Secretarial facilities were provided by the Italian H.I.

The Chairman opened the meeting and welcomed the new Board member Mr. Neal (Trinidad & Tobago, FIG) already appointed in 2008, but who was unable to attend the 31st Meeting.

The Agenda was adopted, including some new topics for discussion

4. Chairman’s Report

The Chairman tabled a report of the main activities carried out after the 31st meeting, addressing the following main subjects:

4.1. Meeting of the IAB Executive Team (Chairman and Secretary) in Monaco in December to assess the state of actions and delivery of the draft version of M-6

“Reference Texts” in data base format.

4.2. Attendance at the FIG Commission 4 AGM in Stockholm, meeting with various north European members.

4.3. Visit to Hydro8 in Liverpool in November 2008 meeting with representatives of institutions interested in submitting courses for recognition of the IAB.

4.4. Submission of a paper to the Oman Hydro Symposium in March 2009. This event was excellent as a regional conference relating Hydrography and the various marine developments in the local countries. The Chairman stressed the link between Capacity Building, Standards and Training to generate support and develop a link to economic benefits.

The Chairman also mentioned the work carried out by the IAB to prepare Draft Guidelines for Individual Recognition, the revision of M-5 and M-8 “Standards of Competence for Hydrographers and Nautical Cartographers” (topics included in the Agenda), and other documents for consideration at the meeting.

5. Inter-sessional activities

The Secretary in his turn informed the members about the following items:

5.1. The lack of response from the two Russian institutions running recognized courses. The institutions should have re-submitted their courses and were informed of the fact in several occasions. In accordance with the Board rules, both courses have lost recognition and will be informed by a letter from the Chairman.

5.2. The delay of one year agreed to the Argentinean Hydrographic School for the submission of its Course in Hydrography, due to a major re-organization of the Service.

5.3. The poor response from the organizations with recognized courses following the letter addressed to them by the Chairman providing information about the schedule of re-submissions 2009-2013. Only two countries, France and Portugal had responded affirmatively to the projected schedule. The Board agreed that despite this lack of response, the institutions will have to follow the re-organization proposed by the IAB, in order to implement a period of 6 year duration of the recognition. The schedule approved by the Board is given in Annex III.

5.4. The Annual Reports received by Italy and Japan, in accordance with the new rules established in the “Standards of Competence”. From the courses recognized, neither UTM (Malaysia), Skilltrade (Netherlands) or Otago (N Zealand) have sent the requested Annual Report. The Board reminded that an inspection visit should be paid to Skilltrade in accordance with the decisions of the 31st meeting and Capt. Armstrong (USA) was tasked to prepare such a visit.

5.5. The new structure of the IHO, which was implemented on 1st January 2009. In accordance with this structure, the IAB will report to a new IHO Committee, named Inter Regional Co-ordination Committee that will hold its first meeting on 5 June 2009,

after the 4th IHO Extraordinary Conference. The IAB Chairman should submit a report to the IRCC about the performance and functioning of the IAB.

6. Pending actions

Following the information provided about the Russian courses, the Board decided to cancel the recognition awarded to the Courses in Hydrography of Admiral Makarov and St. Petersburg College (Russia). They will be informed of this decision by a letter of the Chairman.

A list of pending matters was considered by the Board. All actions have been completed, except the change of the name of the IAB that, as agreed in Sydney, should become “International Board” dropping the word “Advisory”.

Both FIG and ICA have agreed with this change and the corresponding proposal will be put forward at the 1st Meeting of the IHO IRCC (see 4 above)

7. Review of courses

The Board was grateful to Dr. Yilmaz (Middle East Technical University, Turkey), Cdr. Hafeez (H.O. Pakistan), Cdr. Zapata (Oceanographic Institute, Ecuador), Dr. Abbott (University of Plymouth, UK) and Captain Fanelli (Hydrographic Institute, Italy), who attended the meeting, gave presentations of their institutions and helped the Board to clarify some aspects of their programmes, responding to the questions of the Board members about different topics.

COURSE	DECISION
Royal Australian Navy H2 Hydrographic Surveying Course, Australia	Re-recognized this course at Category `B` with Options 1 & 6.
Curso de Hidrografia para Oficiales; H.O. Ecuador	Recognized at Category `B`. Op 1
Intermediate Course for Navy Officers and Civilians, Italian H.O., Italy	Recognized at Cat B
Hydrographic survey for production of Nautical Charts . H.O. Pakistan	Recognized at Category `B`
Course in Hydrography for Naval Officers of Brazilian Navy, Brazil.	Re-recognized at Cat. A. with Options. 1,2,3,5,6 & 7 upon reception of complementary information
Hydrographic Course at the Royal Naval Hydrographic School, HMS Drake, UK.	Re-recognized at Cat A. Op 1 & 6 upon reception of complementary information.
Applied Hydrographic Education Certificate Programme. Middle East Technical University, Turkey.	Recognized at Cat B and Op. 1,2,7 upon reception of complementary information
MSc Course in Hydrographic Surveying of the University of Plymouth , U.K. and BSc (Honours) Ocean Exploration. University of Plymouth , UK	Re-submission of the documentation requested for both courses. To finish by correspondence.
Course in Hydrography of Brazilian Navy.	New re-submission requested

8. Future recognitions and re-recognitions

The Secretary reminded that the Course in Hydrography for Naval Officers of the Mexican Navy was expected to be submitted in 2010. The following re-submissions must be received, in accordance with the schedule approved:

COURSE	Last recognition	Years recognized
Specialization Course in Hydrography of the Chilean Hydrographic and Oceanographic Service.	2000	10
MSC in Hydrographic Surveying of the University College of London/ Port of London Authority	2001	9
LSGI Hydrographic post-graduated Diploma of the Polytechnic University of Hong-Kong	2001	9
L'Ecole Nationale Supérieure des Ingénieurs des Etudes et Techniques d'Armement (ENSIETA) of the "SHOM" France.	2001	9
Port Hydrography Course of Bordeaux University, France.	2001	9
Course in Hydrography for Naval Officers of the Argentine Navy	1996	13
Course Programme in Geomatics and Hydrography of the Hamburg University of Applied Sciences	2001	9

9. Review of M-5 “Standards of Competence for Hydrographic Surveyors”

The recommendations and findings of Prof. Surace were considered and it was decided to continue the work after the meeting and propose amendments to each section of the Standards to be considered at the 33rd meeting in Trinidad. The distribution of the work will be as follows:

- Essential 1 – Capt. Armstrong.
- Essential 2 – Prof. Surace
- Essential 3 - Mr. Neale/ Prof. Egge
- Essential 4 – Cdre Nair
- Essential 5 – Mr. Mahmud/ Prof. Egge/ Mr. Greenland
- Essential 6 – Mr. Neale/ Mr. Johnston
- Essential 7 – Prof. Surace/ Mr. Johnston
- Option 1 – Mr. Tsoulos/ Mr. Furness
- Option 2 – Mr. Greenland
- Option 3 – Mr. Johnston
- Option 4 – Mr. Mahmud
- Option 5 - Mr. Mahmud/ Prof. Surace
- Option 6 – Cdre. Nair/ Capt. Bermejo
- Option 7 – Prof. Egge

The dead line for this work will be 21st June.

10. Review of M-8 “Standards of Competence for Nautical Cartographers”

The Board approved the reviewing carried out by Dr. Tsoulos and Mr. Furness. The final draft will be provided to the Board members for final inspection and approval of the 3rd edition of these Standards.

11. Guidelines for Individual Recognition.

Following the mandate received from IHO and FIG “*to investigate a process for recognition of national, regional and industrial schemes of individual certification and the preparation of standards for such individual certification schemes*” the Board considered the document “Draft Guidelines for Recognition of Individuals”, circulated by the Chairman before the meeting.

The text of the Guidelines was refined by the members of the Board who approved some amendments and finalized the text.

These Guidelines are intended to be included as a section of the “Standards of Competence” and should be approved by the parent organizations. The Chairman will present the text agreed at the 1st meeting of the IHO Inter Regional Coordination Committee, to be held in Monaco, on 5 June 2009.

12. Funding of the Board. Courses fee.

This important topic has been developed in response to the increasing concern of the FIG and ICA members to face the expenditure of their attendance to the Board meetings, which, in some cases is not supported by their organizations. For some members of the Board, a lack of solution of this problem may lead in a near future to cancel their membership.

The example of some certifying institutions was studied and the Board was aware that in their majority, such institutions charge a fee, corresponding to different concepts, such as the issuance and maintenance of the certificate but also to the funding of technical accreditation visits of professional teams and other concepts. The amount of such fees is very variable, going from 3,000 to 8,000 \$ annually.

The following conclusions were taken:

- 1) Some ICA and FIG members are not supported by their organizations and must pay their attendance to meetings from their own pockets.
- 2) The future of the Board work is menaced if ICA and FIG members cannot continue to serve in the Board due to this problem.
- 3) The present operational cost of the Board is limited to the travel, accommodation and subsistence costs of its members attending annual 5-days meetings. The rest is covered by the Secretariat (IHB)
- 4) The expenditure of the IHO part of the Board is exclusively maintained by 4 Member States (USA, Germany, India and Italy, that is those which have provided members). It should be fairer that more Member States may share these operational costs and this would be achieved through the payment of a fee from all the 24 countries with recognized courses.
- 5) In the case of FIG and ICA members, the charge of a fee is the only way to ensure the functioning of the Board in the future, independently from personal expenditure that should not be permitted by the parent organizations.

The Board decided to also address this matter at the 1st IRCC meeting and send a letter to the institutions with recognized courses to seek their opinion. A first survey has shown that no objection would be raised by FIG and ICA and moreover FIG has expressed its readiness to administer the funds coming from the establishment of the Courses Fee.

13. Any other business

Some matters added to the Agenda were also discussed by the Board members. Among them the need to reflect in the Standards the convenience to have representatives from institutions submitting courses at the meetings, the organization of the inspection visit to Skilltrade (The Netherlands). The Chairman, Secretary and Capt. Armstrong will take the necessary action to follow-up these matters.

12. Date/Venue of the next meeting

Following the kind invitation of Mr. David Neale, the 33rd IAB Meeting will be held in Port of Spain, Trinidad, probably during the last week in May. Confirmation will be given by Mr. Neale at a later date.

13. Close of the meeting

The Chairman closed the meeting at 13:30 on 24 April.

ANNEX I

LIST OF MEMBERS

NAME	Country	ADDRESS	PHONE	FAX/ e-mail
Mr. Gordon JOHNSTON (FIG) – Chairman	U.K.	67 Devon Road Cheam Surrey England, SM2 7PE	(44)(0) 208 661 1650 (44) (0) 7966 937369	gordon.johnston1@orange.net
Dr. Lysandros TSOULOS (ICA) – Vice-Chairman 1	Greece	Professor NTUA Cartography Laboratory National Technical University of Athens 9 H. Polytechniou Zographou 15780 Athens	30 210 7722730 306944472177 (mobile)	30 210 7722734 lysandro@central.ntua.gr
Dr. Luciano SURACE (IHO) – Vice-Chairman 2	Italy	Istituto Idrografico ella Marina Passo Osservatorio 4 16100 Genova	39 010 2443363 328 5470194	39 010 2443364 luciano.surace@libero.it
Capt. Federico BERMEJO (IHB) Secretary	Monaco	International Hydrographic Bureau 4 Quai Antoine 1 ^{er} BP 445 MC 98011 Monaco	(377)-93-108107	(377)-93-108140 fbermejo@ihb.mc
Capt. Andy ARMSTRONG (IHO)	USA	University of New Hampshire Joint Hydrographic Center Océan Engineering Lab 24 Colovos Road Durham, NH 03824	1-(603) 862 4559 12406766090 (mobile)	603 862 0839 andy.armstrong@unh.edu andy.armstrong@noaa.gov
Dr. Delf EGGE (IHO)	Germany	Department Geomatik HafenCity Universitaet Hamburg Hebebrandstr. 1 D-22297 Hamburg	(49) (40) 42827 5366	(49) (40) 42827 5399 delf.egge@hcu-hamburg.de
Mr Ron FURNESS (ICA)	Australia	93 Ashworth Avenue Belrose 2085.	61 2 9451-9003 61 405 576 196 (mobile)	61 2 9975-3169 rfurness@ozemail.com.au
Mr. Adam GREENLAND (FIG)	New Zealand		DD +64 4 460 0136 Fax +64 4 460 0575 Mob 027 279 8243	agreenland@linz.govt.nz
Dr. Mohd Razali MAHMUD (FIG)	Malaysia	Faculty of Geoinformation Science & Engineering University Teknologi Malaysia 81310 UTM Skudai Johor Darul Takzim	6075530827 60197291109	607 5530827 razalimahmud@utm.my razali.mahmud@gmail.com
Cdre. K.M. NAIR (IHO)	India	National Hydrographic Office 107-17 Rajpur Road Post Box 75 Dehra Dun	+918322582800	+918322585293 km.nair.km@gmail.com
Mr. David NEALE (FIG)	Trinidad & Tobago	LANE Associates Unit G Humphrey's Street The Film Centre St. James Trinidad West Indies	8686284302	8686285017 david.neale@caneassociates.com

ANNEX II

COURSES TO REVIEW IN 2010

COURSE	Last recognition	Years recognized
Specialization Course in Hydrography of the Chilean Hydrographic and Oceanographic Service.	2000	10
MSC in Hydrographic Surveying of the University College of London/ Port of London Authority	2001	9
LSGI Hydrographic post-graduated Diploma of the Polytechnic University of Hong-Kong	2001	9
L'Ecole Nationale Supérieure des Ingénieurs des Etudes et Techniques d'Armement (ENSIETA) of the « SHOM » France. -	2001	9
Port Hydrography Course of Bordeaux UniversityFrance.	2001	9
Course in Hydrography for Naval Officers of the Argentine Navy	1996	13
Course Programme in Geomatics and Hydrography of the HafenCity University, Hamburg	2001	9

Mexico - Course for Navy Officers ????

COURSES TO REVIEW IN 2011

COURSE	Last recognition	Years recognized
International Hydrographic Management and Engineering Program of the Naval Oceanographic Office (USA)	1999	12
Joint International Hydro-graphic Applied Science Program of the University of Southern Mississippi-NAVOCEANO (USA)	2000	11
Graduate Programme in Ocean Mapping of the Joint Hydrographic Center/ University of New Hampshire (UNH) and National Oceanic and Atmospheric Administration (NOAA), USA	2001	10
Hydrographic Surveyors Programme of the Naval Academy of Colombia	2001	10
Advanced Training Course On Hydrography F-r Officers - Epsom (France)	2003	8
Specialization Course in Hydrography of the Portuguese Naval Hydrographic Institute	2003	8

COURSES TO REVIEW IN 2012

COURSE	Last recognition	Years recognized
Programme for Bachelor of Engineering Degree in Hydrography of the Dalian Naval Academy (DNA) of China.	2003	9

UK Royal Navy HM2 Course.	2003	9
Programme For National Diploma In Hydrography of The Dalian Naval Academy (DNA) of China	2003	9
Intermediate Hydrography and Oceanography Course of the Hydrographic Institute of Portugal.	2004	8
Course in Hydrography for Naval Officers of Peruvian Navy	2004	8
Specialization Course of the Spanish Hydrographic Institute.	2005	7
Basic Hydrographic Course of the Bangladesh Navy	2005	7

COURSES TO REVIEW IN 2013

COURSE	Last recognition	Years recognized
Course in Hydrography for Naval Officers of Indonesian Navy (SEHIDRAL)	2006	7
Cat A Hydrographic Specialist Course of the Indian National Hydrographic School, Goa, India	2006	7
Cat B (Free) Course In Hydrography. Goa, India	2006	7
Course in Hydrography (HYDRO I) of the University Teknologi Malaysia.	2007	6
Programme in Hydrography of Maritien Instituut Willem Barentsz Amsterdam.	2007	6
Ocean Science Course of the Japanese Coast Guard School.	2007	6
Course in Hydrography for Petty Officers of the Spanish Hydrographic Institute	2007	6
“Patent Superior Technician in Hydrography” of the Tunisian H.O.	2007	6

ANNEX III

LIST OF RECOGNIZED COURSES
HYDROGRAPHY – MAY 2009

Year Last recogn./ Edition	<u>COURSE</u>	Cat	Options	Language	Next Rec.
1996 - 7th	Course in Hydrography for Naval Officers of the Argentine Navy.	B	Sp. 1	Spanish	2010
1999 - 8th	International Hydrographic Management and Engineering Program of the Naval Oceanographic Office (USA)	B	Op. 1	English	2011
2000 - 8th	Joint International Hydro-graphic Applied Science Program of the University of Southern Mississippi-NAVOCEANO (USA)	A	Op. 1, 5	English	2011
2000 - 8th	Specialization Course in Hydrography of the Chilean Hydrographic and Oceanographic Service.	A	Op. 1,2	Spanish	2010
2001 - 8 th	Hydrographic Surveyors Programme of the Naval Academy of Colombia	A	Op. 1	Spanish	2011
2001 - 8 th	MSC in Hydrographic Surveying of the University College of London/ Port of London Authority	A	Op. 1,2	English	2010
2001 - 8 th	Graduate Programme in Ocean Mapping of the Joint Hydrographic Center/ University of New Hampshire (UNH) and National Oceanic and Atmospheric Administration (NOAA), USA	A	-	English	2011
2001 - 8 th	LSGI Hydrographic post-graduated Diploma of the Polytechnic University of Hong-Kong	A	-	English	2010
2001 - 8th	Port Hydrography Course of Bordeaux University, France.	B	Op. 2	French	2010
2001 - 8th	Course Programme in Geomatics and Hydrography of the HafenCity University, Hamburg.	A	Op. 1	German (Dipl-Ing.). English Master)	2010
2001- 8th	L'Ecole Nationale Supérieure des Ingénieurs des Etudes et Techniques d'Armement (ENSIETA) of the "SHOM" France.	A	Op. 1, 5	French	2010
2003 - 9 th	Specialization Course in Hydrography of the Portuguese Naval Hydrographic Institute	A	Op. 1, 2	Portuguese	2011
2003 - 9th	Advanced Training Course On Hydrography For Officers – EPSHOM (France)	B	-	French	2011

2003 - 9th	Programme for Bachelor of Engineering Degree in Hydrography of the Dalian Naval Academy (DNA) of China.	B	Op 1, 2, 3, 4, 5, 6 7	Chinese/ English	2012
2003 - 9th	UK Royal Navy HM2 Course.	B	Op. 6	English	2012
2003 - 9th	Programme For National Diploma In Hydrography of The Dalian Naval Academy (DNA) of China	B	Op 1, 2, 3, 4, 5, 6	Chinese/ English	2012
2004 - 9th	Intermediate Hydrography and Oceanography Course of the Hydrographic Institute of Portugal.	B	Op. 1, 2	Portuguese	2012
2004 - 9th	Course in Hydrography for Naval Officers of Peruvian Navy	B	Op. 1, 2, 5, 7	Spanish	2012
2005 - 9th	Specialization Course of the Spanish Hydrographic Institute.	A	Op. 1, 6	Spanish	2013
2005 - 9th	Basic Hydrographic Course of the Bangladesh Navy	B		English	2012
2006 - 9th	Course in Hydrography for Naval Officers of Indonesian Navy (SEHIDRAL)	B	Op. 1, 2	Bahasa Indonesia	2013
2006 - 9th	Hydrographic Specialist Course of the Indian National Hydrographic School, Goa	A	Op. 1, 2, 3, 4	English	2013
2006 -9 th	“Free” Course in Hydrography of the National Hydrographic School, Goa, India	B	Op. 1, 2, 3 , 5	English	2013
2007– 9th	Course in Hydrography (HYDRO I) of the University Teknologi Malaysia.	B	Op. 2, 7	English	2013
2007– 9th	Programme in Hydrography of Maritien Instituut Willem Barentsz Amsterdam.	A	Op 2,4,7.	Dutch	2013
2007– 9th	Ocean Science Course of the Japanese Coast Guard School.	B	Op. 1	Japanese	2013
2007– 9th	Course in Hydrography for Petty Officers of the Spanish Hydrographic Institute	B	Op. 1, 6.	Spanish	2013
2007– 9th	“Patent Superior Technician in Hydrography” of the Tunisian H.O.	B	Op. 1	French	2013
2008 - 9th	Specialization Course of the Italian Hydrographic Institute.	A	Sp. 1	Italian	2014
2008 - 7 th	Group Training Course in Information Management for Maritime Activity and Disaster Prevention (JCG and JICA, Japan)	B		English	2014

2008– 9th	Course in Hydrography from the University of Technology of Malaysia (UTM)	A	Op. 2, 7	English	2014
2008 - 9 th	Advanced Course in Hydrography of the Japanese Coast Guard Academy, Japan.	A	Op. 1	Japanese	2014
2008– 9th	Course Programme in Hydrography from Skilltrade – STC (Netherlands)	B		English	2014
2008 - 9th	Hydrographic Education Programme of the University of Otago (New Zealand)	A		English	2014
2009 - 9th	Royal Australian Navy H2 Hydrographic Surveying Course	B	Op. 1,6	English	2015
2009 - 9 th	Course in Hydrography for Navy Officers. INOCAR, Ecuador.	B	Op. 1	Spanish	2015
2009 - 9 th	Intermediate Course for Navy Officers and Civilians. Italian H.O, Italy	B		Italian	2015
2009 - 9 th	Hydrographic Survey for production of nautical charts. H.O. Pakistan.	B		English	2015
2009– 9th	Hydrographic Course at the Royal Naval (UK) Hydrographic School, HMS Drake.	A	Op. 1,6	English	2015
2009 - 9th	Applied Hydrographic Education Certificate Programme. Middle East Technical University (METU), Turkey.	B	Op. 1,2,7	English	2015
2009 - 9th	Course in Hydrography for Naval Officers of Brazilian Navy. RECOGNITION IN PROCESS.	A	Op. 1,2,3,5,6 & 7	Portuguese	2015
2009 -9th	Msc Course in Hydrographic Surveying of the University of Plymouth , U.K. RECOGNITION IN PROCESS.	A	Op. 1	English	2015
2009 – 9th	Bsc (Honours) Ocean Exploration. University of Plymouth, UK. RECOGNITION IN PROCESS.	A			2015

LIST OF COURSES HAVING LOST RECOGNITION

Year recognized				
1994 - 6th	Course in Hydrography. International Maritime Academy of Trieste, Italy. CANCELLED	B	Sp. 1	English
1996 - 7th	Course in Hydrographic surveying of the Department of Geometrics & Geomatics of the University of Melbourne (Australia)	A	Sp. 1	English
1997 - 7th	Course in Hydrography of the “Academy Admiral Makarov, Russia”.	A	Sp. 1, 2 ,3	Russian
1999 - 7 th	Course in Hydrography of the St. Petersburg Naval Academy (Russia).	A	Sp. 1	Russian
2000 - 8th	Harbour and Coastal Management addressed to Harbour and Coastal Surveyors of the International Maritime Academy (IMA), Trieste.	B	Op. 2	English
2005 - 1st	Model Course in Nautical Cartography of the International Maritime Academy, Trieste (Italy)	A		English