

**Report to the 29th General Assembly
FIG Congress in Munich, October 2006**

FIG Commission 4 – Hydrography

Report of Activities 2002-2006

1. General

The Munich Congress marks the end of my tenure as Commission 4 Chair and this is my final report to the General Assembly.

It is my belief that Commission 4 has responded well to some significant strategic challenges over the past four years. The culmination of this work is the Commission 4 Munich programme, and it is notable that pre-eminent organisations such as the International Hydrographic Organisation (IHO) and the International Federation of Hydrographic Societies (IFHS) will be present.

Commission 4 has organised an ambitious programme to prepare and plan for the future. The economic importance of hydrography, professional recognition and education are important issues that affect all hydrographers.

As a specialist area within our profession, it is essential that organisations representing hydrographic surveyors cooperate more closely together. We have shown that we can work together to demonstrate a strong sense of purpose and clear vision. This is where our strength lies as there is increasing competition for members from marginal organisations.

Since FIG was founded surveyors of all disciplines have worked together to achieve more for the profession and society as a whole. We are very much an international profession and I believe we have the will and passion to continue this work and make a real contribution to the world we live in.

I would like to thank the General Assembly for its support and urge the national delegates to participate more fully in the work of the Commissions. This has been a team effort and I could not have accomplished this work without the support and hard work of the FIG Office and my Commission 4 colleagues.

2. Achievements

The overwhelming achievement of Commission 4 over the last four years has been to bring credibility to FIG within the wider hydrographic community. The Commission has demonstrated it can deliver on its programme and make a tangible contribution to the profession. We now participate as equals and bring much sought after knowledge, enthusiasm and experience.

Summary of Commission 4 Achievements, 2003 – 06:

- Presented in excess of 80 papers at over 20 events and meetings, including 5 technical tours
- Formal MOU with IHO and IFHS
- Published over 15 articles and issued 3 Commission CD's
- Produced 2 official FIG Publications from WG 4.2 & 4.3

2.1 Working Groups

WG 4.1 – Strategic Partnerships

The primary goal for this WG was to actively pursue closer links with sister organisations, especially IHO and IFHS. This was achieved through regular meetings and a formal Memorandum of Understanding (MOU). Commission 4 has now forged a close working relationship with both organisations.

WG 4.2 Vertical Reference Frame (Joint WG with Commission 5)

This is highly topical within the surveying community and work has progressed through papers and workshops over the last 4 years. Development of a stable vertical reference surface for hydrography is a vital step in being able to handle modern bathymetric depth data to its fullest extent. The work has culminated in an official FIG Publication, to be launched in Munich. In addition to mainstream FIG events, specific meetings include:

- Dynamic Planet 2005 Cairns, Australia, 22-26 August 2005

WG 4.3 – Administering Marine Spaces (Joint WG with Commission 7)

Good governance and understanding/management of the coastal zone is widely recognised as being essential for the wellbeing of mankind and the wider world we live in. Indeed, sustainable development must become a reality as many communities are located on or near the coastal margins. Through workshops, papers and seminars this WG has made steady progress. An official FIG Publication, to be presented in Munich, will focus on issues relating to the administration of marine spaces from a regional perspective around the globe. In addition to mainstream FIG events, specific meetings include:

- Meeting on Marine Cadastre Issues, UNB, Canada September 2003
- PCGIAP WG#3 International Workshop, KL, Malaysia May 2004

WG 4.4 – Education & CPD

The main bulk of Commission 4 CPD material was made available through the publication of 3 CD's, which contained all papers and articles from FIG events, including sessions, workshops and seminars. CD #2 included the new IHO Manual on Hydrography (IHO-M13). CD #3 includes the final publications from WG 4.2 & 4.3.

It was envisaged that educational events of a specialised technical nature such as short seminars or workshops could be organised around official FIG events. Unfortunately this was not possible due to lack of funding and local constraints. I firmly believe there is a will across

all Commissions to engage more fully with local surveyors/students and I would ask FIG to consider this when planning future events.

FIG Standards Network

Commission 4 is an active member of the Standards Network and is currently engaged in a review of ISO/CD 19130.2 - *Sensor and Data Models for Imagery and Gridded Data* as it pertains to hydrography.

2.2 Cooperation

2.2.1 Cooperation with Other Commissions

There has been close cooperation with all Commissions through ACCO meetings at FIG events. In particular, Commission 4 has close links with Commission 5 & 7 through joint Working Groups.

2.2.2 Cooperation with Sister Organisations

Initial contact with Sister Organisations was established to confirm clear lines of communication. This was followed by visits to the IHB (International Hydrographic Bureau) in Monaco, culminating in the signing of a MOU at the FIG WW in Athens 2004. A similar MOU was signed with the IFHS at the FIG WW in Cairo 2005.

FIG/IFHS Meetings:

- Hydro 2002, Kiel Germany October 2002
- Hydro4 Bi-annual Conference, Galway, Ireland November 2004
- UK Hydrographic Soc seminar – *More than just Button Pushers*, November 2005

FIG/IHO Meetings:

- Monaco, November 2003
- Monaco, November 2004
- IHO Hydrographic Conference (3EIHC) Monaco, 11-14 April 2005.
- IHO Capacity Building Seminar in Trieste, Italy, October 2005
- 5th FIG Regional Conference, Accra, Ghana March 2006. Capacity building meeting with a representative of the Regional Maritime Academy in Accra.
- IHO Capacity Building Seminar in Acapulco, Mexico October 2006

FIG is a long standing member of the FIG/IHO/ICA International Advisory Board (IAB) which meets annually. The Board has compiled Standards of Competence for Hydrographic Surveyors, against which the Board evaluates programmes submitted for recognition. To date the Advisory Board has awarded recognition to more than 40 courses worldwide.

FIG/IHO/ICA IAB Meetings:

- London, June 2003
- Malaysia May 2004
- Athens, Greece April 2005
- Goa, India April 2006

2.2.3 Cooperation with UN

Commission 4 does not have direct links with the UN. All contact with the UN is through the IHO & the International Maritime Organisation (IMO).

2.3 Events

2003

- FIG Working Week, Paris, France 2003
- 7th SEASC, Hong Kong, November 2003
- 2nd FIG Regional Conference, Marrakech, Morocco December 2003

2004

- FIG Working Week in Athens, Greece May 2004
- 3rd FIG Regional Conference, Jakarta, Indonesia October 2004

2005

- FIG Working Week in Cairo, Egypt, 16-21 April 2005

2006

- 5th FIG Regional Conference, Accra, Ghana March 2006
- FIG XXIII Congress, Munich, Germany October 2006

2.4 Publications

- Hydro International, A J Greenland, October 2002 - *FIG & Hydrography*
- Geomatics World, R Adams, December 2002- *FIG's Hydrographic Surveyors Rally at Hydro2002*
- Hydro International, A J Greenland, June 2003 – *FIG Working Week 2003*
- Hydro International, A J Greenland, November 2003 - *A House Divided Against Itself Cannot Stand*
- The Hydrographic Journal, M Sutherland & S Nichols, January 2004 – *The Evolving Role of Hydrography in Ocean Governance and the Concept of a Marine Cadastre*
- Geomatics World, M Sutherland, March/April 2004 - *Why a Marine Cadastre is Important*
- The Hydrographic Journal, R Adams, July 2004 – *FIG Working Week 2004 – The Olympic Spirit in Surveying*
- Geomatics World, R Adams & D Schnurr, July/August 2004 – *FIG Working Week: Athens 2004, The Olympic Spirit in Surveying*
- The Hydrographic Journal, R Adams, WG 4.2, July 2004 - *Seamless Data & Vertical Datums – Reconciling Chart Datum with a Global Reference Frame*
- Hydro International A J Greenland, October 2004 - *Joined up Hydrography*
- Geomatics World, R Adams, June 2005 – *FIG WW 2005 Commission 4 Report*
- FIG Article of the Month, A J. Kerr, Presentation at Intergeo, November 2005 - *Hydrography and Disaster Management*
- Hydro International, A J Greenland, January 2006 – *Pathways to Professionalism*

- Hydro International, A J Greenland & H Gorziglia, September 2006 – *IHO/FIG Co-operation: Capacity Building for Hydrography*
- FIG Publication, WG 4.2, October 2006 - *Vertical Reference Surface for Hydrography*
- FIG Publication, WG 4.3, October 2006 – *Administering Marine Spaces*

2.5 Other Notable Achievements

- 1st Commission 4 CD 2003
- 2nd Commission 4 CD 2004-05
- 3rd Commission 4 CD 2005-06

Adam Greenland

Chair of FIG Commission 4

July 2006