

## ANNEX J TO EAthC WEST AFRICA ACTION TEAM REPORT DECEMBER 2002

### COUNTRY REPORT: SIERRA LEONE

#### **INTRODUCTION.**

1. International. Sierra Leone is not a member of IHO, nor associate member of the EAthC, and has not participated as observer to meetings of this regional hydrographic commission. Sierra Leone is a member of MOWCA and of PMAWCA (via Sierra Leone Ports Authority, which is subordinate to the Minister of Transport).
2. Sierra Leone is not a member of IALA, or signatory to the SAR convention, but has acceded to SOLAS and to UNCLOS.
3. Preliminary Liaison. The visit of the WAAT was prepared by the British Defence Advisor (Lt Col Poraj-Wilczynski) in close liaison with the Harbour Master, Captain Sawyerr, at Sierra Leone Ports Authority in Freetown.
4. Points of Contact. Up-dates to the IHO Yearbook:
  - a. Sierra Leone is still in the process of setting up a hydrographic service. The new Sierra Leone Maritime Administration (SLMA), created in June 2000, has overall responsibility for maritime safety matters. Executive Director: Mr Philip LUKULEY, PO Box 313, Maritime House, Government Wharf Ferry Terminal, Freetown, Sierra Leone. +232 22 221 211
  - b. Sierra Leone Ports Authority (SLPA) is responsible for the management and operation of all ports in Sierra Leone – PMB 386, Cline Town, Freetown. Relevant contacts are:  
Captain P E M KEMOKAI, General Manager, +232 22 250 989  
Captain R R SAWYERR, Harbour Master, + 232 22 220 537

#### **DESCRIPTION OF MARITIME ACTIVITIES.**

5. National Maritime Affairs. Sierra Leone has suffered greatly from the effects of prolonged civil war. The recent return to peace is providing the first opportunity for more than 10 years to rebuild commercial and administrative structures with significant assistance from international donors. Freetown, the capital city, major port and key entry and exit point for Sierra Leone, is in the process of repairing war damage, improving port facilities and restoring aids to navigation. The mineral export ports of Pepel and Niti are both dormant at the moment and not open to safe navigation. In coastal waters there is a variety of fishing and transport activity which is affected by the threat of pirates who have been operating with increasing boldness, particularly to the north of Freetown. Further offshore there is industrial fishing activity, and a number of exploration blocks have been sold for international oil companies to search for economic reserves of oil and gas. It was noted that maritime boundaries with neighbouring states have yet to be formally agreed under the terms of UNCLOS.
6. Trade and Maritime Traffic. Imports and exports through Freetown have expanded rapidly in the last 3 years. Imports support national redevelopment programmes and include general cargo, containers, cement and cars. Exports are dominated by agricultural products, especially cocoa. Sierra Leone relies entirely on imported oil products and Kissy Jetty in Freetown is the only oil terminal in the country – ships up to 40,000 tons are berthed here once a week on average.
7. Through Routes and Transshipment. Neither of these activities are particularly significant at the moment. Port traffic is mainly serving the domestic needs of the nation.

8. Feeder, Coasting and Local Trade. Coastal and local trade is limited and concerns freight and passenger traffic within Sierra Leone and a little further beyond, with Guinea and Gambia in particular. An important passenger service runs across the harbour between Freetown and Tagrin Point, connecting the city with Lungi international airport.
9. Tourism - Cruise Liners. No cruise liners visit Sierra Leone, although there is great potential for attracting tourists to the local beaches and other locations in the country.
10. Tourism - Small Craft. There are no facilities for small leisure craft.
11. Fisheries. National fishermen conduct artisanal fishing from many locations along the coast. There are a small number of national industrial fishing vessels and many more foreign flagged vessels have licenses to fish in Sierra Leone waters. 30% of the catches are landed in Sierra Leone; the remainder are transferred to factory ships at sea. The Ministry of Fisheries and Marine Resources mentioned the problem of piracy for unprotected fishing vessels, as well as the problem of policing the offshore areas where catches of some species (particularly tuna) were difficult to monitor.
12. Responsibility for Safety of Navigation. The SLMA has responsibility for safety of navigation in all of Sierra Leone's waters. This includes responsibility for all lights, floating navigational marks and acting as the receiver of wrecks. The SLPA provides for safe navigation within the confines of the port limits, by maintaining adequate depths at berths and ensuring dangers to navigation are promulgated to mariners.
13. Defence Force Responsibilities. The Navy is not directly involved in hydrographic matters, but could make a contribution by reporting information gathered during routine patrols of the coastal waters. Although severely limited by fuel restrictions, the Navy is responsible for conducting counter-piracy patrols, counter-trafficking, fishery patrols and assisting with SAR operations. A recent SAR incident was reported in which the Navy had been successfully involved with saving 150 lives from a stricken vessel.
14. Coastal Zone Management and Environmental Protection. The WAAT was unable to discuss what, if any, national planning there was in regards to managing the coastal zone and protecting the marine environment, particularly from the threat of pollution. There is a limited amount of equipment in Freetown to contain oil spills at Kissy terminal.
15. Joint Maritime Capability (JMC). This group includes the Armed Forces of Sierra Leone, Customs, SLPA and SLMA. It has been set up to coordinate activity by all national agencies that are working to improve maritime safety and security, and particularly to counter the problem of criminal activity at sea.

## **CAPACITY ANALYSIS.**

16. Status of surveys within the National Maritime Zone. Charts of Sierra Leone's waters are published by UKHO. Most of the source data was collected during surveys in the 19<sup>th</sup> century, with some coastal surveys being conducted in the early part of the 20<sup>th</sup> century. No systematic surveys have been carried out in the offshore zone. Modern survey data is very sparse, however HMS BEAGLE carried out a survey of Freetown harbour in 2001 and the results are expected to be reflected in new editions of the charts affected in early 2003.
17. Freetown was last dredged over 10 years ago and several of the berths are now suffering the effects of siltation, which in turn is limiting the shipping capacity of the port. It was evident that there were other changes to the charted bathymetry, including the southwards migration of the shoal areas of Middle Ground Bank on the northern side of Freetown Harbour. Many uncharted wrecks can be seen in the bays around Freetown, and it was said that many others exist elsewhere. During the period of civil war there was no maintenance of the aids to navigation in the country. All buoys in the approaches to Freetown went missing and have yet to be replaced, including the

important fairway buoy at the entrance to the port. Likewise the lighthouses were neglected and Cape Sierra Light is still defective, although a temporary light does function.

18. This means that Sierra Leone has many survey requirements, but the most pressing priority is to ensure that Freetown is adequately surveyed, with aids to navigation replaced or restored, in order to make the port safe to enter and capable of taking the ships needed to support the economic recovery of the country. Fortunately, these priority requirements are in the process of being addressed with the assistance of funding from the World Bank.
19. Collection and Circulation of Nautical Information. The SPLA Harbour Master collects local information affecting navigational safety and this is circulated by local notices to mariners, by the pilots or by VHF radio to ships arriving. This organization does not extend beyond the port limits, and there is no national system that covers the whole maritime area. The SLMA is already addressing the problem (with the help of a consultancy study) of how best to disseminate MSI.
20. SAR and GMDSS. The SLMA, with assistance from the IMO, has plans to set up a Rescue Co-ordination Centre in Freetown – possibly in the same building as the SLMA office. Practical experience has shown there are problems communicating with ships at sea (who do not always monitor the correct maritime safety frequencies) and problems of communication between naval units and helicopters (that are not necessarily fitted with appropriate maritime frequencies). Regarding GMDSS, Sierra Leone does not broadcast MSI on NAVTEXT or SafetyNET; hence ships in waters off Sierra Leone only receive information if and when they enter port.
21. Survey Capability. There is no qualified hydrographic surveyor and no specialised surveying equipment between all the authorities responsible for maritime safety. SLPA have just received a new tug boat (13m) which is an ideal survey platform within the harbour, and another new vessel (26m) is being purchased in the near future. The need, therefore, is for trained surveyors and some additional specialist equipment in order to build up a surveying capability. This will take time to achieve and in the short term commercial contract surveys will be needed to support activities such as restoring the buoyage, surveying the wrecks and dredging the berths in Freetown.
22. Independent Chart Production Capability. There is no capacity for producing nautical charts.

#### **PROPOSALS FOR CO-ORDINATION AND CAPABILITY BUILDING.**

23. National Hydrographic Strategy. The importance of hydrography and the need to coordinate national effort in this area was well understood, particularly by the Secretary to the President, the SLMA, the Navy and SLPA, as well as the World Bank Coordinator for the Transport Sector Projects. It was felt that a National Hydrographic Committee was not necessarily needed given that hydrography was already being given proper consideration in National Development Plans. It is clear that funding has been set aside for a number of key projects that will make significant improvements to safety of navigation in Freetown. The WAAT was able to assist with identifying the need for training and equipping a hydrographic unit at SPLA which will hopefully develop into a national capability over time so that Sierra Leone can undertake hydrographic projects beyond the port limits. It was also suggested that hydrography could be a topic for discussion between all the key stakeholders within the forum of the JMC. The WAAT provided terms of reference for a maritime safety committee which might prove useful in this regard.
24. MSI Organisation and GMDSS. Within GMDSS several technical means are used for passing MSI to mariners. For ocean-going ships, the navigational warnings should be made available on INMARSAT (SafetyNET) via the NAVAREA II coordinator: although it was noted that no input has been received from Sierra Leone. For ships sailing off Sierra Leone or approaching harbour, NAVTEX should be the optimum solution; but this infrastructure does not exist at the moment. However, since the concerned ships are part of international shipping, they will have INMARSAT facilities onboard, hence the same information could be passed on SafetyNET via the NAVAREA II co-ordinator. This requires the MSI to be made available to the NAVAREA coordinator by

telephone/fax/e-mail. This solution was discussed with both SLPA and SLMA. It was proposed that Sierra Leone should designate the focal point for information collection and assessment that is permanently manned (SPLA to begin with and possibly the SLMA jointly manned 'Ops Room' in the future), and then establish a link with the NAVAREA II coordinator to discuss the manner in which information is to be passed.

25. UKHO will continue to issue new edition charts and Notice to Mariner corrections (NtMs) on receipt of information from Sierra Leone. The WAAT visit provided the opportunity to strengthen the link between UKHO and local authorities in Sierra Leone and emphasised the need to keep UKHO informed of any changes affecting charts and nautical publications (List of Lights, Sailing Directions, etc). These publications will continue to be published and maintained by UKHO.
26. Hydrographic Capability. At present there are no trained personnel and no specialized hydrographic equipment within the country. However, SPLA does have a modern workboat that could easily be used to embark portable surveying equipment when needed.
27. Regional Activity. Regional activity could be easily prepared under the auspices of IHO (EAtHC), where technical matters, training, and implementation of GMDSS are discussed and promoted. For hydrographic surveys, such a regional cooperation does not seem a priority at the moment since the most important work needs to be carried out in harbours or inshore shallow water areas. For MSI, a regional solution for a shared NAVTEX station with neighbouring countries is necessary (the range of HF makes it possible to cover the waters of several countries with one station). At the IMO Florence Conference (2000) on SAR and GMDSS, Sierra Leone was placed in the regional sub-grouping with Liberia (coordinator), Guinea, Cote d'Ivoire and Ghana. Further progress on these topics should be taken forward in close liaison with these countries and the IMO.

#### **PROPOSALS FOR ASSISTANCE.**

28. Training. The WAAT proposed that two suitable candidates are identified for training on a Category B hydrographic course at the first opportunity, hopefully as soon as early 2003. It would be most important to ensure that these individuals were assured employment as hydrographic surveyors on their return to Sierra Leone. Posts would have to be created, probably at SPLA, within the organisation of the Harbour Master – although this would be subject to discussion between the interested parties.
29. Equipment. A range of portable equipment will be needed to provide a basic hydrographic capability that will enable accurate positioning and recording of depths onboard the new harbour vessel as well as post-processing and plotting of data ashore. A detailed list of equipment was provided by the WAAT shortly after the visit. The list included separate costs for sidescan sonar that could be purchased at a later date if an improved capability was desired. Purchase of the equipment should be timed to coincide with the end of the overseas training period.
30. Funding. Training costs for two persons were estimated to be \$32,000 (tuition) and \$30,000 (living expenses). Equipment costs were estimated to be \$53,000 (basic package) and an additional \$120,000 (for side scan sonar package – not essential at this stage). The World Bank TSP Coordinator (Dr Mustapha) has been provided with these details and intimated that funds to cover the proposals for training and basic equipment could probably be identified from within the current budget allocated to maritime projects.

#### **FOLLOW UP ACTIONS.**

31. Formation of a NHC and Development of a National Hydrographic Strategy.
  - a. The formation of a National Hydrographic Committee (NHC) or National Maritime Safety Committee (NMSC) has been proposed and has received general agreement,

notably by the Secretary to the President. Coordination of hydrographic matters might also take place within the JMC group.

**Action: Sierra Leone**

- b. A National Hydrographic Strategy should be formulated within the context of the NHC or NMSC. The first priority should be to improve safety of navigation for ships using Freetown with the aid of consultancy services and commercial companies. At the same time a plan should be adopted to introduce a national hydrographic capability based on the training and equipment packages mentioned above. Further advice can be found in IHO publication M2 (provided by the WAAT) or sought from the IHB and RHC members.

**Action: Sierra Leone, IHB and RHC members**

32. Provision of Hydrographic Services in accordance with SOLAS. UK can continue to issue nautical publications, charts and up-dates, on behalf of Sierra Leone. Sierra Leone should implement an organisation for the collection and dissemination of nautical information, to ensure that MSI is provided to mariners by the best means available (using SafetyNET when appropriate). Initial survey work by commercial companies to improve navigational safety in Freetown can be followed by the build up of a national capacity to carry out hydrographic work. The improved provision of MSI and a growing capacity to conduct surveys according to local priorities will greatly support the safety of navigation in Sierra Leonean waters.

**Action: Sierra Leone & UKHO**

33. Encouragement of effective and timely collection and promulgation of Hydrographic Information.

- a. It is urgent to report existing known dangers to navigation – particularly the positions of wrecks when they occur. The results of recent and forthcoming surveys of wrecks and any other hydrographic works in Freetown should be forwarded to UKHO for appropriate charting action.

**Action: Sierra Leone & UKHO**

- b. An organization for the collection and dissemination of Maritime Safety Information needs to be instituted as soon as possible, with a link being established with the NAVAREA II co-ordinator at EPSHOM, Brest, for the distribution of urgent MSI on INMARSAT SafetyNET. All maritime agencies should be involved in providing information, and the focal point needs to have a permanent on-watch facility.

**Action: Sierra Leone & EPSHOM**

- c. Recent surveys by HMS BEAGLE will provide modern hydrographic data in the approaches to Freetown. New Editions of the British Admiralty chart will be published in early 2003.

**Action: UKHO**

34. Encouragement of Development of Hydrographic Capability.

- a. Select and commission two suitable candidates for training on a Category B hydrographic course as soon as possible. Plan for their future employment in a new national hydrographic unit. Further advice on training courses can be provided by the IHB and RHC members.

**Action: Sierra Leone, IHB & RHC members**

- b. Identify a package of portable equipment to provide a basic hydrographic capability for use by surveyors on return from their training period. Further advice can be provided from the IHB and RHC members.

**Action: Sierra Leone, IHB & RHC members**