

The Prospect for an FIG/IHO/ICA Program for Recognition of Individual Hydrographers

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Advisory Board Terms of Reference

- ▶ Duties
- ▶ Membership
- ▶ Secretariat
- ▶ Regulation by Terms of Reference and Terms of Procedures
- ▶ Expenses
- ▶ Terms of Reference approved by sponsoring organizations

Membership

- ▶ Individuals
 - From civil, governmental, and educational sectors
 - With wide spectrum of knowledge and experience in education, hydrography, and nautical cartography
 - From different geographical areas
- ▶ 4 from IHO, 4 from FIG, 2 from ICA

Duties

- ▶ Establish standards of competence
- ▶ Maintain publications (M5, M8, M6, S47)
- ▶ Review syllabi
- ▶ Provide advice on syllabi
- ▶ Review procedures on submission of syllabi
- ▶ Communicate with sponsoring organizations
 - with FIG via Commission IV
- ▶ Meet annually

Standards of Competence

- ▶ Establish requirements for educational programs for hydrographers and nautical cartographers
- ▶ Describe competencies that students should master in the training environment

Recognition

- ▶ The IAB develops standards and recognizes educational and training programs at two levels
 - Category A
 - Category B
- ▶ The IAB maintains a list of recognized programs on the IHO website

Category B

A programme which provides a practical comprehension of hydrographic surveying for individuals with the skill to carry out the various hydrographic surveying tasks.

Example competency:

Explain the principles of various types of water level gauges and poles. Describe characteristics of river, coastal and offshore water level gauges. Install and operate water level gauges and poles.

Category A

A programme which provides a comprehensive and broad-based knowledge in all aspects of the theory and practice of hydrography and allied disciplines for individuals who will practise analytical reasoning, decision making and development of solutions to non-routine problems.

Example Competency:

Evaluate and select appropriate instruments and sites for water level monitoring. Calibrate analogue and digital recording water level gauges. Evaluate sources of error. Apply appropriate corrections.

Recognition

The IAB does not (and will not):

- Evaluate Individuals
- Recognize Individuals
- Certify Individuals

So, what is a "Cat A" Surveyor?

Recognition

The IAB is considering whether it should recognize national, organizational, or regional schemes for certification of individuals

The screenshot shows the IMCA website with the following content:

- IMCA The International Marine Contractors Association**
- Navigation: About IMCA, News, Activities, Regional, Publications, Members, Links
- Training, Certification & Personnel Competence (TCPC)**
- IMCA's Training, Certification & Personnel Competence Core Activity is responsible for developing competence standards for offshore personnel in safety critical positions. Also included in its work programme is co-ordination of training and certification initiatives and work on recruitment and careers promotion issues.**
- Text: "For full details on the work of the TCPC core activity, including its guidance on competence assurance and assessment, a range of careers guides for those wishing to work in the offshore sector and details of training guidance and certification, click here."
- Text: "IMCA's four regional sections also address personnel issues affecting members in each area of the globe. Click here for more information."
- Section: "For more details on the work of the core activity, its guidance publications and more, select from the links below:"
- Buttons: Profile, News, Events, Publications
- Regional Activities: "IMCA is your part of the world" with links for Americas Deepwater Section, Asia-Pacific, Europe & Africa, Middle East & India.
- Footer: Site Map | Contact IMCA | ©1998-2009 IMCA

<http://www.imca-int.com/core/tcpc/>

The screenshot shows the ACSM website with the following content:

- A.C.S.M. American Congress on Surveying and Mapping**
- Navigation: Home, Membership, Conferences, Search, ACSM eDocs, Mission Board
- ACSM Certified Hydrographer**
- Text: "add credibility to your contract proposals and increase your opportunities"
- Text: "ACSM Hydrographer Certification is well-recognized and considered by many Federal, State and local agencies as well as private firms, seeking subcontractors when evaluating technical proposals for marine engineering, surveying, and construction. These include port authorities, NOAA and the Corps of Engineers. The certification program is also endorsed by the Hydrographic Society of America which provides financial support through annual contributions."
- Text: "Designed for hydrographers with five years of experience, ACSM Certification authenticates your work experience and gives credence to your resume. Earn certification through examinations offered throughout the year. Don't get left behind as others obtain certification, get the great job offers and empower their companies to be awarded contracts."
- WHO SHOULD SEEK CERTIFICATION**
- Text: "Surveyors, engineering technicians, dredge operators, geophysical exploration surveyors/geologist, hydrographers, principles in architecture-engineer firms"
- ACSM HYDROGRAPHER CERTIFICATION EXAMINATION DATES AND SITES**
- Text: "Requests from applicants for additional exam sites will be researched and offered when possible. Certification Board members may be available to proctor exams in their areas. Exams will be offered at the ACSM Headquarters Office in Gaithersburg, Maryland, upon request."
- Text: "Click on the link below to download an application and complete program details."
- Text: "For more information please call 240-632-9716."
- Footer: <http://www.acsm.net/hydrocert.html>

Accreditation/Certification of Hydrographic Surveyors in Australasia



slide courtesy of Australasian Hydrographic Certification Program

REQUEST

The AHSCP now seeks endorsement from the FIG/IHO/ICA International Advisory Board for the Australasian Hydrographic Surveyors Certification Process.

Such an endorsement would assist to clarify the status of AHSCP certification to relevant Government Authorities in Australasia and enhance International recognition of the Profession of Hydrography.

slide courtesy of Australasian Hydrographic Certification Program

Issues for the IAB

- ▶ Is international recognition of competency schemes needed in hydrography?
- ▶ Is the Board equipped to recognize certification schemes?
- ▶ What should constitute standards for recognition of certification schemes?
- ▶ How will recognition of schemes affect the recognition of training and education programs?

What is certification

A professional certification, trade certification, or professional designation often called simply certification or qualification is a designation earned by a person to certify that he is qualified to perform a job. Certification indicates that the individual has a specific set of knowledge, skills, or abilities in the view of the certifying body. Professional certifications are awarded by professional bodies and corporations. The difference between licensure and certification is licensure is required by law, whereas certification is generally voluntary. Sometimes the word certification is used for licensure.

People become certified through training and/or passing an exam. Individuals often advertise their status by appending the certification abbreviation to their name

From: Wikipedia

What is a professional?

What is a Professional Engineer?

Like doctors who have passed the medical boards or lawyers who have passed the bar exam, professional engineers (PEs) have fulfilled the education and experience requirements and passed the rigorous exams that, under state licensure laws, permit them to offer engineering services directly to the public. PEs take legal responsibility for their engineering designs and are bound by a code of ethics to protect the public health and safety.

Engineering licensure laws vary from state to state, but, in general, to become a PE an individual must be a graduate of an engineering program accredited by the Accreditation Board for Engineering and Technology, pass the Fundamentals of Engineering exam, gain four years of experience working under a PE, and pass the Principles and Practice of Engineering

From: National Society of Professional Engineers
<http://www.nspe.org/aboutnspe/ab1-what.asp>

What would be a Cat A Surveyor?

- ▶ Someone who has (and has demonstrated) the competencies described in M5
- ▶ Not someone who has the competencies of prior editions of M5
- ▶ Not someone who has lots of experience without all the competencies
- ▶ Not someone who has all the training and not much experience

A Model for the IAB to consider

- ▶ Education and training which in the aggregate covers the competencies subjects of M5
- ▶ Documented experience in the field encompassing a the major aspects of the competencies
- ▶ Demonstrated mastery of the subjects by way of examination
- ▶ Demonstrated continuing professional education to maintain currency

How would the IAB administer this process?

- ▶ Free of charge?
Probably not
- ▶ Charge to certifying bodies?
- ▶ Charge per individual certified?
- ▶ Both?

- ▶ Would this actually pay for the process?

What are some problems?

- ▶ Incompatibility with existing local, national, regional, or organizational certification

- ▶ Legal conflict with licensing authorities
 - i.e., Registered Land Surveyors in the U.S.

What next?

- ▶ First—a mandate from an IAB sponsoring organization—FIG?
- ▶ Second—approval from the other sponsoring organizations
- ▶ Third—a plan to fund the process
- ▶ Fourth—develop a standard