



SULTANATE OF OMAN NATIONAL REPORT

**TO 14th NORTH INDIAN OCEAN
HYDROGRAPHIC COMMISSION MEETING
(26 - 28 FEBRUARY 2014, BANGKOK, THAILAND)**

Executive summary

1. **Hydrographic Office/Services in Oman:** The Royal Navy of Oman is taking the responsibilities of providing hydrographic services in all sectors Nationally and Internationally through the following directorates:

a. **Directorate of Hydrography (DOH-RNOHQ).** It is basically responsible for giving consultancy and advice in hydrography and any other related subjects to all RNO branches. It is also the source for all plans/policies and other matters concerning hydrographic affairs.

b. **Directorate of Oman National Hydrographic Office (DONHO).** The main tasks and duties of this directorate remains the same, it provides safety of navigation to all Omani waters, which is achieved by producing and maintaining charts covering Omani waters, assisting Omani maritime boundaries delimitation including continental shelf extension project, giving advice on all matters related to Maritime Safety Information, and maintaining the National Hydrographic Archive which includes copies of data from all surveys carried out in Sultanate of Oman.

c. **Hydrographic Unit (HU).** This unit is under the Directorate of Hydrography and it is responsible of various duties including but not limited to, carrying out all beach surveys, establishing tidal stations and analysing tidal data as well as, processing of MBES and SBES data and finally supporting other operational units and maintaining survey equipments.

c. **Survey Ships.** All hydrographic surveys are tasked to RNOVs through Hydrographic Unit and there are three Hydrographic survey ships which are Royal Navy of Oman Vessels Al Mabruka, Al Makhirah, and As Seeb which are tasked as scheduled through Hydrographic Instructions (HIs).

2. **Hydrographic Surveys:**

2.1. A number of new Hydrographic Instructions (HI) were carried out by Survey Vessels and Hydrographic Unit to date along the coast of Sultanate of Oman to support the national interests as well as enhancing the safety of navigation.

2.2. Technologies and equipments. All of the Survey Vessels are fitted with MBES systems and other sophisticated equipments in order to perform hydrographic surveying to the IHO standards and specifications.

3. New charts & updates:

3.1. ENCs. Currently the processes of converting the existing paper charts to ENCs and quality control (Verification and Validation) are ongoing, expected to complete in 1st quarter of 2015.

3.2. ENC Distribution method. Oman after the technical visit to UKHO and IC-ENC last year decided validate and distribute the Oman's official ENC through UKHO, waiting for administrative issues to be finalised and officially agreed and announced which as a result will further improve the quality and the distribution of Oman-ENC.

3.3. INT. Charts. The Omani INT. Charts scheme which cover both area "I" and "J" has been revised, according to national needs and other coastal development where most updates are in area "I" .

3.4. National Paper charts. Oman producing a number of national paper charts as planned and according to national requirements in different scales as schemed, these charts are continuously maintained.

4. New publications & updates: Oman published recently the 2014 editions of the annual Oman Maritime Book, where this book provides diverse, valuable and comprehensive information to the mariners and it consists of five sections, Tide Tables, List of Radio Signals, List of Lights, National List of Wrecks, Oman Chart Catalogue and Maritime Distance Table. At present the OMB is only available in hard copy.

5. Maritime Safety Information:

5.1. MSI provides services such as drafting and broadcasting the Navigation warnings through Muscat Radio, covering Sea of Oman and Arabian Sea areas. Oman is operating with one NAVTEX station located at Watayah. Also, keeps close cooperation with Area IX coordinator Pakistan for Promulgating NAV warning through safety net.

5.2. The Ministry of Transport and Communications is the authority for GMDSS in Oman. The Telecommunications Regulations Authority (TRA) is responsible to the Ministry of Communications for all radio and satellite communications aspects of GMDSS. The Royal Air Force of Oman operates the national rescue coordinate centre (RCC) which is responsible for coordinating search and rescue operations in Sultanate of Oman.

5.3. Ministry of Transportation and Communications, Directorate General of Maritime Affairs offers a national cooperative activity which will have an impact on maritime safety information and its concerning Lighthouses Construction and DGPS Stations Project, and it is as follows:

- a. Ra's al Hadd DGPS Station
- b. Masirah Lighthouse
- c. Ra's Madrasah Lighthouse
- d. Ra's Madrasah DGPS Station
- e. Qibliyah Lighthouse
- f. Marbat DGPS Station.

5.4. **C-55:** The latest updates on the status of hydrographic surveying in Omani water are shown below, where the survey coverage is in percentages as following:

Depth	A	B	C
< 200 m	60 %	40 %	50 %
> 200m	25 %	10 %	70 %

Where:

- A** = Percentage which is adequately surveyed.
- B** = Percentage which requires re-survey at larger scale.
- C** = Percentage which has never been systematically surveyed.

6. **Capacity building:** To maintain the required level of efficiency and effectiveness at all times for all employees, rehabilitation of the hydro-staff (technician and officers) to efficiently engage in their future work is considered to be a must. Qualification is a continuous operation regardless of the many hurdles in

delivering proper training. At present it is achieved by both In-house and overseas training. The recent capability building is observed in the following:

- a. Currently a group of trainees is taking in-house basic Hydro-training, eventually they will be attached to different sections for on job training.
- b. The third group of senior hydro-technician were in Malaysia for a period of 6 months in Geomatic Engineer course the other technicians will go on the same course in future.
- c. Seven young officers successfully completed CAD B Nautical Cartography Course in India, November 2013.

7. Oceanographic activities:

7.1. **General.** Different sectors and organizations are dealing or responsible for Oceanographic activities in Oman where the RNO (The Hydrographic Office/ Services) is not yet acquiring nor processing but only archiving this kind of data.

7.2. **Tide Gauge Network.** Oman monitors Tides over the Omani coast through a number of permanent stations where the Tide Gauges in these stations are fully automated, highly precise and with satellite connectivity. The network then is connected by a number of Standard, Secondary and Minor Tidal stations. Seven new permanent tide gauges will be installed soon covering the coast of Oman.

8. Other Activities:

8.1. **Participation in IHO working Groups.** Oman Hydrographic Office/ Services is an active member in Regional Hydrographic commissions (RSAHC) and associate member in the (NIOHC), and it is strongly participating in IHO-WG Such as S23 and WENDWG. The head, Oman hydrographic Office, was the previous chair of the RSAHC

8.2. According to Disaster Prevention, Environmental Protection, Astronomical observation there are different organisations observing and monitoring and dealing with these issues and Oman Hydrographic Office/ Services is always in close contact and cooperating with these organisations especially in related and common field and areas.

9. Contact Information:

DIRECTORATE OF THE HYDROGRAPHIC

Tel: +968 24322832

Fax: +968 24

DIRECTORATE OF OMAN HYDROGRAPHIC OFFICE

Tel: +968 24312350

Fax: +968 312460

E-Mail: nhooman@omantelnet.om

10. Conclusions: Oman National Hydrographic Office/Services has/had another successful year but, will continue its efforts to fulfill its National and International role. It will continue in developing to cope with the trends and new technologies in order to deliver better Hydrographic services at all times.