

COUNTRY REPORT: KENYA

INTRODUCTION

1. **RHC Involvement.** Kenya is not an IHO member, but it was indicated during the visit that the application process would be initiated. Meanwhile, Kenya is an associate member of the SAIHC. There was no representative at the 5th SAIHC Meeting in September 2005, and a National Report was not available to the RHC Study Team. There is routine liaison with the UKHO for chart production.
2. **Preliminary Liaison.** Mr J. K. Mathenge of the Survey of Kenya (SOK) and Mr J. P. Muindi of IMO, co-ordinated the visit. A preliminary meeting of officials had been held, and comprehensive briefs were tabled for the Visit Team.
3. **Points of Contact.** Amendments to the entry in the IHO Year Book are shown in Appendix 1. The former Director of Surveys, Mr K. Mwero, is now the Permanent Secretary in the Ministry of Lands, and his active interest will greatly assist the development of Kenya's arrangements for the delivery of responsibilities under SOLAS V. The Ministry of Transport confirmed that Captain T. Khamis, Harbour Master and Chief Operations Manager at Mombasa should be the first point of contact for IHO within KPA.

DESCRIPTION OF MARITIME ACTIVITIES

4. **National Maritime Affairs.** The Ministry of Transport brief, and the Master Plan of KPA, which operates the 9 ports, provide an excellent overview of strategic issues and statistics in the maritime sphere in Kenya. The Permanent Secretary in the Ministry, Mr Garson Ikiara, indicated that a Task Force has been formed to assess how maritime resources in the Kenyan EEZ can be better utilised. The following paragraphs pick out salient points which were discussed during the meetings with officials and local experts.
5. **Trade and Maritime Traffic.** The seaborne trade of Kenya has recently been analysed in a Master Plan Study focused on the port of Mombasa. Activity on Lake Victoria has been analysed in consultancy reports to the East Africa Community (EAC). The main components of sea-borne traffic, and the patterns of activity in national waters, are as follows:
 - a. **Through Routes.** Mombasa is on the liner route along the East coast of Africa, and is second only to Durban in terms of tonnage and number of containers handled.
 - b. **Trans-shipment.** Mombasa handles the bulk of Kenya's trade, and also cargoes for the southern part of Sudan, eastern part of DRC, Rwanda, Burundi, Uganda, and the eastern part of Zambia. This trade totalled 13.2M tonnes in 2005.
 - c. **Bulk Trades.** Mombasa handles bulk oil, cement, soda ash, and an increasing volume of refined products, especially vegetable oils for Uganda.
 - c. **Feeder, Coasting and Local Trade.** From Mombasa feeder and coastal traffic, including dhows, goes to Lamu and Malindi, and also to Kismayo in Somalia, Zanzibar, and the Comoros. Traditional commercial passenger ferries operate along the coast and to the islands. Ferries on Lake Victoria are operated by Kenya Railway Services and some private operators.
 - d. **Offshore Supply and Support.** 3 offshore wells are currently capped. The SIMBA well at 4° 00' 06".6 S 40° 34' 03".68 E is not charted, and action is required to inform UKHO. There is

a plan for another deep water well in Licence Block 5 in the NE part of Kenyan waters. The contractor is discussing future logistics with KPA and security with the Kenyan Navy.

e. Tourism - Cruise Liners. The ROYAL STAR liner service calls at Mombasa, where other cruise liners also call. Cruise liners anchor off at Lamu, where passengers are landed by boat.

f. Tourism - Small Craft. Eco-tourism is increasing all along the coast, operating from the hotels. There are some marinas and occasional visiting yachts. This activity is regulated by ICAM and the Kenya Marine Forum.

g. Fisheries. Kenyan fishing is entirely artisanal, and 95% of the catch comes from Lake Victoria. A fish processing plant in Mombasa receives cargo, especially tuna, from licensed European and Far Eastern fishing vessels for export.

6. Responsibility for Safety of Navigation. KPA is responsible for the maintenance of channels, removal of wrecks, provision and maintenance of aids to navigation, pollution control, and the promulgation of Notices to Mariners. It is expected that the Kenya Maritime Authority (KMA) will assume some of these responsibilities when it is fully established. KPA reported that dredging took place in 2000. This is not reflected on the chart of Port Mombasa (BA 666). Further dredging is planned for 2006. It will be contracted out. Hydrography is recognised as a priority issue bearing on under keel clearance and access, especially since post-PANAMAX vessels are currently going elsewhere.

7. Defence Force Responsibilities. The primary roles of the Navy are coast guard duties, patrol of the territorial sea and surveillance of the EEZ. Secondary roles are SAR, fishery protection, and operations to counter traffic in contraband or illegal immigrants. The Navy reported concern over reliance on nineteenth century surveys when operating in coastal waters, especially near Shimoni and Wasin Island. They do not operate on Lake Victoria where patrols are conducted by the police.

8. Coastal Zone Management and Environmental Protection. Kenya Wildlife Services are responsible for marine National Parks. A number were reported to exist. Coordinates should be provided to KPA so that charting action can be taken. KMFRI has a GIS data-base for sensitivity mapping and new 1: 50k aerial photography of the coastline, all of which should be available for update of the official navigational charts. There are GLOSS tide gauges at Mombasa and Lamu, where there is a transmitter for the data. It was reported that there were differences between the data from these gauges and the predictions in the Admiralty Tide Tables. KMFRI confirmed that their data could be made available to KPA free of charge. This should be done without delay to enable the reported differences to be investigated by the UKHO Tidal Branch.

OUTLINE S-55 ANALYSIS

9. Status of surveys within the National Maritime Zone. The current information in S-55 was discussed. The team were made aware of surveys by the Indian Navy, the USN, and Canadian operators of an airborne system. Some of this activity related to dredging of a channel to the Lamu Naval Base, and new surveys in Manda Bay. None of these surveys are reflected in the published charts, nor is the resultant data held in Kenya. The Ministry of Defence should take steps to make this information available for the update of the official navigational charts, since the Kenyan government risks liability in the event of an accident arising from dangers which may have been detected but not promulgated.

10. Collection and Circulation of Nautical Information. During 2005 a dedicated PC was commissioned in the Port Authority Building to facilitate the collection and onward transmission of MSI to the NAVAREA Coordinator and to UKHO. The latter link is operating well, but there does not appear to be any contact with NAVAREA VIII, and this will be investigated by the SAIHC Visit Team members.

11. Survey Capability. KPA has no survey capability, and out-sources any requirements. SOK has 4 personnel who have been trained in Japan, and who have recently obtained sea experience during the USN surveys. The Kenya Navy has 3 officers who have undertaken Cat B surveying courses, and 10 survey recorders who form a sub-branch in the shore-based Fleet Support Unit. None of these personnel have had any subsequent field experience.

12. Independent Chart Production Capability. Kenya is content with current arrangements for chart production and publication by UK, which has INT chart production responsibility for the area.

PROPOSALS FOR CO-ORDINATION AND CAPABILITY BUILDING

13. National Hydrographic Committee. The NHC has been dormant. It was agreed that it must meet as soon as possible after receipt of this report. The priorities for discussion and decision-making are the establishment of full MSI capability, and the development of a prioritised national survey plan.

14. MSI Organisation and GMDSS. The Visit Team stressed the vital importance of establishment of the first phase of hydrographic capability, namely the collection and promulgation of urgent navigational safety information.

a. MSI (Navigational Warnings). KPA promulgates local navigational warnings by Port VHF, through the Pilots, and by E-mail to shipping agents. Their tide gauge is unserviceable and is to be replaced. Care should be taken that the installation complies with existing port datum. KPA Tide Tables for Mombasa and Lamu are based on British Admiralty predictions.

b. Information on Ports and Harbours. KPA will need assistance from the SOK coastal districts and other maritime stakeholders to ensure that all new developments and information bearing on maritime safety is gathered in and promulgated without delay, especially for the update of the official charts and publications (Sailing Directions; List of Lights; List of Radio Signals).

c. GMDSS Status. The regional MRCC will open in the KPA building in May 2006. INMARSAT Fleet 77 equipment is included in the package. Confirmation is needed that this includes NAVTEX equipment. It was not made clear to the SAIHC visit team that the personnel who would man this equipment had been identified, or that advice had been received on the optimum coverage by NAVTEX or SafetyNET. CPRNW advice would be highly desirable.

15. Hydrographic Capability. There is a requirement for the NHC to discuss the allocation of responsibilities for the obligations defined in SOLAS V/4&9.

a. Provision of Survey Data. KPA is currently conducting the role of passing data to the INT charting HO, and may be best placed to retain it, whilst the SOK acts as the repository for official data.

b. Survey Capability. The proposal by the NHC Secretariat for a national survey team, to draw together the existing trained personnel, has much merit. The availability of a suitable craft and the serviceability of any existing equipment holdings should be assessed, so that the team could gain field experience in check surveys and small area surveys. The equipment repair facilities of the Regional Centre for Mapping of Resources for Development (RCMRD) could greatly assist in this process. Assistance should be sought through SAIHC for the development of survey policy and planning, including civil-defence liaison.

c. Chart Production. Consideration should be given to the formalisation of the arrangement with UKHO through a bilateral agreement. As noted at paragraph 9 above, the responsibility for the currency of information in the published charts lies with the Kenyan government and new information must be supplied with minimum delay.

d. Potential for Regional Activity. Regular liaison within SAIHC will ensure that opportunities to foster Kenya's hydrographic capability are identified and maximised. Co-operative field work on Lake Victoria is one example. Both the Lake Victoria project and the WB WIO Marine Highway project could release substantial funding for both capacity building and contract surveys in Kenyan waters.

PROPOSALS FOR ASSISTANCE

16. Training. For the time being KPA staff should be the priority for Phase 1 training in MSI, with the SAIHC Maputo Technical Workshop affording an early opportunity. There are sufficient trained surveyors in Kenya to form a national team for basic Phase 2 survey work, but training will be needed in the medium term to support succession planning and to develop a national capability for higher policy and planning work. SAIHC can advise and co-ordinate regional opportunities. The first priority now is to enable the existing personnel to gain practical experience in basic survey tasks in home waters or in co-operation with neighbours. RCMRD is willing to support refresher and continuation training.

17. Equipment. The GMDSS equipment provision may need assessment with the aid of IHO CPRNW, and this can be sought through SAIHC. Once an inventory has been made of available KPA and naval craft, and equipment holdings, SAIHC can advise on purchase and hire options. Purchase should be confined to portable equipment for check surveys and small area surveys. The RCMRD Servicing Centre should be used wherever possible to repair, re-commission and calibrate existing instrumentation.

18. Funding. The special SAIHC conference and subsequent IHOCBC meeting in Maputo represent a strategic opportunity for regional states to make bids for funding assistance. These must be supported by taut cost-benefit analyses. The Visit Team recommend that Kenya give particular consideration to supporting a regional bid for a short MSI/GMDSS Course to be delivered in region by CPRNW, and to a bid for attachments to field survey teams or ships in other SAIHC states. They should also consider seeking funding for a short term attachment of an experienced hydrographic surveyor from an IHO MS to assist to develop Kenya's prioritised survey plan, and to advise on survey specification and contract management.

FOLLOW UP ACTIONS

19. Encouragement of Formation of a NHC, Development of a National Hydrographic Strategy, and RHC Membership. The NHC must meet as soon as possible to ensure that Kenya takes advantage of forthcoming opportunities in the IHO capacity building Work Programme, and to provide information to enable SAIHC to shape the hydrographic components of the Lake Victoria and WB WIO MH projects. . In subsequent discussions with the Permanent Secretaries, it was indicated that Kenya will pursue membership of IHO, and guidance on the process will be provided by SAIHC. **ACTION: NHC Chairman; Permanent Secretary Lands; Chairman SAIHC.**

20. Encouragement of Effective and Timely Collection and Promulgation of Hydrographic Information.

a. Data related to dredging, Marine Parks, and recent surveys in Kenyan waters should be forwarded to UKHO for inclusion in the official charts and publications. **ACTION: NHC Secretariat.**

b. Data from the GLOSS tide gauges, including comprehensive information on their datums, should be forwarded for analysis by the UKHO Tidal Branch. **ACTION: NHC Secretariat.**

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

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

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

b. Preparation of bids to the IHO CBC. ACTION: **NHC; Chairman SAIHC.**

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

AMENDMENT TO ENTRY FOR KENYA IN THE IHO YEAR-BOOK

KENYA (REPUBLIC OF)

SURVEY OF KENYA

Director of Surveys: Mr J. MATHENGE

KENYA PORTS AUTHORITY

Captain T. Khamis, Harbour Master and Chief Operations Manager