Report to the 28th General Assembly FIG Working Week in Cairo, April 2005

FIG Commission 4 – Hydrography

Report of Activities 2004-2005

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. Workplan 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/commission4/workplans/workplan.htm

3. Chairman's Report

2004 has been a busy year for Commission 4, where steady progress has been maintained in pursuit of our objectives as outlined in the published workplan. There has been a notable increase in tempo and profile of the Commission after a successful FIG WW in Athens, which included the launch of the Commission 4 CD. The Commission has worked hard to consolidate its position in the profession and it is now a respected partner in international hydrography alongside the IHO and the newly formed IFHS.

During the Athens WW in May 2004 Commission 4 organised a day of meetings and presentations followed by a 1 day technical tour onboard the survey vessel H/S O/S Naftilos. I would like to take this opportunity to thank Lt. C A. Mavraeidopoulos and Commodore A. Sklavidis of the Hellenic Navy Hydrographic Service for arranging the visit and whose professionalism and hospitality was greatly appreciated.

A highlight of the Athens meeting was the signing of a new MOU between FIG and the IHO, which further strengthens our relationship. We were delighted that the President of the IHB Vice Admiral Alexandros Maratos could attend and present a paper on IHO Activities after which the MOU was signed with FIG President Prof. Holger Magel.

Also in 2004, Commission 4 participated in the 3rd FIG Regional Conference in Jakarta, Indonesia, the HYDRO4 Biennial Symposium of the Hydrographic Society held in Galway, Ireland and visited the IHO in Monaco.

The HYDRO4 Biennial Symposium was an historic meeting as it saw the adoption of the new International Federation of the Hydrographic Societies (IFHS). During the conference I had the opportunity to meet Paul Hornsby, the new Chairman of the IFHS, and we discussed at length how best FIG & IFHS could co-operate in the future with the aim of agreeing a new MOU for signature at the FIG WW in Cairo.

During my visit to the IHB in Monaco I held lengthy discussions with Capt. Hugo Gorziglia on various topics of mutual interest including capacity building, education and participation in future events. I am encouraged by our continued co-operation and feel confident that Commission 4 can make a tangible contribution to areas of mutual interest, in particular to support the current IHO capacity building strategy. Commission 4 will attend the 3rd Extraordinary I.H. Conference to be held in Monaco in April 2005.

Commission 4 remains committed to the joint IHO/FIG/ICA Advisory Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers. The new Chairman is Capt. Andy Armstrong and the next meeting is to be held in Athens from 26 to 30 April 2005.

The Commission has continued to publish its work in leading international surveying journals. Full details including reports with pictures are available on the Commission 4 website and will be included on the 2005 annual CD.

To conclude, Commission 4 is progressing well and I am confident that we will meet and exceed our objectives over the coming year. However, I am concerned that Commission 4 has not yet identified a successor to the position of Chair Elect and I would urge the General Assembly to seek a candidate with all due haste.

4. Working Group 4.1 – Strategic Partnerships. Adam Kerr (United Kingdom), email: Adam.J.Kerr@btopenworld.com

Progress Report

The new FIG - IHO MOU was signed in Athens and continued progress has been made with a visit to Monaco in November 2004.

At HYDRO4 the International Federation of Hydrographic Societies was adopted and it is anticipated that a new FIG-IFHS MOU will be signed in Cairo.

5. Working Group 4.2 – A Vertical Reference Surface for Hydrography (A Joint Working Group with Commission 5). Ruth Adams, (United Kingdom), e-mail: Ruth.Adams@UKHO.gov.uk & Dr. Ahmed El-Rabbany, Canada, e-mail: rabbany@ryerson.ca

Progress Report

After the successful Athens conference where papers by WG 4.2 were well received, (which included a joint Comm 4-5 open meeting), we have continued in our WG objectives. There have been ongoing Comm 4 and 5 discussions throughout 2004 including a meeting in London in January 2005. An executive summary is currently being prepared and will be presented at WW2005, Cairo.

During 2005 a 'white paper' will be prepared which will fulfil the aims of WG 4.2 in providing advice to hydrographer's re: developing a seamless vertical reference surface. This

paper will be presented at a joint assembly of the IAG, IAPSO & IABO - Dynamic Planet 2005, in August 05 at Cairns, Australia where a special workshop on this topic is scheduled to take place.

The final paper, which is to be published, will be presented at the FIG Congress 2006, in Munich.

6. Working Group 4.3 – Coastal Zone Management (CZM) (A Joint Working Group with Commission 7). Michael Sutherland (Canada), e-mail: d8kw@unb.ca

Progress Report

The objectives of WG 4.3 for 2004 included:

- 1. A meeting of WG 4.3 at the FIG Working Week in Athens in May to continue to pursue the objectives of the Group
- 2. Publication of the work of WG 4.3 in *Geomatics World* journal.
- 3. A possible representation of WG 4.3 at the UN sponsored Permanent Committee on GIS Infrastructure for Asia and the Pacific (PCGIAP) Marine Cadastre Workshop in Kuala Lumpur, Malaysia in May

Objective #1

Some members of the working group met in Athens at the FIG WW in Athens in May. The objectives of the working group were affirmed.

Objective #2

Publication of work related to the objectives of WG 4.3 is as follows:

- 1. Sutherland, M. and S. Nichols (2004). "The evolving role of hydrography in ocean governance and the concept of the marine cadastre." In *The Hydrographic Journal*, No. 111, January 2004 p.13.
- 2. Ng'ang'a, S. M., M. Sutherland, S. Cockburn and S. Nichols (2004). "Toward a 3D marine cadastre in support of good ocean governance: A review of the technical framework requirements." In *Computer, Environment and Urban Systems*, 28 (2004), pp. 443-470.
- 3. Sutherland, M. (2004). "Why a marine cadastre is important." In *Geomatics World*, Issue No. 3, March/April 2004, Volume 12, pp. 26-28.

Objective #3

Presentations were made to the Permanent Committee on GIS Infrastructure for Asia and the Pacific (PCGIAP) as follows:

- 1. Sutherland, M. (2004). "Update on the UNB-FIG Marine Cadastre Meeting in Fredericton, Canada." Presented to the Permanent Committee on GIS Infrastructure for Asia and the Pacific (PCGIAP), Kuala Lumpur, Malaysia, May.
- 2. Sutherland, M. (2004). "Status of marine cadastre in Canada." Presented to the Permanent Committee on GIS Infrastructure for Asia and the Pacific (PCGIAP), Kuala Lumpur, Malaysia, May.

It is hoped that members of the WG will meet in Cairo, April 2005 to fine-tune and continue pursuing the group's objectives.

7. Communications

The 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 articles from Commission 4 were published in leading International Surveying Journals and all are available from the website. They offer the reader a good overview of current policy and current/future activities.

In May 2004 a total of 600 Commission 4 CDs were distributed worldwide. Each CD contained a comprehensive account of activities during the year including all articles, proceedings, meetings, minutes and reports relating to Commission 4. A second CD to be produced in 2005.

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.

8. Conferences and Events

The Commission attended and participated in two conferences:

- the 3rd FIG Regional Conference in Jakarta, Indonesia.
- HYDRO4 the 14th International Biennial Symposium of the Hydrographic Society Visits:
- IHO, Monaco.

9. 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.
- Commission 4 will attend the 3rd Extraordinary I.H Conference from 11-16 April 2005 in Monaco.
- Commission 4 will fully participate in and support the FIG WW in Cairo. The WW will include an official Commission 4 meeting, individual WG meetings and a 1-day Hydrographic Workshop including a technical tour.
- Commission 4, WG 4.2 will participate in A Joint Assembly of the IAG, IAPSO & IABO
 Dynamic Planet 2005, from 22-26 August 2005 in Cairns, Australia
- Commission 4 will fully participate in and support the 4th FIG Regional Conference in Havana, Cuba, 26-29 September 2005. It is hope that a workshop on Sea Level rise will be held during the conference.
- Visit to IHO, Monaco.

Adam Greenland MRICS Chair of Commission 4 Hydrography February 2005