





REPORT OF THE 34th MEETING OF THE FIG/IHO/ICA INTERNATIONAL BOARD ON STANDARDS OF COMPETENCE FOR HYDROGRAPHIC SURVEYORS AND NAUTICAL CARTOGRAPHERS

1. Venue and attendance

The 34th meeting of the FIG/IHO/ICA International Board was held from 2nd to 6th of May at the Hotel Westin, New Orleans USA, hosted by the University of Southern Mississippi and the US Navy.

The following were present: **IHO:** Capt. Andrew Armstrong Prof. Delf Egge Cdre K. N. Nair Prof. Luciano Surace – Vice Chair **FIG:** Mr. Adam Greenland – Acting Secretary Mr. Gordon Johnston Prof. Razali Mahmud – Vice Chair **ICA:** Mr. Ron Furness Prof. Lysandros Tsoulos - Chair **Apologies:** Mr. David Neale (FIG)

2. Opening of the meeting Agenda and Administrative Arrangements

- a. Dennis A. Wiesenburg Vice President for Research, University of Southern Mississippi (USM), welcome the Board members and took the opportunity to refer to the previous presentation and recognition of the USM programme ten years ago in Chile. CDR Brian Connon and Maxim Van Norden represented the hosts. Chair of the IBSC responded by thanking the hosts for the organization of the meeting.
- b. The Agenda was adopted as proposed.

3. Chairmen report

Gordon Johnston (until 31.12.2010)

GJ briefed the Board members on the main activities carried out after the 33rd meeting until 31.12.2010. He referred to the Hong Kong course, which requested an extension to 2011 IBSC meeting that was not accompanied by a submission for evaluation at the 34th meeting.

Lysandros Tsoulos (from 01.01.2011)

a. LT briefed the Board on the process followed for the publication of the new editions of S-5 and S-8 and the implementation of the funding scheme for the IBSC. In the discussion the IBSC position on how fees may be allocated was established and agreed unanimously as follows: "The fees are intended to support

the work of the IBSC, mainly to support members' expenses to attend meetings and site visits to programmes and the travel expenses for the participation of the IBSC Chairman in the IRCC meetings".

- b. The IBSC position will be part of the Board's report to the IRCC meeting.
- c. LT informed the Board on the appointment of the new IBSC secretary Alberto Costa Neves. The Board members suggested that in view of the numerous issues that must be handled by the secretariat a meeting of the IBSC chair with the new secretary is considered necessary.
- d. The chairman referred to the increasing interest of the private sector in submitting programmes for evaluation/recognition by the IBSC and to the possibility of twelve (12) or more submissions for the 2012 meeting to include at least three (3) from the private sector and four (4) in Nautical Cartography.
- e. It was noted that there is interest from academia and industry for the IBSC to hold some open sessions to receive feedback and discuss the development of the Standards S5 & S8. The Board decided to include a standing agenda item for future IBSC meetings an open session with industry, academia, etc. to listen and receive feedback on future requirements for development of the standards and submission process. This will be a radical change in the way the Standards are developed and maintained and it will contribute considerably to their improvement and the transparency of the process per se.
- f. The chairman noted that these last two subjects are indications of the changing world we live in and that the Board should take those actions needed to face the new challenges.

4. On-site reviews

a. Report on SkillTrade on-site review

The report on the on-site review visit to SkillTrade in November 2010 was circulated to IBSC members. The course is a CAT B in Hydrography (duration 12 weeks).

Summary findings: Overall a good course, a well-run operation, very intense.

Concerns: Very limited exposure to MBES technology, poor library facilities, 12 week short to effectively teach this Cat B

Action: GJ, AA & DE to prepare feedback for SkillTrade for IBSC approval, including any recommendation, to identify areas of major concern and any other comments.

- b. Discussion on conducting on-site reviews It was considered necessary to develop internal guidelines/framework for conducting on-site reviews. Members for future on-site visits to include: 3 IBSC members (minimum 2), notify the institution well in advance and agree timing, generic areas of interest (to include: coherent field course, documentation, facilities, etc.) any items of concern/focus, 2 days duration, meet with students (individually and group), to witness students in a learning situation – afloat or classroom. Action: LT and KN to develop internal guidelines/framework for IBSC.
- Suggestions for future on-site visits
 Two (2) institutions were identified as possible locations for future on-site visits.

5. Administrative issues

- a. Replacement/substitute for David Neale (FIG) was discussed and Chair was asked to contact to the FIG Commission 4 with IBSC criteria requesting suitable candidates
- b. Prof. Luciano Surace (IHO) serving IBSC member, recently retired, expressed the wish to resign from the IBSC in the near future. When/if resignation of Prof. Surace is received. The Chair will contact the IHO requesting suitable candidates fulfilling IBSC criteria.

6. Changes to S-5 & S-8

- a. Changes proposed by the AHSCP
 Letter and correspondence discussed with the suggested changes. The IBSC position was discussed at length and clarified. Content of letter in response to the AHSCP was drafted and agreed by the Board.
 b. Changes to S-5
- Some repetitions/overlapping were identified in S-5 (E.4 & O.1). They were cleaned and additional items were added to Option1 content.
- c. Proposal for new standards framework

Recalling the discussion at IBSC33 in 2010 and the decisions taken therein it was agreed to separate Cat A and Cat B by developing two discrete parts in the standards. Work will start with the restructuring of S-5 and continue with this of S-8. This approach will clarify the situation, assist the submitting organizations to better focus to the essence/content of the Standards and result to the formulation of a much better profile of the students. Discussion continued on whether Cat A & CAT B designation, labeling, branding is appropriate and alternatives were considered. Board members agreed to replace Cat A & CAT B Basics with pre-requisites. The detail in the pre-requisites yet to be determined, but the content of Pre-requisites, Essentials and Options for Cat A and Cat B will be different.

New standards when developed by the Board will be posted as a draft and invite feedback for a limited period prior to implementation.

Rationale for change (who benefits, who are the customers – now serve a wider range of customers, environment – what is the compelling reason for change) is necessary. It was agreed that high level proposal will be prepared.

Quite relevant to the above is to consider a modular learning experience (subjects) over a limited time period to accumulate a full Cat A or Cat B curriculum. The IBSC acknowledge there are various ways of delivering a Cat A or Cat B programme. It was decided that responsibility for a complete modular Cat A or Cat B programme to rest with a single lead organization/institution.

A process was adopted for the development of draft new standards, comments and implementation, through the formulation of two workgroups to create a framework, outline and try to populate the new standard in the interim period until the 2012 meeting. A sub-group will meet and review progress of the WGs in February 2012 during the 6th Shallow Survey Conference to provide feedback to the IBSC before the 2012 annual meeting. Due to the additional work that has to be carried out at the 2012 meeting concerning the restructuring of the standard and the number of programmes for evaluation/recognition, it was agreed that the duration of that meeting will be seven (7) working days.

A modular appre

- A modular approach to the new standards
 IBSC will only consider a complete Cat A or Cat B programme for recognition from a single
- submitting organization/institution
- e-learning is a reality and may be appropriate and adequate for some elements or modules of a Cat A or Cat B programme.
- d. Duration of 12 week Cat B course
 - A 12 week S-5 Cat B course is considered to be the bare minimum duration to deliver a complete programme.
 - To deliver a successful programme in the spirit of the Standards the IBSC would recommend a course duration that exceeds 12 weeks.
 - Each submission will be assessed on a case by case basis.

7. Fees & Funding

- a. Changes to Annex A of the RoP:
 - Para 2: insert bank details

Para 3: insert the following "The IBSC acknowledges receipt of the annual fee for the submission to the IBSC for the period ?? to ?? with respect to the "?? programme" to be delivered by "?? institution" has been received and paid in full on "?? date" Signed by FIG administrator

- b. IBSC accounts and expenditure
 - Any request for funding with justification shall be made to the IBSC funding group in writing by 1st January in the year of the IBSC annual meeting or three (3) months following the annual meeting
 - Payment will only be made upon production of receipts
 - All payments must be authorized by the funding group

The IBSC agreed that in order to build the fund its members will not request financial support in 2011.

8. Recognized Courses

No	Course	Decision	
1	S- 5 CAT B Turkish Navy Hydrographic Course of Turkish Navy	Submit a revised version of	
	Office of Hydrography, Navigation and Oceanography [TN-OHNO]	submission in 2 months or re- submit in 2012	
2	S- 5 CAT B Hydrographic Surveyor of Portugal	Recognized on Condition	
3	S- 5 CAT A Hydrographic Surveyors Programme of the Naval Academy of Colombia	Recognition extended until 31.12.2011	
4	S- 5 CAT B Specialization Course in Hydrography for Navy Officers and Civilan Attendees of the Argentinian Navy Sea Sciences School	Submit a revised version of submission in 2 months or re- submit in 2012	
5	S-5 CAT A Graduate Programme in Ocean Mapping of the CCOM/JHC University of New Hampshire	Recognized	
6	S-5 CAT A Joint International Hydrographic Applied Science Program of the University of Southern Mississippi and Commander, Naval Meteorology and Oceanography Command	Recognized	
7	S- 5 CAT B International Hydrographic Management and Engineering Programme (IHMEP) by NAVOCEANO	Recognized	
8	S-8 CAT B France SHOM school course in Nautical Cartography	Recognized on Condition	
9	S- 5 CAT B France SHOM Course on Hydrography for Petty Officers	Recognized	

The Board was grateful to Lt. Hikmet Ulusal (Turkey), Maxim van Norden, David Wells & Doug Lipscombe (USA) and Patrick Michaut (France) who attended the meeting, gave presentations of their programmes and helped the Board to clarify some aspects of their submissions, responding to the questions of the Board members. The Board members consider the presence of representatives of submitting organizations as necessary if not indispensable and urge organizations which plan to submit programmes in the future to seriously consider their representation at the IBSC meetings.

9. Future recognitions and re-recognitions

No	Course	Last Recognition	Years Recognized
1	S-5 CAT A Programme for Bachelor of Engineering Degree in Hydrography of the Dalian Naval Academy (DNA) of China	2003	9
2	S-8 CAT A Programme for Bachelor of Engineering Degree in Nautical Cartography of The Dalian Naval Academy (DNA) of China	2003	9
3	UK Royal Navy HM2 Course	2003	9
4	S-5 CAT B Technical Course in Hydrography of the Hydrographic Institute of Portugal	2004	8
5	S-5 CAT B Course in Hydrography of the Peruvian Navy	2004	8
6	S-5 CAT Specialization Course of the Spanish Hydrographic Institute.	2005	7
7	S-5 CAT Basic Hydrographic Course of the Bangladesh Navy	2005	7
8	S-5 Australasian Hydrographic Surveyors Certification Scheme	NEW	
9	S-8 CAT B Specialization Course in Nautical Cartography of the Argentinean Navy Sea Sciences School	NEW	
10	S-5 CAT B STET Maritime Pte Ltd Hydrographic Surveying Course	NEW	
11	S-8 CAT A Course in Nautical Cartography IIC Technologies Group	NEW	
12	S-8 CAT B Course in Nautical Cartography IIC Technologies Group	NEW	
13	S-5 CAT Hydrographic Surveyors Programme of the Naval Academy of Colombia	2001	11

10. Feedback session - Presentations

The Board held a feedback session on the new editions of S-5 & S-8. Participants from the academia and the private sector expressed their views and gave the opportunity to the Board members to respond where appropriate. The board took note of the comments made and which will be considered in the framework of the restructuring of the standards. It was generally agreed that this session was to the benefit of both sides (see also 3.d)

Presentations from the industry were also made as follows: Caris – Paul Cooper

Fugro – Don Ventura

IV3-3D – Lindsay Gee

11. Venue – date of the next meeting

The Board decided that the next meeting should take place at a submitting organization's location in order to enable the reviewers to get a clear/rigor view of the programme(s) submitted. To this effect the chairman was authorized to contact specific organizations.

Preferable dates for the next meeting are 21-31 May 2012.