

COUNTRY REPORT: TANZANIA

INTRODUCTION

1. **RHC Involvement.** Tanzania is not an IHO member, but it is an associate member of the SAIHC. It was represented at the 5th SAIHC Meeting in September 2005, and a National Report was available to the RHC Study Team. A Project Formulation Proposal on Hydrographic Surveying of Tanzania Maritime Waters had also been submitted to the IHOCBC and SAIHC during that year. The current Chairman of the National Hydrographic Committee sits on the Executive Council of IOC. There is routine liaison between the Tanzania Ports Authority and UKHO for production of charts.

2. **Preliminary Liaison.** Mr C. S. Mwaijande, Assistant Director Hydrographic Surveys in the Ministry of Lands, Housing & Human Settlement Development co-ordinated the visit with assistance from Mr I. K. Nhnyete of Tanzania Ports Authority (TPA).

3. **Points of Contact.** Details in the IHO Year Book require amendment to reflect the responsibility of the Hydrographic Surveys Section of the Directorate of Surveys and Mapping in the Ministry of Lands for the definition of national policy and the provision of the secretariat for the National Hydrographic Committee (NHC). This and other small amendments are shown at Appendix 1. Mr Mwaijande undertook to report any future implications for national hydrographic legislation or organisation arising from the creation of the Surface and Marine Traffic Regulatory Authority (SUMATRA), whose area of competence covers ports and is to be extended to cover port approaches and the inland lakes.

DESCRIPTION OF MARITIME ACTIVITIES

4. **National Maritime Affairs.** The meetings enabled the Visit Team to build up a picture of the salient features of the maritime sphere both on the Indian Ocean coast and on the Great Lakes. The meetings also facilitated data sharing amongst the national representatives, not least on sector requirements which will need to be taken into account in the ongoing work of TPA to revise the Port Development Master Plan. The significance to Tanzania of the WB WIO Marine Highway Project and the Lake Victoria Development Programme was confirmed.

5. **Trade and Maritime Traffic.** Information from previous reports to SAIHC was reviewed and the following summary was approved in the meeting with the NHC:

- a. **Through Routes.** Dar es Salaam is on the liner route along the E African coast.
- b. **Trans-shipment.** Dar es Salaam is the hub port for the country and also handles cargo for Uganda, Rwanda, Burundi, DRC, Zambia and Malawi.
- c. **Bulk Trades.** Bulk cargoes of aggregate from mining and of liquid ammonia are handled at Tanga.
- c. **Feeder, Coasting and Local Trade.** Tanga is the second largest port, and Mtwara is the third. Coastal and local dhow traffic is handled at Wete, Chake Chake, Mkoani, Pangani, Zanzibar city, Kilwa Kivinje, Kilwa Masoko and Lindi. On Lake Tanganyika there is a routine coastal service linking Kigoma, Kasanga and Kipili, as well as ports in Zambia, DRC and Burundi.
- d. **Offshore Supply and Support.** It was stated that gas was being produced from the Songo Songo Field. [Post Visit Note: details on chart BA 1032 and smaller scales require urgent update if a structure is in place on the well.] It was also stated that the 'Simba' field was to open with one

well. The Petroleum Development Corporation indicated that they required the development of a dedicated port for the offshore industry. It was suggested that offshore supply and support operations are currently centred on Mtwara, also embracing the well in nearby Mnazi Bay.

e. Tourism - Cruise Liners. Statistics for sea-borne tourist visitors (23.7k in 2004) were made available. Cruise liners berth alongside in Dar es Salaam and Zanzibar. The Tourism Division made a strong bid for provision of a dedicated Passenger Terminal in the Ports Master Plan. It was also confirmed that liners use Monitor Anchorage off Mafia Island, landing tourists on Shungu-mbili Island. The charting of this area is based on nineteenth-century lead-line surveys.

f. Tourism - Small Craft. Some cruising and long-distance racing yachts pass through the waters of Tanzania. Marina developments have been mooted in the vicinity of Dar es Salaam and Mafia Island.

g. Fisheries. There are 31 trawlers under the Tanzanian flag, based in Dar es Salaam. There is an aspiration to develop a deeper water fleet for the offshore fisheries which are currently exploited by licensed vessels from Spain and Far Eastern countries, and this will require a dedicated harbour area in Dar es Salaam with cold storage facilities. It was reported that modern surveys of coral areas were required to optimise the operation of fish sonar. There is a substantial artisanal fishery both on the ocean coast and the lakes. The latter fishery is very productive and supports a substantial export industry by both air and sea.

6. Responsibility for Safety of Navigation. TPA is responsible for the maintenance of channels, removal of wrecks, provision and maintenance of aids to navigation, and the collection and promulgation of urgent navigational information.

7. Defence Force Responsibilities. The Tanzanian Navy is responsible for SAR, fishery protection, other EEZ maritime patrols and operations to counter traffic in drugs or illegal immigrants. They have reported a grounding during coastal operations in an area of inadequate survey, and have recognised the need for modern surveys to support their operations. They have an Inshore Survey Vessel, but it is non-operational.

8. Coastal Zone Management (CZM) and Environmental Protection. Tanzania has an Environment Policy, and a National Strategy for CZM, including an oil spill prevention plan. There is a World Bank sponsored Marine and Coastal Environment Programme (MACEP), and several bilateral assistance programmes have been implemented for specific local marine programmes. It was acknowledged that hydrographic considerations had not been considered in these programmes. The only Marine Park currently charted is the Mafia Island Marine Park.

OUTLINE S-55 ANALYSIS

9. Status of surveys within the National Maritime Zone. The information in S-55 was confirmed during the meeting of the NHC.

10. Collection and Circulation of Nautical Information. A Port Tower is under construction in Dar es Salaam which will house the Tanzanian sub-station in the East Africa SAR network. It is unclear whether provision has been made for either NAVTEX or SafetyNET within Tanzania's GMDSS planning. Meanwhile, a dedicated PC in the Port Authority Building, provided by UKHO to facilitate the collection and onward transmission of MSI to the NAVAREA Coordinator and to UKHO has not yet been commissioned. Information is currently being passed to UKHO since there are difficulties in communication with the NAVAREA Coordinator.

11. Survey Capability. Mr Nhnyete, the Principal Hydrographer TPA, has a Cat A qualification. The Port Hydrographer is a Cat B graduate of IMA Trieste. They operate a survey launch equipped with DGPS and SBES. Most surveys have been conducted in Dar es Salaam, but the launch is capable of reaching the

other ports and has conducted a jetty survey at Mafia Island. There are tide gauges in Dar es Salaam and Zanzibar, from which data is supplied to the Proudman Oceanographic Centre for analysis. The Navy has four personnel trained at the Indian Navy Hydrographic School, but they have had no subsequent practical experience.

12. Independent Chart Production Capability. Tanzania is content with current arrangements for chart production and publication by UK, which has INT chart production responsibility for the area. However, they expressed an aspiration to produce their charts in the future. The Chairman of SAIHC tabled a proposed chart scheme for Lake Victoria for future reference and undertook to provide a larger format diagram of the scheme to the NHC Secretary.

PROPOSALS FOR CO-ORDINATION AND CAPABILITY BUILDING

13. National Hydrographic Committee. The NHC has clear Terms of Reference which include a summary of its establishment and remit. The composition provides an excellent cross-section of maritime stake-holders in the country. Chairmanship currently rotates between the Tanzanian Navy and the University of Dar es Salaam – Institute of Marine Sciences, Zanzibar. Dr Alphonse Dubi from the latter is the current chairman. The NHC is directed to meet 3 times a year and more often if it is deemed necessary. This is ambitious, and an annual meeting, with additional special meetings if required, may be more realistic, productive and sustainable, particularly when the committee begins to prioritise the national survey programme. At the special meeting the NHC took note of proposals in the World Bank WIO Marine Highway Project to offer surveys at Dar es Salaam, Zanzibar and one other port. It was confirmed that Mtwara was the preference.

14. MSI Organisation and GMDSS. The Team felt that more attention must be given to Phase 1 of hydrographic capability, and could not sense a clear identification of the authorities responsible for collection and promulgation of urgent navigational information. The importance of Tanzanian attendance at the SAIHC Technical Workshop in Maputo on 5 June was emphasised.

a. MSI (Navigational Warnings). The PC currently held by TPA must be commissioned as quickly as possible, and personnel to utilise it should be identified and trained. Further advice on this training is given at paragraph – below. It may prove best to transfer the PC to the Port Tower when it is in operation. Meanwhile the TPA should continue their efforts to communicate with the NAVAREA Co-ordinator. SAIHC Chairman and Vice Chairman IHOCBC would assist with this liaison.

b. Information on Ports and Harbours. Currently, the TPA Hydrographic Team acts as the national focal point for passing information to UKHO and local shipping. Closer liaison with the Directorate of Surveys and Mapping will assist with prompt supply of co-ordinates for conspicuous buildings and new development which require to be charted and included in official publications (Sailing Directions; List of Lights; List of Radio Signals).

c. GMDSS Status. INMARSAT Fleet 77 equipment will be fitted in the Dar es Salaam MRSC. CPRNW advice should be sought on implementation of the MSI component.

15. Hydrographic Capability. There is a clear awareness of the importance of hydrography amongst senior government officials, and the closing remarks by the Director of Hydrographic Surveys at the NHC stressed the commitment of the Government of Tanzania to establish its own national capacity. The IHO was once again requested to scrutinise and assess the Project Formulation Project. The Team urged the importance of selecting a solution which was appropriate and sustainable.

a. Provision of Survey Data. The Team stressed the crucial importance of supplying updating information for the charts of Tanzania's waters, and noted the crucial team-work which was required between the Directorate of Survey and Mapping and TPA, assisted by frequent input from the stakeholders on the NHC.

- b. Survey Capability. The Team stressed the importance of avoiding duplication of roles and waste of opportunities for training and field experience. They noted that any surveyor employed in the Ministry of Lands must maintain sufficient field experience to enable him to perform his policy and planning role. They doubted the requirement for a hydrographer on the staff of SUMATRA. They recommended that any submissions to IHOCBC for training and field experience should first focus on building up the existing TPA hydrographic cadre. Consideration should be given to the sustainability and role of the Tanzania Navy hydrographic unit, and field experience should be given to the personnel trained in India by secondment to the TPA unit. There is scope for regional collaboration with neighbours, especially for joint surveys on the Great Lakes.
- c. Chart Production. The Team urged that the creation of a national chart production capability, the third Phase of hydrographic development, should not be rushed until the first two phases are firmly established. The relationship with the INT chart producer appeared to be working well, although consideration should be given to putting it on a formal footing through a bilateral arrangement. SAIHC was ready to provide advice on this step. Meanwhile, the TPA Team confirmed that fair sheets from their harbour surveys are rendered to UKHO. The team assessed that the large scale sounding surveys were competently planned and conducted.
- d. Potential for Regional Activity. The Lake Victoria Development Project offers the opportunity for a joint team. There is also scope for co-operation with field survey staff from Malawi and Mozambique.

PROPOSALS FOR ASSISTANCE

16. Training. The Team noted the considerable potential for training in region, rather than sending students further afield. The survey courses at the local universities, and the facilities of the Dar es Salaam Maritime Institute (DMI), offer opportunities which the NHC should explore, also considering scope for sharing teaching and funding resources with neighbours. The DMI GMDSS facilities may be particularly appropriate for MSI training. One option tabled at the last SAIHC meeting was for a training course in region to be conducted by the IHO's Committee for the Promulgation of Navigational Warnings (CPRNW). The short term priority for training is the qualification of 2 additional Cat B surveyors for the TPA team.
17. Equipment. The team urged caution in procuring expensive hydrographic surveying equipment if options for hire are available.
18. Funding. The Team briefed the NHC on the limited size of IHOCBC funding. It cannot at present finance projects and consultancy. It is focussed on training and advisory functions, drawing from within IHO MS resources, which can seed greater potential. They noted that major national and regional projects, especially those related to the environment, could provide much greater resources, and NHC stake-holders were urged to help to ensure that hydrography was included in appraisal documentation. The IHO will continue its involvement in the Lake Victoria and Mozambique Channel project processes with an aim of ensuring that the capacity building requirements of national hydrographic units be addressed.

FOLLOW UP ACTIONS

19. Encouragement of Formation of a NHC, Development of a National Hydrographic Strategy, and RHC Membership. The Chairman was urged to implement annual meetings of the NHC. SAIHC support was pledged. **ACTION: NHC Chairman; Director Hydrographic Surveys.**
20. Encouragement of Effective and Timely Collection and Promulgation of Hydrographic Information.
- a. The NHC should give urgent consideration to the identification of the focal point mandated to collect and promulgate urgent navigational safety information. It would be beneficial if this could

be done in time for the designated post holder to attend the Technical Workshop in Maputo on 5 June. ACTION: **NHC**.

b. The NHC should identify the optimum means of promulgation of urgent navigational and safety information, including assessment of the benefit of using any regional GMDSS arrangements which are developed for MSI. ACTION: **NHC; Director Hydrographic Surveys; TPA**.

c. The Visit Team will liaise with the NAVAREA – Co-ordinator to facilitate communication with East African states. ACTION: **Chairman SAIHC and Vice Chairman IHOCBC**.

21. Encouragement of Development of Hydrographic Capability. Tanzania should consider seeking SAIHC support with the following:

a. Identification of opportunities for field and office experience with IHO Member States. ACTION: **Director Hydrographic Surveys; TPA; Chairman SAIHC**.

c. Preparation of bids to the IHO CBC, particularly for funding of training. ACTION: **Director Hydrographic Surveys; TPA; NHC members; Chairman SAIHC**.

APPENDIX 1 TO
ANNEX D TO
FOF/HYD/R/320/19/1
DATED 10 MAR 06

AMENDMENT TO ENTRY FOR TANZANIA IN THE IHO YEAR-BOOK

TANZANIA (UNITED REPUBLIC OF)

HYDROGRAPHIC SURVEYS SECTION
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