



SULTANATE OF OMAN NATIONAL REPORT

20th North Indian Ocean Hydrographic Commission Meeting (NIOHC)

13 – 15 July 2021

BY

OMAN NATIONAL HYDROGRAPHIC OFFICE

Oman National Report 2021

Executive Summary

1. **Hydrographic Office/Services in Oman:** The Royal Navy of Oman (RNO) has taken the responsibility of providing hydrographic services in all sectors nationally and internationally through the following directorates:
 - a. **Directorate of Hydrography (DOH-RNOHQ).** Is 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. DOH plans, directs and assures the work of the RNO Survey Vessels.
 - b. **Directorate of Oman National Hydrographic Office (DONHO).** The main tasks and duties of this directorate remains the same, it provides safety of navigation in all Omani waters. This is achieved by producing and maintaining navigational charts at different scales, assisting Omani maritime boundaries delimitation including the 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, supporting RNO Survey Vessels conduct shallow water surveys, establishing tidal stations and analyzing tidal data, processing and analyzing MBES and SBES data collected by RNO Survey Vessels, maintaining survey equipment and supporting other operational units.
 - d. **The National Hydrographic Archive (NHA).** The NHA contains various hydrographic surveys, some dating back many years, which have been collected/compiled by RNO Survey Vessels/units or by allied countries through bilateral arrangements or joint surveys. It also includes surveys executed through civilian hydrographic survey companies which are authorized to conduct surveys on behalf of related/concerned Ministries for their coastal projects. All of this data is systemically indexed and

referenced to ease and facilitate the process of obtaining/providing the data for users now and in the future.

2. Surveys:

a. **Coverage of new surveys.** All hydrographic surveys are tasked to RNO Survey Vessels/HU through Hydrographic Instructions (HIs) as scheduled by the DOH. Hydrographic surveys are continually being carried out along the coast of the Sultanate of Oman to support National interests as well as enhancing the safety of navigation of all mariners. Priorities are based on requirements from RNO, ONHO and other concerned Ministries. Once fully appraised, the surveys are received and indexed by the Oman National Hydrographic Archive. In addition to RNO surveys, a number of commercial surveys have been received recently.

b. **New technologies and equipment.** The RNO Survey Vessels and three Hydrographic Survey Launches (HSLs) are equipped and fitted with MBES systems and other sophisticated surveying systems and software in order to undertake hydrographic surveys to the IHO standards and specifications.

c. **Problems encountered.** RNO is currently limited to one Survey Vessel, the other being in a planned refit.

3. New charts & updates:

a. **ENCs.** ONHO is continuing the process of converting existing paper charts into Omani ENCs. The priority is to convert large scale charts first, followed by medium and smaller scales. ONHO has published 20 ENC cells since 2019; another 6 cells will be ready by the end of 2021.

b. **RNCs.** ONHO is not yet producing any of these charts, but checking the feasibility and methodology of producing these charts, or equivalents, in the future.

c. **INT charts.** The Omani INT charts scheme which covers both areas I and J has been revised, according to national needs, coastal development, and other requirements. Accordingly, the list of Omani INT charts in S11 are proposed for updating with most updates being in area I; once this is

done, changes will be reported to IHO. At the last meeting of the ROPME-SAHC International Charts Co-ordination Working Group (RSAHC-IICWG) 29-30 April 2015 held by ONHO in Oman, a report on all changes and updates were forwarded to the regional coordinator (IR of IRAN) but no update has been observed in area I INT charts since then.

d. **National Paper charts.** Oman continues to produce National paper charts, according to requirements, in different scales; these charts are continuously maintained. Since the last NIHC meeting, ONHO published a number of new large scale new charts of PORT SULTAN QABOOS (OM52), AS SUWAYQ PORT (OM58) and SHINAS PORT (OM56). ONHO also plans to publish a number of new charts during 2021: PORT SALALAH (OM102) and APPROACHES TO PORT SALALAH (OM303) at a scale of 1:30,000 which will replace OM250 (1:25000) to provide better coverage of the area.

e. ONHO plans to issue new editions of three paper charts during this year: OM1219, OM1218 and OM257.

4. **New publications & updates:**

a. ONHO plans to publish the annual Oman Maritime Book (ONP 01) in December for 2022. This book provides valuable information to the mariner such as Tide Tables, List of Radio Signals, List of Lights and National List of Wrecks.

b. **Problems encountered.** Nil.

5. **Maritime Safety Information (MSI):**

a. ONHO is responsible for all navigational warnings in the Sea of Oman and Arabian Sea, this includes the drafting and broadcasting of navigational warnings and MSI services as needed through Muscat Radio, although this is currently not operational. Oman is operating one NAVTEX station located at Al Amirat (not operational) and ONHO operates in close cooperation with all concerned authorities/parties including NAVAREA IX Coordinator (Pakistan) to facilitate the promulgation of all navigational warnings through Safety Net. The Ministry of Transport, Communications

and Information Technology (MOTC) is responsible for the NAVTEX station and any updates to the situation will be reported to the NAVAREA IX Coordinator.

b. ONHO issues the monthly Oman Notice to Mariners to provide timely marine safety information for mariners and all other users of Omani navigational charts and publication from a wide variety of sources.

c. The MOTC is the authority for GMDSS in Oman. The Telecommunications Regulations Authority (TRA) is responsible to the MOTC for all radio and satellite communication aspects of GMDSS. The Royal Air Force of Oman operates the national Rescue Coordination Center (RCC) which is responsible for coordinating Search and Rescue (SAR) operations in the Sultanate of Oman.

d. MOTC is taking significant steps towards the installation of two new NAVTEX stations to cover all the Oman EEZ. Negotiations are in the final phase and an agreement will be signed with AMNAS (Arabian Maritime and Navigation Aids Services).

e. **Problems encountered.** Oman NAVTEX station is still not operational.

6. C-55: surveying in Omani water are shown below, where the survey coverage is in percentages as following:

Depth	Adequately surveyed	Requires re-survey	Not systematically surveyed
< 200m	45%	11%	44%
> 200m	63%	8%	29%

7. Capacity building:

a. To maintain the required level of efficiency and effectiveness at all times for all personnel (officers and technicians) continuous professional development is considered to be a must. Education and learning is a

constant requirement and is achieved by both in-house and overseas training: the recent capability building has been undertaken:

- i. 2 officers attended basic hydrographic course Nov 18 to May 19, IIC, India.
- ii. 3 officers completed CAT A hydrographic course Jan to Jun 19, HMS Drake, UK.
- iii. 2 officers undertaking CAT A hydrographic course Jun to Dec 21, HMS Drake, UK.
- iv. 1 officer expected to attend CAT B cartographic course at UKHO, UK in Sep 21.
- v. 2 officers expected to attend CAT B cartographic course at UKHO, UK in 2022.
- vi. 1 officer expected to attend CAT B hydrographic course Sep 21, HMS DRAKE, UK.
- vii. 7 officers attended 'Transition to S-100' presented by Teledyne CARIS (VTC) in Apr 20.
- viii. 6 officers attended S-100 presented by Teledyne CARIS (VTC) in Dec 20.
- ix. 4 officers attended IC-ENC technical conference (VTC) in May 21.
- x. 3 officers completing IC-ENC validation training course in Jul 21.

8. **Oceanographic activities:**

- a. **General.** Different sectors and organizations are responsible for most oceanographic activities in Oman. The RNO is not charged to collect or processing oceanographic data, but will archive it.
- b. **Tide Gauges Network.** Oman monitors tides around the Omani coast through a number of permanent stations fitted with fully automated precise sensors with satellite connectivity. A number of standard, secondary and minor tide stations completes the network. Ten new permanent tide gauges are now installed by Director General Meteorology (DGMET) covering the coast of the Sultanate as part of Mean Sea Level observations.

9. **Other Activities:**

a. ONHO new building. The RNO celebrated, on 21 of Jun 21, the inauguration of the new Omani National Hydrographic Office building, under the patronage of Vice Admiral Abdullah Khamis al Raisi, Chief of Staff of the Sultan's Armed Forces (SAF).



b. The Sultanate of Oman established a working group for the Ocean Decade (2021-2030); ONHO is a member in this WG.

c. **Participation in IHO Working Groups.** ONHO is an active member of the ROPME Sea Area Hydrographic Commission (RSAHC) and associate member in the North Indian Ocean Hydrographic Commission (NIOHC). It is an active participant in IHO-WGs, such as WENDWG, and Director ONHO has been selected to join the S32 (Hydrographic Dictionary) Working Group (HDWG) for Arabic speakers.

d. Oman is the Chair of ROPME Sea Area Hydrographic Commission (RSAHC) and represented ROPME HC member states in IRCC 13th meeting 23-25 Jun 21.

e. ONHO is planning to hold the 9th meeting of RSAHC during the latter part of 2021.

f. In relation to disaster prevention, environmental protection, astronomical observation, etc there are different organizations observing, monitoring and dealing with these subjects. ONHO continues to have close liaison with these organizations especially in related fields and common interest/areas.

10. **Contact Information:**

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11. Conclusions:

a. ONHO recognizes the importance of hydrography worldwide and works in cooperation with other national and international organizations to provide hydrographic services and other relevant/vital information to support mariners/users for a safer navigation in Omani waters. In addition, it contributes through RNO and other concerned sectors to increase safety awareness in marine affairs and other related fields i.e. including, but not limited to, anti-piracy operations, SAR, preventing marine disasters and protecting the marine environment.

b. ONHO, through the National Hydrographic Requirements Committee, is revising the strategic plan of both hydrographic surveying and the production of nautical publications to fulfill the National requirement for better hydrographic services in Omani waters and, despite some small problems/issues encountered, the ONHO has had another successful year. It will continue to make best efforts to continue development and embrace new technologies and trends in all sectors in order to deliver better hydrographic services to all sectors/users.