## Hydrographic and Cartographic Competency Standards – Challenges and Opportunities

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## **SUMMARY**

The professional surveying sector that involves the offshore, marine and hydrographic surveys, as well as the creation of charting products, relies on specialist knowledge and competencies to ensure satisfactory outcomes. To maintain appropriate standards of competence, FIG is a collaborator with the IHO and ICA in developing and maintaining minimum standards. It is the FIG/IHO/ICA International Board on the Standards of Competence for Hydrographic surveyors and Nautical Cartographers, or the "IBSC" that undertake this work.

The standards were introduced over 40 years ago and they are under frequent review and development to remain relevant. Pressures due to the changes in teaching methods and ways of learning, new and emerging technologies and other various trends impact and cause the IBSC to review and develop amendments. The sector is enjoying a busy period and is also seeing more robotics and automated operations without personnel onboard. Such operations still require some appreciation of the context and offshore environment but will this be a skill that is required in the future? Data types, data volumes and the potential data users are all expanding and growing in volume and number. How should a data centric approach be represented and supported for the "Nextgen" surveyors and cartographers.

Consequently, some current challenges are outlined in this presentation and the challenges described to inform and to also, perhaps more importantly, to engage and develop a response from the audience, readers and delegates. The IBSC welcomes input and feedback while is assesses the development of new standards. This presentation forms a chapter in that process.

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