# EatHC 18 – CHAtO Meeting Casablanca, Morocco, 29th April – 3rd May 2024

# NATIONAL REPORT TO REGIONAL HYDROGRAPHIC COMMISSION – 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 primary charting authority.

## Hydrographic Office / Service

Hydrographic functions are executed by the Gambia Ports Authority under Department of Harbours and Marine Services directorate. The Gambia Ports Authority is a State Owned Enterprise (SOE) under the direct supervision of Ministry of Transport, Works and Infrastructure (MOTWI).

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 yearbook are as follows and thus should be maintain.

# I. Capt. Kulay Manneh

Harbour Master
Gambia Port Authority
1st Liberation Avenue

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Banjul, The Gambia Mobile: (220) 9977038

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#### II. Dominic Correa

Hydrographic Survey Technician

Gambia Ports Authority

1<sup>st</sup> Liberation Avenue

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Banjul, The Gambia

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Email: <u>dcorrea@gambiaports.gm</u>/dominic.correa@eagles.usm.edu

## **Surveys**

The Gambia Ports Authority has bought the equipment below for the Hydrographic Unit. The hydrographic unit conduct surveys in support of port maintenance plans like dredging, monitoring depth around berthing and ferry landing facilities. As a state enterprise, government and private entities also engage the GPA in bathymetry surveys for feasibility studies in execution and support of other projects for national development.

Equipment	Serial #	Function
Single Beam Echosounder  • CEESCOPE 200		Logs Depths and Position
<ul><li>Global Positioning System</li><li>Incl. integrated Trimble</li><li>GPS Antenna</li></ul>	BD970	Receives and stores position of the sounding data
Transducer  • Dual Frequency	M163	Sends sound pulses to the water column and receives return pulses
Laptop		Displays and record all incoming data
Getac	B300 i7	
	Softwares	

Softwares	Version	Function
Hydromagic Software	Eye4Software HydroMagic (9.0.64.0127)	Marine data acquisition and processing software
Digibar – S SVP		SVP profiles along the water column

### Equipment System Schematics

Trimble GPS Antenna



CEESCOPE 200 INTEGRATED TRIMBLE GNSS



Getac Laptop w/Hydromagic



Dual Frequency Transducer



#### Fig 1. Cable Diagram equipment configuration

The Gambia Ports Authority has made budgetary provisions for 2024 to purchase a survey vessel and an RTK bathymetry survey kit. The procurement process for the survey platform and kit has started and the two items are expected before the end of the year.

#### **Vessel Specification**

You will potentially be operating in a nearshore (0-3nm) and Coastal (up to 12nm) from the port as well as up the river. The key requirements are for a vessel that has a shallow draft, good seakeeping qualities and the ability to transit at 10knots or above to reduce transit time.

Any vessel should be capable of providing shelter (essential if working in a seaway or hot temperatures for a long period), 240V power and where necessary be able to provide basic hotel services.

I would suggest that a vessel needs to be around 8-11m long and given access to parts etc should have single or twin outboard propulsion similar to the vessel below:



Fig. 2 Survey platform and specs recommended by UKHO for The Gambia

Date Fin	de validité Code	client V/Ref		Votre contact
03/02/2021 03	3/03/2021 <b>C02</b>	870 SUBAF2018	30314	Thomas LONGCHAMP - Tél : 06 50 80 69 77

Référence	Description	Qté	PU	Rem %	Montant	Délais de livraison	TVA
SINGLE BEAM DUAL	FREQUENCIES BATHYMETRIC SYSTEM						
ECHOSOUNDER							
RES-E20-DC1	Echosondeur E20-DC Echotrac monofaisceau Dual Channel	1	10 330.00		10 330.00		C0
RES-TC2122	Transducteur 200/33 KHz avec câble 10 m	1	2 950.00		2 950.00		C0
POSIT							
ACT-NONGERDIV.	Global GNSS solution	1	32 000.00		32 000.00		C0
Including :							
	KKO2 with internal UHF radio modem and accessories (tripod). nternal UHF radio modem and accessories (output cable)						
SOFTWARE & COMP	PUTER						
ACT-ACR.	TELEDYNE PDS software (acquisition, processing, edition)	1	5 000.00		5 000.00		C0
ACT-NP5410-WA	Interface Réseau => 4 Ports RS232C, alim 12/24 V + secteur	1	590.00		590.00		C4
Computer provide by t	the GAMBIA PORT AUTORITHIES						
TRANSPORT & SUPF	PORT						
ACT-MO-ASSTECH.	Technical support	1	2 225.00	50.00	1 112.50		C0
ACT-MO-ASSTECH.	Mangement of project for administrative purposes	1	6 575.00	50.00	3 287.50		C0
EMB/TRANS.	Project management / Packaging / Transport with insurance	1	1 980.00		1 980.00		C0
Taxes to import the ed	quipment in Gambia are not included						
TRAINING							
ACT-MO-FORM.	8 days in Gambia - Senior trainer	8	1 200.00		9 600.00		C0
ACT-MO-TRANSIT	2 transit day + 1 day off	3	1 200.00	30.00	2 520.00		C0
ACT-MO-FRAIS	Operator fees (Flight and visa)	1	2 500.00		2 500.00		C0
Hotel, food, locam transport have to be boo and paid by Gambia Port Authorities							
If french government imposes a 7 days quarantine, Gambia Port Authorities has to pay 7 x 830€HT = 5.810€HT in addition							
ADMINISTRATION							
ACT-NONGERDIV.	Bank cost for Payment garanty	1	1 260.00		1 260.00		C0

Table 1: Proposed Bathymetric kit for The GPA

# New charts & updates

The UKHO continue to support The Gambia in updates of the BA 608 Chart and production of other nautical products. The office has provided The Gambia with two ENCs covering the Port area, part of the river and the entrance channel. The BA 609 Chart depths are in fathom and feet. Therefore, there is need to conduct mapping of The River Gambia and update this chart to recent publications.

# New publications & updates

Results of the post-dredged survey of the maintenance dredging works at Banjul-Barra Landing sites and jetty areas project of 2018

were sent to the UKHO. The 608 chart was updated accordingly with Edition number 3 and dated February 17, 2019.

#### **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. Navigational information is transmitted to Navarea II by the National MSI coordinator of the GPA. Daily weather reports are received by the port from the Department of Water resources via email. The Gambia Ports Authority has also installed AIS and RADAR system at the Banjul Port Control Radio Room. This has enhanced effective communications and monitoring of operations of the port.

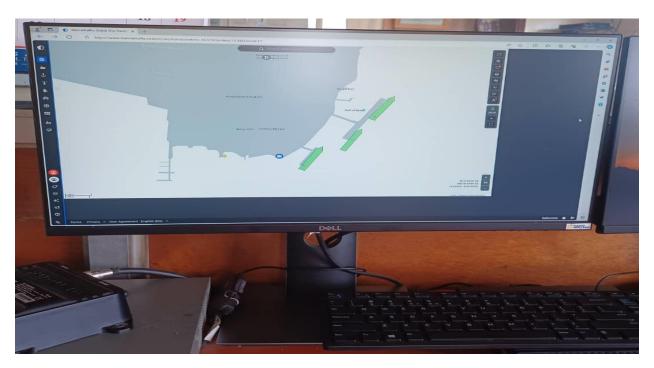


Fig 3: Port Control Monitor using marine traffic global ship tracking program

Navigational Information	Status	Notes
Local warnings	Yes	VHF
Coastal warnings	Yes	VHF
NAVAREA warnings	Yes	Sent to NAVAREA
		Coordinator
Information on Port and Harbours	Yes	Sent to The UKHO

## **Capacity Building**

The Gambia Ports Authority on behalf of The Gambia Government has signed an agreement with The UKHO to promote cooperation between them in the field of hydrography and related disciplines. In 2017 IHO technical visit, one of the recommendations states that "survey training by the UKHO be envisaged after using the new equipment". In February of 2022, The UKHO provided capacity building support for The Gambia as part of its commitments to its PCC. Two hydrographers were sent to Banjul to provide survey training for a period of two weeks. Personnel for Navy, Maritime Authority, Department of Water Resources and GPA Surveyors benefited from this training. The training was a combination of classroom-based theory and practical, hands-on training using GPA SBES equipment.

Nathanael Knapp, The UKHO Head of Partnering and Engagement was in Banjul in the second week of the training session. He had meetings with CEOs of GPA, Maritime Authority, Water Resources and top officials from the Ministry of Transportation. Their discussions were centered on the importance of Hydrography and IHO membership.



Fig 4: Training and presentation of certificates by UKHO

The Government of The Gambia has approved the IHO membership cabinet paper submitted to the Ministry of Transport by the GPA during the twelfth Cabinet session. The ministry of Transport and Foreign Affairs are to complete the rest of the process and formalization of The Gambia membership to the IHO is expected to be completed before the end of 2024.

Upon gaining membership, The Gambia/Port Authority will require technical support for capacity building for the following program.

- Cat "B" Nautical Cartography
- Cat "B" Hydrographic Surveying
- Onboard training
- Tide analysis training
- ATON Level 1 training course for managers

# Oceanographic activities

During the IHO technical visit to the Gambia July, 2017, the consultant recommended that the GPA develop a relationship with IOC for development and possible further training opportunities.

The GPA is yet to identify possible channels of communication to establish relationships with IOC

#### **Tide Gauge Network**

The Department of Water Resources is the custodians of tidal structures and tidal information in the Gambia. There is one tide station at the Banjul Harbour and nine other stations along The River Gambia. In the recent monitoring exercise conducted by Water Resources and GPA, the team discovered that none of the stations are working nor recording data. These are due to dilapidated structures and damaged recording devices.

Noting the importance of tidal data for the port operations, The GPA has made a budgetary provision for the purchase and installation of a new tide station at the Banjul Harbour. The procurement process has started and is expected to be completed by the end of May 2024.

# **Spatial data Infrastructures**

There is no national geospatial policy yet, but The Gambia is a member of the EAtHC Working Group.

#### **Innovation**

The National Disaster Management Agency (NDMA) conduct risk assessments. The agency has models that monitor floods and other disasters and make projections for informed decisions.

#### Other activities

The priority for The Gambia/GPA is clear and therefore, execution of the following projects remains a great priority.

- GPA Port Expansion Project
- Procurement of a survey vessel
- Purchase of a new bathymetric survey kit

- Installation of new tide gauges at the harbour and along the river
- Mapping of The River Gambia

#### **Conclusions**

The Gambia Ports Authority on behalf of The Gambia Government expresses it sincere gratitude to IHO, EAtHC, IALA and UKHO for their continuous support towards an enhanced hydrographic capability for The Gambia. We continue to seek your support especially in areas of capacity building mentioned above.