



SULTANATE OF OMAN NATIONAL REPORT

TO 5th ROPME SEA AREA HYDROGRAPHIC COMMISSION

MEETING

Kingdom of Saudi Arabia

04 - 06 MARCH 2013

Executive summary

1. **Hydrographic Office/ Services:** The Royal Navy of Oman, represented by the Directorate of Hydrography in RNOHQ, and the Directorate of National Hydrographic Office, have responsibilities for all matters related to the management and supervision of the National Hydrographic Services in Oman. The main role is generally to provide maximum safety of navigation in the territorial sea. Some organizational changes occurred recently, which are summarised as follows:

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. All hydrographic surveys are tasked to RNOVs Al Mubrooka and As-Seeb through HU.

c. **Survey Ships.** 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 by the DOH to perform Hydrographic survey.

2. Surveys:

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

2.2. **New 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.

2.3. **New ship.** RNOV Al Makhirah is the state of the art, addition to the RNO hydrographic service and was launched in February 2012.

3. New charts & updates:

3.1. **ENCs.** Currently the processes of converting the existing paper charts to ENCs are now ongoing, eventually the completed ENCs will go through the process of quality control (Verification and Validation), and finally the officially produced ENCs will be announced widely through one of the existing means.

3.2. **ENC Distribution method.** Oman is not yet a member in any validation and distribution organization, However IC-ENC RENC, Primar or any other suitable means are all options. Oman has recently acquired its own validation software which will improve further the quality of the end products.

3.3. **INT. Charts.** The Omani INT. Charts scheme which cover both area "I" and "J" has been revised, where most updates are in area "I" the updated listed is shown in Annex A.

3.4. **National Paper charts.** Oman produced a number of national paper charts in different scales as schemed, these charts are continuously maintained, and according to the production plan the following charts are recently published:

National No.	Chart Title	Scale	Publication date
Om 252	Ad Duqum Port	25000	30 April 2011
Om 1207	Approaches to Ad Duqum Port	125000	30 January 2012
Om 1212	Ra's al Hadd to Daghmar	125000	30 January 2012
Om 1214	Muscat to As Suwayq	125000	23 Julay 2012
Om 1215	Jusor as Sawadi to Sohar	125000	23 Julay 2012
Om 1216	Ra's Sallan to Khatmat Milahah	125000	30 January 2012
Om 1218	Ra's Daba to Khawr al Habalayn	125000	30 April 2011
Om 1219	Strait of Hormuz	125000	30 April 2011
Om 3505	Muscat to Daba	350000	31 January 2012

3.5. **Other Charts.** Many special products with military operational nature were produced for RNO and other Sultan Armed Forces (SAF) units as well as a large number of civil products to suit the of both government and private sectors.

4. **New publications & updates:** Oman published the 2012 and 2013 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. With respect to the digital format of this book is not yet produced.

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.

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

Depth	A	B	C
< 200 m	50 %	40 %	50 %
> 200m	30 %	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.

7. Capacity building: To maintain the level of efficiency and effectiveness in all time for all employees, rehabilitation of the hydro-staff (technician and officers) to smoothly get engaged in their future work is considered to be a must. Qualification is a continuous operation regardless the hurdles in delivering proper training, at present it is achieved by either In-house or overseas training. The 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 second group of senior hydro-technician is now in Malaysia for a period of 6 months in Geomatic Engineer course, where in August 2012 the first group finished the same course.

- c. One officer in 2012 was sent to ITC in the Netherlands for a specialised course in GIS.
- d. Four officers followed a specialized MB course and other seven young officers will attend S8 “Marine Geospatial information” course conducted by IIC in India.
- e. Six officers completed Cat. (B) Basic hydrographic course in UK, USA, and Malaysia and Two officers completed Cat. (A) Long hydrographic course this year in UK.
- f. Six officers and ratings attended RSAHC workshop in Law of the Sea in February 2012.

8. Oceanographic activities:

8.1. **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.

8.2. **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 Sultanate of Oman

9. Other Activities:

9.1. **Participation in IHO working Groups.** Oman Hydrographic Office/ Services is 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.

9.2. 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.

10. **Conclusions:** Oman Hydrographic Office/ Services will continue its distinguished performance to fulfill its National and international role and it will continue in developing to coup with the trends and new technologies in order to deliver better Hydrographic services at all times.