

PAPUA NEW GUINEA HYDROGRAPHIC SERVICE



IHO

SOUTH WEST PACIFIC HYDROGRAPHIC COMMISSION (SWPHC)

9<sup>th</sup> Meeting – Port Moresby, Papua New Guinea, 10-11 March 2007

SWPHC9-01PNG

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**PAPUA NEW GUINEA REPORT**

**1. INTRODUCTION**

**1.1. Background**

The National Maritime Safety Authority was established by an Act of Parliament in 2003 as a non-profit statutory authority to raise standards of maritime safety, promote marine environment protection and coordinate maritime search and rescue operations.

**1.2. Functions**

The core functions of National Maritime Safety Authority are:

- Registration of ships
- Registration of seafarers
- Quality control of seafarer qualifications
- Establishing and refurbishing navigational aids
- Monitoring navigational aids through maintenance program
- Ensuring search and rescue operations are instigated whenever required
- Monitoring safety of ships through Flag State Control and Port State Control inspections
- Maintaining, updating and supplying the PNG charts portfolio and nautical publications
- Continuously reviewing maritime safety policies and relevant legislation
- Ensuring environmental marine pollution response whenever needed
- Investigation all maritime incidents, accidents & casualties
- Prosecuting infringements of PNG laws
- Enforcing wreck removal

**1.3. Organisation**

The National Maritime Safety Authority is headed by a General Manager/CEO with two Divisional Executive Managers for Corporate Services and Maritime Operations. There are nine Departments headed by Managers.

<b>CORPORATE DIVISION</b>	<b>MARITIME OPERATIONS</b>
Information Technology Department	Hydro graphic Services Department
Finance and Administration Department	Navais and Investigation Department
Human Resources Department	Ships Surveys and Inspection Department
	Pollution Control and Search & Rescue Department
	Community Development Department
	Legal Services

## **2. PNG HYDROGRAPHIC SERVICES (PNGHS)**

The PNG Hydrographic Services Department is responsible for the administration and implementation of the Memorandum of Understanding between the Charting Authority (AHS) and all national programs and activities.

These program activities are based on the three phased hydrographic development model derived from the IHO Publication M-2, "National Maritime Policies and Hydrographic Services", which has been used as a guide for PNGHS' development strategy over the last three years.

PNGHS is into the second development phase under this model with national activities planned for implementation over the next 3 to 5 years. The main focus being capacity building.

### **2.1. Phase of Development**

#### **National Activity**

Since its inception the Papua New Guinea Hydro graphic Services has implemented the following in accordance with Hydro graphic development model 1:

- Formed the Nautical Information Committee
- Created/Improved current infrastructure to collect and circulate Information
- Strengthened links with charting authority to enable updating of charts and publications
- Training and human resource development.

Within the last three) years PNGHS in collaboration with Charting Authority, has successfully linked and established strong relationships with stakeholders and established a convenient network with its partners and maritime operators in collecting, assessing and circulating nautical information for timely chart updates and nautical publications and updated existing charts and publications.

### **2.2. Nautical Data Committee**

PNGHS has successfully established a Nautical Data Committee. The Committee convened four meetings over the last three years. Representatives from the Charting Authority; the Australian Hydro graphic Service (AHS) have attended these meetings. The committee prioritizes the surveys program for inclusion in the Hydro scheme and chart program.

### **2.3. Current Infrastructure to Collect and Circulate Information**

PNG hydrographic service uses four means of communication to collect and circulate information. PNGHS uses Phones (Landline and Mobile), Facsimile and Email to effectively collect and circulate information. PNGHS uses industry distribution list database to circulate or collect information from those infrastructure. Only when there is vandalism to those infrastructures then we lose contact with stakeholders. Normal mailing system is used when other delivery services are not available.

## **2.4. Links with Charting Authority to Enable Updating of Charts and Publications**

The existing Memorandum of Understanding on Hydrographic Arrangements between the Department of Transport and Civil Aviation, Papua New Guinea and Department of Defence, Australia which came into effect on 26th June 1978 has been revised. There are now strong links between PNGHS and the AHS.

## **2.5. Training**

PNGHS has been fortunate in receiving attachment training with AHS. One female officer undertook training on chart maintenance, publications and distribution. Another officer did two weeks training on Cartographic skills and data process. This training has been useful in the development of PNGHS.

## **2.6. Focus for the Next 6 Years and Beyond**

The focus for the next 3-5 years is:

- Build capacity to carry out surveys of ports and their approaches
- Maintain adequate aids to navigation
- Build capacity to enable surveys in support of coastal and offshore projects
- Identify resources and opportunities to further training and equipment and to look at outsourcing survey work

PNGHS does not have the logistics and capacity to acquire hydrographic data and therefore there is a need to build in this area and seek industry support through outsourcing. PNGHS will also require assistance in working towards ISO 9001 - 2000 standards and a quality management system for Hydro graphic data.

PNGHS will also support industry and build relationships with stakeholders in acquiring hydrographic data for offshore economic development purposes.

PNGHS has developed standard contract documents for outsourcing hydrographic data acquisition. Capacity building is crucial in the development and progress of PNGHS. NMSA plans to send personnel to undertake H2 and H1 training to have the capacity to undertake hydrographic cartographic data acquisition and processing. There is also a need to train more hydrographic surveyors.

The PNGHS is developing surveying standards base on S44 and will be needing assistance from the AHS to develop such standards. This is important in monitoring and maintaining survey standards and data quality.

PNGHS human resource training and development is focussed on hydrographic and cartographic processing, S44 standard and ISO 9001-2000.

PNGHS recognises that Hydrographic Development model Phase 3 requires a large investment by the government and presents a big challenge for the long term future.

### **3. CHARTS (PAPER/ENC)/SURVEYS**

On January 21, 2007, Papua New Guinea received 39 recompiled charts in metric units from the Charting Authority (Australian Hydrographic Services) which was funded under an Asian Development Bank loan. This was contracted to HAS Systems, under the project, which commenced on 1 June 2005. Concurrently, electronic versions of these paper charts were also prepared for use and a further 17 existing electronic charts were also updated. There are 72 charts altogether but these cover only 40% of PNG Waters.

The annual program under the AHS hydro scheme is very successful, with excellent cooperation and most surveys are done as programmed. PNG still has un-surveyed areas that are planned to be surveyed annually based on economic development plans and goals.

Most priority surveys in PNG waters are based on offshore economic development projects or for access to inshore economic development. The Nautical Data Committee provides assessment and supports the PNG survey priority and chart programs. This year we have three RAN ships undertaking surveys in PNG; they commenced on 10th February and will end on 16th April 2009.

### **4. PROJECTS**

#### **4.1. DGPS Navigation Service**

This project aims to establish regional Marine Navigation Differentials GPS system covering PNG territorial seas for PNG registered Merchant vessels.

A pilot project is being undertaken in partnership with shipping companies to assess the benefits by getting operational feedback from operators.

#### **4.2. Wrecks Database**

There are a lot of unidentified wrecks around PNG waters. The PNGHS has created a database and a map marking these wrecks. The database describes properties of these wrecks as well as the date reported. It is now in the development stage. More research work is required.

#### **4.3. Place Names Gazetteer**

The PNG place names gazetteer requires updating. The last names update and gazettal were in 1998. The Surveyor-General is the Chairman of the Committee. No meeting has been convened for names approval and gazettal since then. It is a major concern for the country to enable identification on charts.

There have been two major mapping and charting projects within the past ten years.

- The Chart Modernization program, 39 charts
- Remapping exercise by Australian Army Survey Corps - topography maps

There are new names to be approved through public notices and the National Gazette. PNGHS has received queries from AHS on names which cannot be found in the 1998 Gazetteer, a matter over which PNG has no control.

PNGHS has developed a database identifying all features associated with the maritime sector. Names will be forwarded to the Office of the Surveyor-General as maritime names under the appropriate section and clause of the Place Names Act 1995.

#### **4.4. Maritime Boundary Delimitation**

PNGHS is actively involved in the National maritime Boundary project with its delimitation program. New base points have been identified and a survey team with SOPAC assistance has completed the survey. The new PNG baseline will be gazetted before May 2009 as a new schedule to the National Seas Act 1977.

This project is in conjunction with the Extended Continental shelf beyond 200nm. Briefly, PNG will submit a joint paper with Federated States of Micronesia and the Solomon Islands.

The current national legislation (PNG National Seas Act 1977) dealing with the maritime zones has no correlation to UNCLOS. The legislation (Maritime Zones Act) encompasses the UNCLOS.

#### **4.5. Marine Science Research**

PNGHS has identified the value of hydrographic data acquisition from research vessels and vessels carrying out surveys in PNG. The PNGHS has an established network with the Marine Science Research Committee to build a database profile on research vessels, their tracks, location of surveys and the type of data collected.

### **5. CONCLUSION**

PNGHS is confident that the goals will be achieved. Cooperation and support of the Charting Authority gives us confidence for future development. It also offers useful guide to minimizing cost of providing services such as updated nautical information for safe navigation and effective marine environment protection management within PNG Waters. Services that PNGHS would be able to provide in partnership with IHO, the Charting Authority (AHS) and stakeholders, and industry participants.