Hydrographic Education, Training and Professional Development

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**SUMMARY**
Hydrographic education and training is baseline for recruiting new hydrographers and cartographers and also essential for maintaining the Hydrographic Offices and Services in their constant activities. As a nature of conducting hydrographic surveys and producing standard nautical charts, theoretical hydrographic education and practical training ought to be world standard and include modern technologies. Along with the technological developments in hydrographic and cartographic fields, demands of the Hydrographic Offices and the hydrographic industry have triggered the new curriculum developments in hydrographic education and training. In our era, addition the traditional nautical charting surveys, surveys for Coastal Zone Management and Industrial Offshore Surveys are also inseparable subjects of the modern hydrographic education and training. In this context, hydrographic education should contains difficult scientific components, applied mathematics, physics and information technologies that students can understand the complexity of hydrographic surveying systems and data processing methods. Modern technology can also be used to deliver training in new and innovative ways, such as providing e-learning resources and programmes tailored to individual needs. This distance-learning method can make hydrographic training and education more accessible. On the other hand, IHO Capacity Building training programme should continue for providing developing and small countries with starter assistance in order to meet their hydrographic requirements and obligations. Taking into account the rapid technical changes or developments in the practise of hydrographic surveying, nautical charting and data management, Professional Development should be considered to gain new skills and knowledge as part of hydrographers’ work. This can be delivered by individual states according to the guidelines and resources provided by the IHO. This might encompass Marine GIS; Nautical Charting or Hydrographic Surveying with recognition of efforts made. This can be woven into career development pathways for IHO Member States’ employees. One additional option might be to instigate a “mentoring” programme. Also, Professional Development should be implemented at every level in Hydrographic Offices and hydrographic industry, from surveyor and cartographer to the top level Manager and Directors.