15th EAtHC – CHAtO Meeting Lagos, Nigeria, 17th – 19th October 2019

DRAFT NATIONAL REPORT TO REGIONAL HYDROGRAPHIC COMMISSIONS - THE GAMBIA

Executive summary:

The Gambia is a signatory to the SOLAS and UNCLOS conventions. It is also a member of the IMO, IALA and MOWCA. The Gambia Port Authority is a member of PMAWCA and maintains regular liaison with the UKHO which is its charting authority.

1. Hydrographic Office / Service:

Hydrographic functions are executed by the Gambia Ports Authority under Department of Harbours and Marine Services directorate. Capt. Kulay Manneh, Harbour Master and Dominic Correa, CAT A Hydrographic Surveyor are the appropriate contacts for navigational warnings, port information and hydrographic surveys. The contact details in the entry for The Gambia in the IHO year book are as follows and thus should be maintain.

- I. Capt. Kulay Manneh Harbour Master Gambia Port Authority 1st Liberation Avenue P.O Box, 617 Banjul, The Gambia Mobile: (220) 9977038 Office: (220) 4229940 Email: <u>kmanneh@gambiaports.gm</u>
- II. Dominic Correa
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 - 2. Surveys:

Chart 608 is the product of the survey of the approach channel and Port of Banjul done by the Royal Navy in 1981. Chart 609 is the product of survey of the River Gambia above Banjul to Kaur done by the Royal Navy in the 1940s

Gambia Ports Authority has just financed a maintenance project that was executed by DEME. The dredged areas include all the berthing areas facilities, Banjul and Barra Ferry Landing Terminals, and part of the approach channel.

Pre-dredged and post-dredged hydrographic surveys were conducted by DEME and the local staff. A single beam system and RTK positioning were used for data acquisition. Qincy Software was used for data acquisition and processing.

The Authority has procured the following equipment from Sheargold.

Depth logger

Side Scan Sonar

Odom Digibar SVP

GPS antenna

Creation of depth reports/ bathymetry sheet with the software used was not accomplished during the training and installation. The Authority has made arrangements to purchase additional equipment. See section 7

3. New charts & updates:

Soundings data for the charts 608 and 609 are represented in fathoms and feet. The UKHO as the primary charting authority is in process of shifting them to WGS 84 datum.

4. New publications & updates:

Bathymetric sheets for the post-dredged survey of the maintenance dredging works at Banjul-Barra Landing sites and jetty areas project have been received by the Port Authority in DWG format and sent to the UKHO for promulgation and other updates. Nautical publications are delivered upon request through GPA procurement unit.

5. MSI

A new GMDSS radio station was installed at the Gambia Naval Headquarters in 2007. The name of this station is called Banjul Radio. It is controlled and operated by the Gambia Navy. Local warnings and navigational information including weather and tidal predictions are transmitted by the Banjul Port Radio. Daily weather reports are received by the port from the Department of Water resources via email.

6. S-55 Latest update (Tables)

7. Capacity Building:

Arrangements are been made to procure the following additional equipment to enable full execution of hydrographic surveying and generation of end products.

a. Single beam echosounders

(I)1 ECHOTRAC CVM, comprising Dual Frequency shallow water Echo Sounder in "carryon" size environmental case, includes DC and AC power cables, Ethernet cable, Odom E-Chart (Windows compatible control & display software), and operation/installation manual on CD

(II) Computer System for Data Acquisition and Processing

(III) Teledyne Odom Singlebeam transducers 1 SMBB200-9

b. Trimble Rover positioning system1 Trimble SPS855RTK rover receiver includingRadio insite

L1/L2 antenna and cabling External UHF antenna Antenna cabling

c. Trimble Base positioning system
1Trimble SPS855RTK Base receiver including Radio insite
L1/L2 antenna and cabling
External UHF antenna
Antenna cabling
2 tripods

d. 1 Data acquisition system, comprising:
Teledyne RESON Singlebeam Data acquisition license
1 x Teledyne RESON Software on USB

Once these equipment are delivered and the installed, the authority would require the service of an experienced surveyor to lead the local staff in conducting routine surveys and surveys for the purpose of charting for our port, channel, river and other water ways.

The Port Authority will also require technical support for capacity building for the following program.

- BSc hydrographic/Oceanography/Geomatic studies
- Cat "B" Nautical Cartography
- Onboard training

8. Oceanographic activities.

During the IHO technical visit to the Gambia July, 2017, the consultant recommended that the GPA develop a relationship with OIC and IALA for development and possible further training opportunities. The GPA is yet to identify possible channel to establish relationships with these international organizations.

Tide Gauge Network

The Department of Water Resources is the custodians of tidal structures and tidal information in the Gambia. There is a tide station installed at the Banjul harbour.

- tidal observations?
 - > OTT Ecolog 800 Device and OTT Side Looking Doppler Device are available
 - > There are also Gauge plates installed as back up for water level monitoring in all stations
 - Tidal observations / Water level measurements, Salinity, Specific conductivity, Total Dissolved Substances and Temperature are recorded by the OTT Ecolog 800 device while Discharge is recorded by the OTT SLD.

The GPA is yet to receive tidal data for onward transmission to the UKHO to perform harmonic analysis of the tidal data. This was among the recommendations put forward by the consultants during the IHO technical visit.

9. Other activities:

Stakeholders in the national hydrographic coordinating committee have been identified. Once equipment are delivered and survey commences, a national hydrographic coordinating committee will be instituted and technicians from these institutions may receive training.

10. Conclusions

Our priority remains the development of clear routine survey program for the definition and maintenance of Banjul Port, Banjul Fisheries Jetty, Approach Channel, Rivers and/or other water ways.

Training two technicians at Bsc level in Oceanography/Geomatics.

Category "B" Nautical Cartography and Onboard training for multilateral and regional development projects with hydrographic components.