

13 December 2016

FIG Commission 4
Working Group 4.1 – Standards and Guidelines for Hydrography
Report of Activities 2016

Members

Working Group 4.1 (WG 4.1) currently consists of members from Australia and New Zealand and is supported by the respective FIG Member Associations; the Surveying and Spatial Sciences Institute of Australia (SSSI) and the New Zealand Institute of Surveyors (NZIS).

Simon Ironside	Chair	New Zealand
Michael Beard	Vice Chair	Australia
Mathieu Bestille		Australia
Peter Barr		Australia

Background

The WG 4.1 2015-2018 Work Plan was approved at the Commission 4 Annual General Meeting in Sofia, Bulgaria on 18 May 2015 during the FIG Working Week 2015.

WG 4.1 was renamed (from WG 4.2) at the Commission 4 Annual General Meeting held in Kuala Lumpur, Malaysia in June 2014, during the FIG Congress 2014.

WG 4.2 had been moribund for a number of years and one of the goals of the incoming Commission 4 Chair, Mrs Angela Etuonovbe, was to focus Commission's efforts on having relevant and meaningful input into hydrographic standards and guidelines, hence the WG's re-invigoration and renaming.

The intent of WG 4.1, as set out in the current work plan, is to deliver tangible but realistic outcomes based on the agreed objectives of:

- 1 Assisting in the development and recognition of standards of competency for hydrographic surveyors.
- 2 Assisting in the development of technical standards and guidelines.
- 3 Assisting with review of standards and guidelines.
- 4 Promoting the need for, and benefits of, professional hydrographic surveyor certification.

Outcomes

WG 4.1 has committed itself to a number of specific outcomes based on these agreed objectives over the period of the work plan as follows:

- 1 Broaden the membership of WG 4.1 to ensure its legitimacy as an active international professional body.

- 2 Support the International Hydrographic Organization (IHO) through the work of its Hydrographic Services and Standards Committee (HSSC) by participating in HSSC working groups to review hydrographic standards and guidelines, primarily:
 - S-44 – IHO Standards for Hydrographic Surveys (the most recent version is the 5th Edition, February 2008).
 - S-100 – IHO Universal Hydrographic Data Model (January 2010)
- 3 Support FIG members on the FIG/IHO/ICA International Board of Competence for Hydrographic Surveyors and Nautical Cartographers (IBSC) in reviewing and updating competency standards, namely:
 - S-5A – Standards of Competence for Category 'A' Hydrographic Surveyors (currently under review).
 - S-5B – Standards of Competence for Category 'B' Hydrographic Surveyors (February 2015).
- 4 Represent Commission 4 on the FIG Standards Network and other international fora where appropriate.
- 5 Support the work of other FIG Commissions and Working Groups, and participate in Commission 4 events where possible.

Progress against WG 4.1 Objectives/Outcomes in 2016

Broaden WG 4.1 membership

Two members, Emily Tidey (New Zealand) and Simon Allen (Australia), stood down from the WG in 2016. One additional member, Mattieu Bestile (Australia), has joined. Simon Ironside (New Zealand) assumed the role as Chair in February 2016.

No international (i.e. non-Australasian) members have volunteered to join the WG in 2016 despite email approaches being made to several candidates (as a result of contacts made during the FIG Working Week in Sofia in 2015) and more recently through face-to-face engagement during the 2016 FIG Working Week in Christchurch.

Additional members will continue to be sought in the coming year with the aim being to ensure the WG encompasses appropriate international expertise to be able to make meaningful contributions to WG outcomes/deliverables.

HSSC Involvement

In accordance with WG 4.1 Terms of Reference, published on the FIG website (www.fig.net/organisation/comm/4/2015-2018/WG/wg_4.1_15_18.asp) exploratory discussions with the HSSC Vice Chair, Mike Prince (Australia) have been undertaken during the year. The Vice Chair remains very supportive of WG 4.1 assistance to the HSSC and its associated Working Groups in addressing hydrographic issues/standards.

The next step in this process, which is currently underway, is the formalisation of WG 4.1 involvement in the following HSSC Working Groups:

S-44

S-44 is in need of review and consideration is being given by the IHO to assigning this body of work to an existing HSSC Working Group rather than forming a new one. Either way, it has been agreed with the HSSC Vice Chair that WG 4.1 should be involved in the S-44 review process.

- this involves making a request to the Working Group Chair that WG 4.1 be included as an Expert Contributor as part of any new or established HSSC Working Group assigned S-44 review responsibilities. In this way WG 4.1 will be able to attend HSSC Working Group meetings as required;
- be included on the Working Group distribution list to receive future requests to review the S-44; and
- take advantage of an established HSSC forum whereby WG 4.1 submissions can be formally tabled through the Commission 4 Chair.

S-100

The S-100 Working Group is already established within the HSSC. The Working Group's remit is to maintain, develop and extend S-100 Universal Hydrographic Data Model and S-99 Operational Procedures for the Organisation and Management of the S-100 Geospatial Information Registry. This is a very technical and specifically focussed Working Group and it is questionable whether WG 4.1 could add any value in revising related standards.

However, the Working Group's other remit is to monitor the development of other relevant international standards. To this end, it is understood that sub Working Groups and Project Teams can be formed to undertake detailed work on specific topics under the S-100 Working Group Terms of Reference. For example, one sub-group is currently addressing under-keel clearance issues while another is looking at bathymetry.

Work in these specific sub group areas is where WG 4.1 can best contribute and the S-100 Working Group Chair will be requested to consider including WG 4.1 as an Expert Contributor in reviewing relevant hydrographic standards (eg. S-102) as an alternative to S-100.

IBSC Involvement

WG 4.1 has reviewed the first draft of S-5A Standards of Competence for Category 'A' Hydrographic Surveyors. The consolidated Commission 4 submission was sent to the IBSC Secretariat on 6 April 2016.

WG 4.1 is now recognised by IBSC as Expert Contributor and has been asked to be involved in the review of S-8 Standards of Competence for Nautical Cartographers.

FIG Standards Network

Nothing to report. However, work on this relationship will be undertaken over the coming year.

FIG and Commission 4 Support

This deliverable remains an ongoing WG 4.1 commitment. Only one significant development has arisen during 2016:

Royal Institution of Chartered Surveyors (RICS) Support

WG 4.1 has been asked, and has agreed in principle, to contribute to the hydrographic component of the RICS International Property Measurement Standards (IPMS). FIG remains a key member of IPMS Coalition.

WG 4.1 Funding

The WG 4.1 Chair has secured support from SSSI and NZIS to enable short to medium term participation in FIG Working Weeks/Congresses and other international hydrographic fora or events.

IHO South West Pacific Hydrographic Commission

At the Commission 4 AGM held during FIG Working Week 2016 in Christchurch it was agreed that members would approach the IHO Hydrographic Commissions to offer hydrographic surveying assistance.

The South West Pacific Hydrographic Commission is yet to be engaged by WG 4.1. However, it is intended to work on this relationship over the coming year in order to provide support and relevant technical input to the work of the Commission on behalf of Commission 4.

WG 4.1 Webpage

A [WG 4.1 page](#) has been established on the FIG website (Commission 4).

And all reports, membership details, the Work Plan, Terms of Reference etc. have been posted there and will be updated as work progresses and once this report of activities for 2016 has been submitted.



Simon Ironside
Chair
Working Group 4.1
FIG Commission 4

16 December 2016