

**21<sup>ST</sup> MEETING OF THE NORTH INDIAN OCEAN HYDROGRAPHIC  
COMMISSION (NIOHC21)  
Bali, Indonesia, 22-25 August 2022**

**NATIONAL REPORTS FROM SULTANATE OF OMAN TO THE NIOHC21**

Reference: IHO Resolution 2/1997 as amended

**Executive summary**

1. Hydrographic Office / Service:
  - a) Name of the institution: Oman National Hydrographic Office
  - b) Description: The Royal Navy of Oman (RNO) has taken the responsibility of providing hydrographic services in all sectors nationally and internationally through Oman National Hydrographic Office (ONHO), which 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. ONHO plans, directs and assures the work of the RNO Survey Vessels. Also, the main tasks and duties of this office 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 the Sultanate of Oman.
  - c) Submitted by: Captain/ Yahya Al-Balushi (yahya.albalushi@mod.gov.om).
2. Surveys:
  - a) Coverage of new surveys: All hydrographic surveys are tasked to RNO Survey Vessels and the Hydrographic Unit (HU) through Hydrographic Instructions (HIs) as scheduled by the ONHO. 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 recently conducted.
  - b) New technologies and/or 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) New ships: Nil.
  - d) Problems encountered: RNO is currently limited to one survey vessel, the other being in a planned refit.
3. New charts & updates:
  - a) ENC: ONHO is in 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 27 ENC cells since 2019; another 4 cells will be ready by the end of 2022.

- b) ENC Distribution method: Through IC-ENC.
- c) 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.
- d) 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 is proposed for updating with most updates being in area I; once this is done, changes will be reported to IHO. At the 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.
- e) National paper charts: Oman continues to produce National paper charts, according to requirements, in different scales; hence charts are continuously maintained. Since the last NIOHC meeting, ONHO plans to publish new charts during this year (JUZUR AD DIMANIYYAT– OM304) and new editions (APPROACHES TO SUHAR PORT – OM257, RA’S DARBAT ALI TO PORT OF SALALAH – OM1200 and PORT OF SALALAH TO BANDAR JANJARI – OM1201)

#### 4. New publications & updates:

- a) New Publications: ONHO plans to publish the annual Oman Maritime Book (ONP 01) in next December for 2023. 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) Means of delivery: Paper and digital.

#### 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 (MTCIT) 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 MTCIT is the authority for GMDSS in Oman. The Telecommunications Regulations Authority (TRA) is responsible to the MTCIT 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) MTCIT 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	A (adequately surveyed)	B (requires re-survey)	C (not systematically surveyed)
< 200m	45%	11%	44%
> 200m	63%	8%	29%

7. Capacity Building Offer of and/or demand for 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:
  - a. 2 officers completed CAT-B course in cartography in May 2022, UK.
  - b. 1 officer completed CAT-B course in hydrography in June 2022, UK.
  - c. 1 officer following CAT-B course in cartography from August to December 2022, UK.
  - d. 2 officers following CAT-A course in hydrography from April to October 2022, UK.
  - e. 1 officer expected to attend GEBCO course in September 2022, US.
  - f. 4 officers attended to IC-ENC technical conferences (VTC) in 2022.
  - g. 1 officers and 4 technicians attend introduction to ArcGIS course in Esri Muscat, Oman.
  - h. 3 technicians following IC-ENC Validation training course in July 2022.
- b) Status of national, bilateral, multilateral or regional development projects with a hydrographic component. (In progress, planned, under evaluation or study)
- c) Description of requests to be considered by the IHO/CBSC

8. Oceanographic activities

- a) General: Different sectors and organizations are responsible for most oceanographic activities in Oman. Most of that oceanographic data is archived within ONHO.
- b) Tide gauge 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 complete the network.

9. Other activities

- a. ONHO has participated in some IHO-WGs, such as WENDWG and MSDIWG. Also, participated in IC-ENC SC23.
- b. Oman is the Chair of ROPME Sea Area Hydrographic Commission (RSAHC) and represented ROPME HC member states in IRCC 14<sup>th</sup> meeting 06-08 Jun 22.
- c. Next November, Oman is planning to hold the 9<sup>th</sup> meeting of RSAHC in Muscat.

d. 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. 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.

Input to the IHO Publication P-5 (*Yearbook*)  
[https://iho.int/uploads/user/pubs/periodical/P5YEARBOOK\\_ANNUAIRE.pdf](https://iho.int/uploads/user/pubs/periodical/P5YEARBOOK_ANNUAIRE.pdf)

Country: **Oman**

Organization: **Oman national Hydrographic Office**

(Please provide the information in English)

<b>Contact information/ Informations de contact / Información de contacto</b>	
-National Hydrographer or equivalent -Directeur du service hydrographique ou équivalent - Director del Servicio Hidrográfico o equivalente	Post: Director Name: CaptYahya Al Balushi Postal address: Royal Navy of Oman Muaskar Al-Murtafah, P.O Box 723 P.C 111 Muscat, Oman Tel: +968 24322170 Fax: +968 24326709 Email: onho@mod.gov.om
-Head of the Hydrographic Office (if different from the person indicated above) -Directeur du Service Hydrographique (si différent de la personne indiquée ci-dessus) -Director del Servicio Hidrográfico (si diferente de la persona indicada anteriormente)	Post: Director Name: CaptYahya Al Balushi Postal address: Tel: +968 99363846 Fax: Email: yahya.albalushi@mod.gov.om
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-Web site -site web -sitio web	
<b>Country information / Informations sur le pays/ Información sobre el país</b>	
-Declared National Tonnage -Tonnage national déclaré -Tonelaje Nacional Declarado	Tonnage: 85330 tons Date: 08/2019
-National day -Fête nationale -Fiesta nacional	18 November
-Date of establishment and Relevant National Legislation -Date de mise en place et législation nationale pertinente -Fecha de constitución y legislación nacional pertinente	Ministerial Decree No. 488/92 (issued by the Minister of Communications) in April 1995. The Under Secretary for Ports and Maritime Affairs (Ministry of Transport, Communications and Information Technology) retains overall responsibility for safety of navigation, aids to navigation, the issue of individual Notices to Mariners, ports and harbours, and ships' registration

-Date first joined IHO -Date d'adhésion à l'OHI -Fecha de adhesión a la OHI	15/10/1992
-Date ratification Convention -Date de ratification de la Convention -Fecha de ratificación de la Convención	31/07/1987
-Remarks on membership -Remarques sur l'adhésion -Comentarios sobre la adhesión	
<b>Agency information/ Information sur l'agence/ Información sobre la agencia</b>	
-Top level parent organisation -Organismemère -Organización asociada de nivel superior	Royal Navy of Oman
-Principal functions of the organisation or the department -Attribution principales de l'organisme ou du département -Principales funciones de la Organización o departamento	Hydrographic surveys undertaken in Sultanate waters; production of nautical charts and publications, including Notices to Mariners (issued monthly); maintenance of the National Hydrographic Archive and of tidal, geodetic and oceanographic databases; and advice on hydrographic matters to all other Government departments, including maritime boundaries, and specifications and quality control of commercial surveys.
-Annual operating budget -Budget annuel -presupuesto anual	
-Total number of staff employed -Effectifstotaux -Número total de personal empleado	
-Number of INT charts published -Nombres de cartes INT publiées -Número de cartas INT publicadas	4, out of an eventual series of 9
-Total number of paper charts published -Nombre total de cartes papier publiées -Número total de cartas de papel publicadas	34
-Number of ENC cells published -Nombres de cellules ENC publiées -Número de células ENC publicadas	27

-Number of Other charts -Nombred'Autrescartes -Número de Otras cartas				
-Type of publications produced -Type d'ouvrages produits -Tipo de publicacionesproducidas	Oman Maritime Book (2022) This is an annual publication.			
-Detail of surveyingvessels/ aircraft -Détail des bâtiments hydrographiques / aéronefs -Detalle de los buques hidrográficos / aeronaves	-Name -Nom -Nombre	-Displacement -Déplacement - Desplazamiento	-Date Launched -Date de mise en service -Fecha de botado	-Number of crew -Nombre de l'équipage - Tripulación
	RNOV AL MAKHIRAH	Equippedwithmultibeam system EM 710s		
	RNOV AL RAHMANIAH	Equippedwithmultibeam system EM 3000 withhullmountedsidescan Sonar		
-Other information of interest -Autresinformationsutiles -Otrainformación de interés	Capable of conducting full bathymetric survey from 200 meter toshore line using multibeam systems. Deep water/offshore surveysundertaken jointly with other nations.			

Input to the IHO Publication C-55 (*Status of Hydrographic Surveying and Charting Worldwide*)

Country: **Oman**

(Please provide the information in English)

<b>C-55 Summary for:</b>				<b>Comments on Charts:</b>
Country:	Oman			
Country Iso Code:	OM			
Country SubCode:				
INT Region:	I & J			
Country/Depend:				
Last updated:	21 August 2022			
Provided by:	ONHO			
<b>Chart coverage</b>	<b>Passage (%)</b>	<b>Coastal (%)</b>	<b>Port (%)</b>	<b>Comments on Surveys:</b>
INT	35	45	80	
RNC				
ENC	28	40	78	
<b>Status of Paper Charts</b>				
Paper charts with depths in meters (%)				
Paper charts referenced to a satellite datum (%)				
<b>Status of surveys</b>	<b>Adequate (%)</b>	<b>Resurvey (%)</b>	<b>No survey (%)</b>	
0-200m	45	11	44	
> 200m	63	8	29	

<b>MSI</b>	<b>Y/N</b>	<b>Comments on MSI:</b>
Local warning	N	
Coastal warning	Partial	Through Muscat Radio for area as far as Ra's Al Hadd.
Nav warning	Y	Through NAVAREA IX Coordinator.
Port warning	Partial	All main ports.
<b>GMDSS</b>	<b>Y/N</b>	<b>Comments on GMDSS:</b>
Master Plan	Y	
Area A1	Y	
Area A2	Y	
Area A3	Y	
NAVTEX	Y	
SafetyNet	Y	



