

**Report for the 26<sup>th</sup> General Assembly  
FIG Working Week in Paris, 13-17 April 2003**

**FIG Commission 4 – Hydrography  
Report on Activities 2002–2003**

**1. Commission 4 Mission**

- Promote the aims and objectives of FIG to hydrographers through the active involvement of national delegates from member associations and other interested parties in the activities of the commission.
- Foster closer links with all sister organisations currently active within the global hydrographic community.
- Develop guidelines and standards that will assist hydrographers in the provision of their services.
- Disseminate information relevant to the profession through participation in international meetings, conferences and committees.

**2. Work Plan 2002-2006**

To date the Commission has adhered to the published workplan. Full details of the workplan (including an Adobe .pdf format version) can be found at <http://www.fig.net/figtree/commission4/workplans/workplan.htm>

**3. Chairman's Report**

Commission 4 held two official meetings during 2002. The first at the Canadian Hydrographic Conference (CHC2002), Toronto in April and the second at The Hydrographic Society Bi-annual Conference (Hydro2002), Kiel, Germany in October.

The priority for the Commission over the last year has been to raise awareness and increase the profile of FIG and Commission 4 to the wider international hydrographic community. To my mind, this has been largely achieved through a combination of initiatives. Namely establishing a new website, articles published in prominent surveying journals, attendance and active participation at hydrographic conferences plus the on-going efforts of the workgroups, as detailed below. Naturally this work will carry on, as we continue to build upon the foundations already laid.

At the time of writing, the hydrographic community remains in a state of flux as considerable changes, namely restructuring and newly elected executives, to both national and international hydrography bodies occurred during 2002. The next couple of years will be critical to Commission 4 in its relationships to sister organisations and attracting national hydrographic bodies to FIG. In addition, a new MOU with the International Hydrographic Organisation (IHO) is to be drawn up and it is anticipated that this will lead to a closer co-operation with this important body.

At the FIG Washington Congress, Commission 4 made a decision to withdraw from the joint IHO/FIG Technical Assistance and Coordination Cooperation Committee (TACC). This was due in part to the complex interests of donor countries and FIG funding issues. In October at Hydro2002, Wilfried Schleider (Germany) and Dirk Bakker (Netherlands) gave a presentation on their work in TACC, which is due to be published in the coming months. Commission 4 acknowledges the work done by Wilfried and Dirk over the years and the valuable contribution they have made to this joint committee.

Commission 4 will continue its participation on the joint IHO/FIG/ICA Advisory Board on Standards of Competence for Hydrographic Surveyors and Nautical Hydrographers.

Over the coming year Commission 4 will endeavor to contribute towards Education and CPD programs in Hydrography, with particular emphasis on inter-commission activity at FIG Regional Meetings. Ideally, to partake in a series of lectures and a structured seminars dealing with local issues.

In conclusion, Commission 4 has a busy year ahead to ensure successful delivery of the workplan.

#### **4. Working Group activities**

##### **Working Group 4.1 – Strategic Partnerships**

Chair: Mr. Adam Kerr (United Kingdom), e-mail: Adam.J.Kerr@btopenworld.com

##### Progress Report

After various ad hoc exploratory discussions letters have now been sent to all known national hydrographic organisations. These include the four previous branches of The Hydrographic Society: UK; Danish; Australasian; Benelux. Also the US Branch.

At this point there has been no response, although there has been some clarification of the situation in the USA between The Hydrographic Society of America and the original Branch of The Hydrographic Society. The level of interest in forming alliances between either of these organisations and FIG is not yet known.

Letters have also been written to the previously independent hydrographic associations of Canada, Russia and South Africa. A response has been received from the Secretary of the Russian Hydrographic Society, saying that in principle they are very positive. They are concerned about any financial commitment that may be needed and this has been brought to the attention of the Chairman of Commission 4.

No direct contact has been made with the IHO as it is understood that action is in hand to prepare a new Memorandum of Understand between the IHO and FIG.

A letter has been sent to the newly formed Federation of Hydrographic Societies but so far no reply has been received. It is understood from the AGM of the outgoing Hydrographic Society, that although there is general agreement to form this Federation, it is not yet formally established and so the question of any alliance must await that event.

Apart from receiving responses from the national and international organisations there are some outstanding matters to address on the benefits and costs of such alliances. These include arrangements for meetings, publications and the costs that an individual society may incur through signing up to an alliance.

In concluding, it may be noted that this a difficult time for associations to decide on the issue of alliance with FIG or any other body as many are in a state of change, particularly those that are being formed from the old Branches of the Hydrographic Society. The situation in the USA is also apparently in some state of change.

#### **Working Group 4.2 – Vertical Reference Frame**

(A Joint Working Group with Commission 5).

Chair: Dr. Ahmed El-Rabbany, Canada, e-mail: rabbany@ryerson.ca

##### Progress Report

Traditionally, bathymetric and topographic measurements have been collected independently to serve different purposes. Additionally, depth and height data were referred to different vertical datums, which created inconsistency across the land-sea interface.

With the growing number of coastal applications, such as coastal zone management and marine boundary delimitation, it is necessary that a seamless vertical reference surface be established. The availability of such a reference surface is also necessary for the development of the three-dimensional ECDIS, which is expected to have significant economic and safety impacts.

Unfortunately, however, establishing the relationships between the various vertical datums, and consequently the seamless vertical reference surface, is not an easy task. This is mainly due to the inconsistent datum distortion as well as the discrepancies in the subsequent measuring techniques.

To tackle this subject, the FIG Working Group 4.2 (WG 4.2), Vertical Reference Frame, was established. A paper summarizing the activities and findings of the Working Group will be presented at the FIG working week in Paris. In addition, a poster highlighting the WG's activities will be produced and presented at the FIG working week.

#### **Working Group 4.3 – Coastal Zone Management (CZM)**

(A Joint Working Group with Commission 7)

Chair: Michael Sutherland (Canada), e-mail: d8kw@unb.ca

##### Progress Report

It was agreed that the group should initially focus on coastal zone management, marine cadastre, and ocean governance as specific topics from the list of relevant topics that include:

- Hydrography
- Coastal zone management
- Ocean governance
- Marine Cadastre
- Boundary delimitation
- Maritime jurisdiction

- Marine spatial data infrastructure

The aim of the group in this regard is to ascertain an acceptable position reflective of how surveyors could contribute to the areas of choice.

After initial discussions via email it was decided that members of the group would write status papers covering the contemporary situations in their own countries/regions. These papers would be brought to the working week in Paris for discussion aimed at formulating a unified position on these topics, and plotting the group's course of actions over the period of their tenure towards the attainment of the objectives of the Workgroup 4.3.

## **5. Communications**

The new Commission 4 website is part of the main FIG website, which is maintained and operated by the FIG permanent office in Copenhagen.

Over the last year, two articles on Commission 4 were published in leading International Surveying Journals. Both are available on the website in Adobe .pdf format and offer a good overview of current policy and future activities.

Details of all meetings and conferences attended, with comprehensive minutes and pictures, are available on the website.

The Commission keeps a full and comprehensive list of addresses of delegates, correspondents and friends of the Commission.

## **6. Conferences and Events**

The Commission attended two conferences, CHC2002 and at Hydro2002.

## **7. Future Plans**

The Commission will hold meetings as and when appropriate throughout the coming year, normally arranged to coincide with conferences that the commission is involved in.

The Paris WW in April, will be the first meeting that Commission 4 is fully represented since the formation of the work groups, in Washington and Canada last year. All the Working Group Chairs will be present to report on progress and discuss future plans.

The Commission is co-sponsoring the 7<sup>th</sup> South East Asian Surveyors Conference to be held in Hong Kong, November 2003. Full details can be found at [www.seasc2003hk.org](http://www.seasc2003hk.org)

Commission 4 will fully participate in and support the FIG Regional Conference in Marrakech, Morocco (2-5 December 2003).

February 2003

Adam Greenland, MRICS  
Chair, FIG Commission 4

Commission web site: <http://www.fig.net/figtree/commission4/index.htm>