



IBSC 2014-2015 Report

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IBSC Chair



The Board

- 10 members (4 FIG, 4 IHO and 2 ICA), from governmental, educational and civil sector;
- 2 new members :
 - FIG: Sobri Syawie from Indonesia,
 - IHO: Nickolás de Andrade Roscher from Brazil.
- ICA : may not support any more the 2 IBSC members
Pending decision (next ICA conf in Rio, August 2015)



The role of the Board

- maintain the Standards of Competence for Hydrographic Surveyors and Nautical Cartographers (S5 & S8);
- maintain the publications C6 (Reference Texts for Training in Hydrography) and C47 (Training Courses in Hydrography and Nautical Cartography);
- review programme submissions from institutions against these standards and award certificates of programme recognition where appropriate;
- undertake on-site visit of institutions offering recognized programmes.



Output of the Board activities

- a *worldwide network of formally recognised programmes* of education and training for Hydrographic Surveyors and Nautical Cartographers.
- To ensure our profession has appropriately *qualified hydrographers and cartographers* to meet current and future needs.
- Availability of qualified professionals is an absolute fundamental requirement *of industry and government*, from established HOs to emerging states that are part of *the IHO CB programme*.



Summary of IBSC decisions

REVIEWS		Submitted		Recognized / conditionnaly recognized	
Cat B	Hydro	5	5	2	2
	Carto	0		0	
Cat A	Hydro	4	6	1	1
	Carto	1			
Ind. Recog. Schemes		0	0	0	0
		TOTAL	10		3

Next IBSC meetings:
PANAMA CITY, April 2016
NEW ZEALAND, April 2017



Challenges



The IBSC Secretary assists the IBSC with:

- regular liaison with institutions, the IHO, FIG and ICA and IBSC Board members;
- provide institutions with guidance;
- **managing the IBSC fund** (invoicing, receipts and accounting);
- **Correspondence with institutions (IBSC decisions, CLs, invitations to IBSC meeting);**
- **Maintenance of standards** and a register of recognised courses;
- maintaining the IHO IBSC website;
- organizing on-site visits to institutions, **follow working groups activity and reports**, finalize the minutes of meetings.



Continuing limitations in the ability of the IHB to provide the necessary secretarial and administrative support of the IBSC has the potential to adversely affect the work programme of the IBSC and ultimately the credibility of both the IBSC and the IHO.



New Standards development



The IBSC workprogram (2013-2017)

“IBSC to develop a new Standards framework to separate competency requirements for Cat A and Cat B hydrographers and nautical cartographers by

- developing two discrete parts in the standards S-5 and S-8 ;**
- updating their content to comply with the scientific and technological developments in the fields of Hydrography and Nautical Cartography.”**



New standards development

- **7 additional workshops for the completion of the S-5B;**
- **A total of about 30 days of group meetings (workshop + Board meeting) have been dedicated to S-5B and A**
- **S-5B has been completed in June 2014**
- **Delay for S-5A (expected in April 2015): Postponed to April 2016**
- **S-8B currently under development**



Interaction with Stakeholders

- Extensive presentation of the new S-5B
- Discussions and remarks from stakeholders
- Outcomes:
 - S-5B is welcomed;
 - Clear distinction between learning outcomes and content is positive;
 - Suppression of option is well accepted
 - Focus on core competencies of hydrographers on HS and Industry needs is welcomed
- IBSC Participation to the IHO panel (the IHO and us)



Existing Model (for many programs)

Learning Progression



Category A Competencies
Essentials and Options

Category A Basics (more math, more physics, etc.)

Category B Competencies
Essentials and Options

Category B Basics (math, physics, computer science, etc.)



New Model

To be introduced 2016 - 2018

Category B

Practical Competencies and
Basic-level Theoretical
Understanding



Typical Academic
Prerequisites

Associate Degree, Technical Diploma, or
BA degree

Category A

Theoretical,
Analytical, and Practical
Competencies



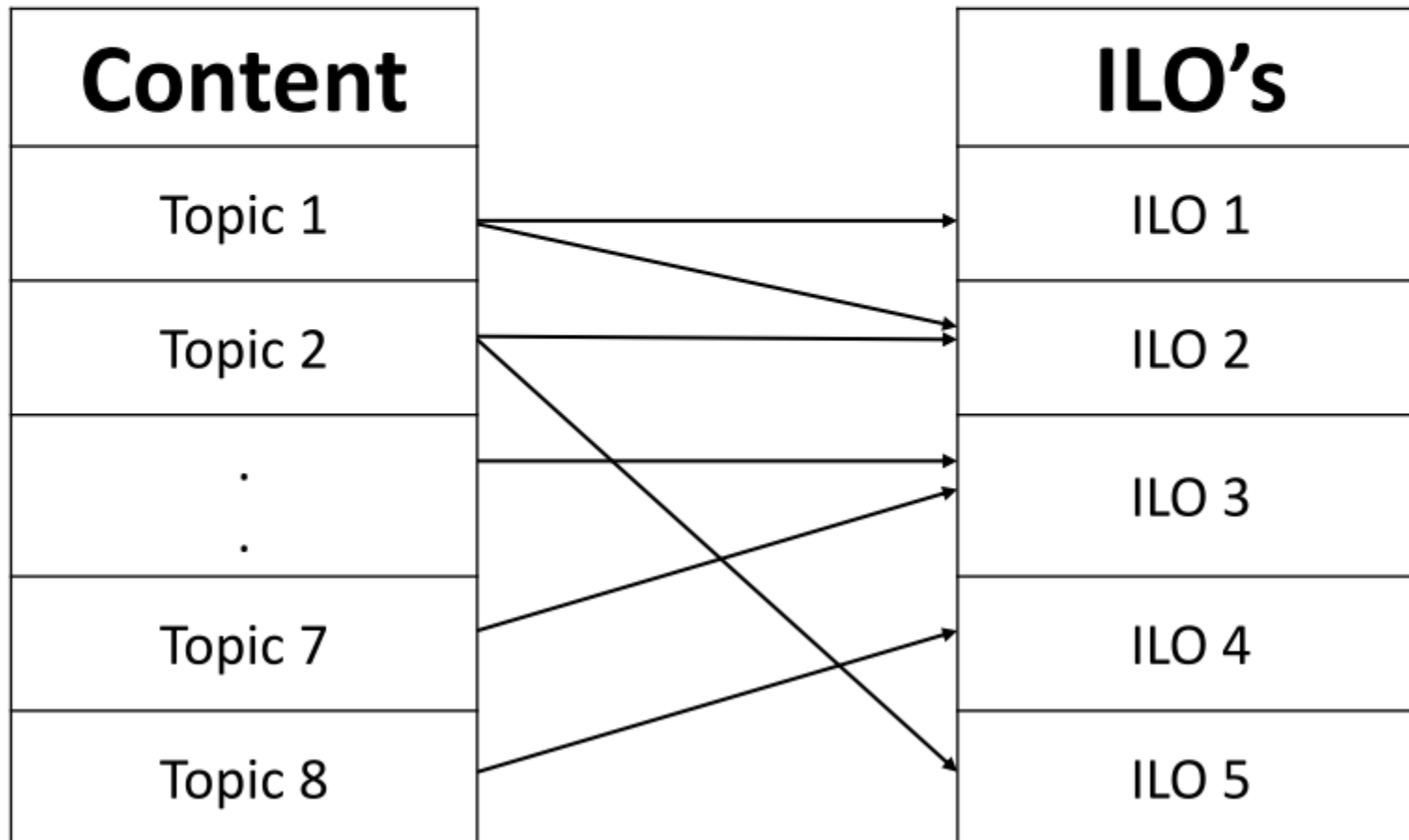
Typical Academic
Prerequisites

BSc degree



Mapping content to ILO's

(many to many relationship)



Assessment



Example from S-5B

E5.2b Survey systems (I)	T 3	P 10	SG 5	Mxx (i)	<ul style="list-style-type: none"> (i) Installation and calibration requirements for: <ul style="list-style-type: none"> Echo sounders Swath systems Side scan sonar 	<p>Explain the importance of the correct installation, calibration and determination of the attitude and position of each sensor.</p>
5.2c Calibration and corrections (I)					<ul style="list-style-type: none"> Surface and sub-surface positioning system IMU/INS (ii) Sound velocity probes and profilers (iii) Data acquisition and integration systems 	<p>Setup, integrate and test survey system including sensors, acquisition system time-stamping strategy with appropriate physical offset determination.</p> <p>Explain the purposes and apply speed of sound measurements in acoustic systems.</p>
E5.2b Survey systems (I)	1	4	5	Mxx (i)(ii)	<ul style="list-style-type: none"> (i) Installation and calibration requirements for: <ul style="list-style-type: none"> Echo sounders Swath systems Side scan sonar 	<p>Explain the importance of the correct installation, calibration and determination of the attitude and position of each sensor.</p>
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Summary of responses to CL31/2015

- 11 Member states replied;
- 3 Recognized institutions replied
- All of them are supportive to the new S-5B;
- Suggestions from MSs (from minor modifications to proposals to modify items content and ILOs);
- **Improvement suggested by the MSs to be incorporated to the 1st edition of the S-5B;**
- **IBSC proposes IRCC to endorse the S-5B;**



IBSC expectations for recognition

- Compliance with both content and ILOs;
- A clear description of student hydrographic surveying projects and practical activities;
- Beyond the content of a programme, **how Learning Outcomes are actually assessed** ;
- Quality Assurance of programmes (student feedback, staff feedback, impact of programme evolution);



New Category A and Category B standards development plan

- **S5-B: in force by Jan 2015;**
- **S5-A: in force by Sept 2015;**
- S-8 B and A: in force by Jan 2017

Note:

- Category B Submissions for 2016 (received before Dec 2015) will be reviewed against current S-5;
- 2 Volunteers institutions to submit against S-5B by 31 January 2016.



Actions required by the IRCC7

- **Note the IRCC7-08G1 (IBSC report)**
- **Note the IRCC7-08G2 (S-5B Standards development and feedback from the MSs)**
- **Consider the potential impact of the IBSC secretariat limitations on IBSC activities**
- **Endorse the S-5B publication;**
- **Approve the S-5A development plan.**