



NATIONAL REPORT OF KINGDOM OF SAUDI ARABIA

17th North Indian Ocean Hydrographic Commission Meeting

17 – 20 July 2017

Cairo, Egypt

NATIONAL REPORT OF KINGDOM OF SAUDI ARABIA

1. Hydrographic Office Service

Changes from IHO yearbook – (refer Enclosure 1)

2. Hydrographic Surveys

- Coverage of new surveys (2016 – 2017) in Red Sea:-
 - A Memorandum of Understanding (MoU) has been signed for the acquisition of hydrographic survey data with national agencies and the supplied data will be evaluated for data accuracy as per the guidelines mentioned in ‘Guidelines for Quality Control ‘of S44 ‘Standards for Hydrographic Surveys’.
 - New surveys will be planned based on the results of the acquired data.
 - HSV ALMASHE ALBAHRI SULTAN has been engaged in offshore surveying operations. These surveys are mainly useful in compiling medium and small scale charts. Till now we have completed coverage from Offshore Yanbu to Offshore Ash Shuabah (deep waters west of reef line) covering the total area of 35,000 km² approximately.
 - HSV ALMASHE ALBAHRI SULTAN is also been engaged full-fledged hydrographic surveying in the Gulf of Aqabah and till now we have completed 181 km²

3. New Charts & Updates

General Commission for Survey (GCS) has produced following charts in 2016 from results of Hydrographic Survey Project (HSP) 1-5 in Red Sea:-

Chart Status	HSP-1	HSP-2	HSP-3	HSP-4	HSP-5	HSP - Sultan	Total
Area in km ²	3,956	3,819	3,490	8,164	11,426	35,000	65,855
ENCs	4	4	3	9	12	4*	36
PNCs	4	4	3	9	12	4*	36
INT charts	None	None	None	None	None	None	
Coastal Zone Management Charts	7	7	7	14	38	Nil	73

* in progress

QC/QA, encryption and external distribution arrangements for the charts are under active consideration at the GCS.

4. Hydrographic Data Management (HDM) Implementation

As part of Marine Spatial Data Infrastructure, GCS is proud to announce that HDM System implementation has been successfully completed. As GCS is transforming to National Hydrographic Office of Saudi Arabia, the adaption of state of the art technology will be useful in creating a seamless database, maintaining consistency among the products and for creation of nautical publications like list of lights, sailing directions and tide tables.

The Saudi Arabia National Geo Portal can be accessed from the below link:

<http://geoportal.sa/GCS/WebPages/Map/FundyViewer.aspx?language=en-US>

The loading of hydrographic surveys and conversion of standalone ENC's & Paper Charts to the database driven system is in progress and will be completed by the end of 2017. This will enable us to grow as a full-fledged hydrographic office and we are ready to support our neighboring countries to adapt and implement this technology and can provide an in-house training to make them technologically advanced.

5. MSI

Master plan of shore-based facilities for the global maritime distress and safety system (GMDSS master plan) as per 25th July 2013 GMDSS.1/Circ.15

Status of shore-based facilities for the GMDSS

O = Operational

P = Planned or to be decided

COAST STATIONS			MSI BROADCAST SERVICE NAVTEX	COSPAS-SARSAT	
DSC				MCC	LUT
A1	A2	A3 & A4			
O	O	P	O	O	O

Note: GMDSS equipment has been installed in GCS branch at Jeddah

6. C-55

A. Hydrographic Surveying

Status of hydrographic survey of all navigable waters, including internal waters, out to the limits of the EEZ:

Survey coverage, where:

A = percentage which is adequately surveyed.

B = percentage which requires re-survey at larger scale or to modern standards.

C = percentage which has never been systematically surveyed.

	A	B	C
Depths < 200m	55	35	10
Depths > 200m	38	40	22

**Note: The above table will be updated based on Section 2 at later stages*

B. Nautical Charting*

Status of nautical charting within the limits of the EEZ.

A = percentage covered by INT series, or a paper chart series meeting the standards in M-4.

B = percentage covered by Raster Navigational Charts (RNCs) meeting the standards in S-61.

C = percentage covered by ENC's meeting the standards in S-57.

Purpose/Scale	A	B	C
Offshore passage/Small	-	-	-
Landfall and Coastal passage/Medium	33%	Nil	33%
Approaches and Ports/Large	30%	NA	30%
Percentage of Group A showing depths in metres	100%		
Percentage of Group A referenced to a satellite datum	100%		

**The conversion of standalone products into the database driven system is in progress and GCS will update the status to IHO after completing the conversion.*

7. Capacity Building (CB):-

Following courses as part of capacity building have been completed:

No.	Course Title	Duration	No. of Participants
1	MSI Course	May 2016 to June 2016	11
2	HDM Training*	2014 to 2016	10
3	SevenCS	March 2016	5

** HDM training has been conducted during the implementation of the HDM Project*

8. Oceanographic Activities:-

GCS collects oceanographic information from various sources. Most of this information is collected while undertaking hydrographic surveys and from the National Tide Gauge Network (NTGN) and the Marine Science Data Buoy projects.

GCS operates NTGN at Red Sea for real time and advanced prediction of tides (for navigation) and sea level studies. GCS also supports collaboration projects for collecting oceanography data with Saudi universities.

GCS has published Tide Tables for the years 2016 & 2017

9. Other Activities:-

GCS is also preparing customized products as per the requirement of its stake holders and Hydrographers and Cartographers are actively participating in the national exhibitions and seminars. GCS is working in integrating the HDM project with Geographical Information Centre (GIC) to make the products available online as part of self-sustainability.

10. Conclusion:-

GCS in Kingdom of Saudi Arabia continues to develop and gain experience adapting state of the art technologies for hydrographic surveying and nautical publication, committing to assure safety of navigation under IHO/IMO regulations. It is expected that the coastal series of nautical charts will be completed by 2020 for entire KSA coast.

Considering the national goal of vision 2030 GCS is very ambitious in its mission and will strive to achieve this goal.

Enclosure 1: Changes to IHO Yearbook

IHO/OHI Yearbook/Annuaire/Anuario

Country name / nom du pays	Saudi Arabia
Agency name / nom d'agence:	General Commission for Survey

Contact information/ Informations de contact / Información de contacto

-National Hydrographer or equivalent -Directeur du service hydrographique ou équivalent -Director del Servicio Hidrográfico o equivalente	Post: PRESIDENT, GCS Name: His Excellency Major General (retd.) Dr. Abdul Aziz Ibn Ibrahim Ibn Abdullah Al Saab Postal address: Ishara Al Olaya Road and Prince Abdul Malek Bin Marwan Street, PO Box 87918, Riyadh, 11652, KSA Tel: +966 920000427 ext. 1700 Fax: +966 11 4647589 Email: hydro@gcs.gov.sa
-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 General Hydrography Name: Faisal Mohammed Al-Zahrani Postal address: Ishara Al Olaya Road and Prince Abdul Malek Bin Marwan Street, PO Box 87918, Riyadh, 11652 Tel: +966 920000427 ext. 1500 Fax: +966 11 464 7692 Email: f.alzahrani@gcs.gov.sa
-Other point(s) of contact -Autre(s) point(s) de contact -Otros punto(s) de contacto	Mr. Zaher Al Shehri, Manger (Operations and Training, Hydrography) Tel: +966 920000427 ext. 1501 Fax: +966 11 464 7692 Email: z.alshehri@gcs.gov.sa
-Web site -site web -sitio web	www.gcs.gov.sa

Country information / Informations sur le pays/ Información sobre el país

-Declared National Tonnage -Tonnage national déclaré -Tonelaje Nacional Declarado	Tonnage: 1,678,474 Date: 2011
-National day -Fête nationale -Fiesta nacional	23rd September.
-Date of establishment and Relevant National Legislation -Date de mise en place et législation nationale pertinente -Fecha de constitución y legislación nacional pertinente	Saudi Cabinet Resolution dated 13 Feb 2006.
-Date first joined IHO -Date d'adhésion à l'OHI -Fecha de adhesión a la OHI	2007

-Date ratification Convention -Date de ratification de la Convention -Fecha de ratificación de la Convención	27/02/2007
-Remarks on membership -Remarques sur l'adhésion -Comentarios sobre la adhesión	Full member.

Agency information/ Information sur l'agence/ Información sobre la agencia

-Top level parent organisation -Organisme mère -Organización asociada de nivel superior	Hydrographic Department is part of the national mapping agency, namely GCS
-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, related Marine Sciences, nautical charts and publications, tide gauge network and MSDI.
-Annual operating budget -Budget annuel -presupuesto anual	Approx. 80 million Saudi Riyal.
-Total number of staff employed -Effectifs totaux -Número total de personal empleado	92
-Number of INT charts published -Nombres de cartes INT publiées -Número de cartas INT publicadas	NIL
-Total number of paper charts published -Nombre total de cartes papier publiées -Número total de cartas de papel publicadas	NIL (30 charts awaiting distribution arrangements) on scale 1:50,000 or larger.
-Number of ENC cells published -Nombres de cellules ENC publiées -Número de células ENC publicadas	Nil – 30 charts awaiting distribution arrangements on scale 1:50,000 or larger.
-Number of Other charts -Nombre d'Autres cartes -Número de Otras cartas	60 coastal management charts on scale 1:25,000 for special applications
-Type of publications produced -Type d'ouvrages produits -Tipo de publicaciones producidas	Saudi Tide Tables for 2017.

-Detail of surveying vessels/ aircraft -Détail des bâtiments hydrographiques / aéronefs -Detalle de los buques hidrográficos / aeronaves	-Name -Nom -Nombre	-Displacement -Déplacement -Desplazamiento	-Commissioning Date -Date de mise en service -Fecha de puesta en servicio	-Number of crew -Equipage -Tripulación
	HSV AIMaseh AIBahri Sultan with two survey launches	499 grt 4.6 tons each	22 Jun 2015 22 Jun 2015	24 (including survey team) 3 each
	AIMaseh AIBahri 1 survey launch	25 tons	Apr 2013	8 (including survey crew)
-Other information of interest -Autres informations utiles -Otra información de interés	(A) Saudi Ports Authority (SPA) for Management of Ports Activities (B) Presidency of Meteorology and Environment (PME) for Management of Weather and Marine Environment within Saudi Marine areas. (C) Aramco for offshore oil and gas explorations. With National mandate for hydrography, GCS has embarked upon national capacity building in the form of modern hydrographic surveys, production of ENC's, and training in hydrography/ related marine sciences and marine cartography, with substantial progress in meeting the national responsibilities with a progressive charting scheme and under international, regional and national obligations. King Abdullah Economic City.			