

ISLAMIC REPUBLIC OF IRAN

**Ministry of Roads and Urban
Development**



Ports and Maritime Organization
(PMO)

**National Report to the 7th ROPME Sea Area
Hydrographic Commission**

Muscat
Sultanate of Oman
20-22 Feb. 2017

Executive Summary

Background:

The Islamic Republic of Iran joined IHO in 1961, and all the hydrographic activities therein are organized by the Iranian National Hydrographic Committee (INHC).

The main task of this Committee is to provide services to enhance the safety of navigation within Iranian coastal waters, territorial sea, EEZ and inland waters. The principal service is the provision of nautical information, including nautical charts, notices to mariners, navigational warnings, etc.

The provision of accurate and up-to-date charts fosters significant economic and commercial benefits through facilitation of maritime trade and other marine activities.

Mission:

The mission of the Iranian National Hydrographic Committee is to ensure the provision of adequate and timely hydrographic information, to the international maritime community and other stakeholders and purposes, nation-wide (e.g. offshore constructions, research activities etc.), through the co-ordination of local hydrographic organizations.

Objectives:

The objectives of the National Hydrographic Committee are as follows:

- 1- Co-ordination of national hydrographic activities;
- 2- Unification of national nautical charts, documents and publications; and
- 3- Bilateral or mutual co-operation with IHO members and regional States.

1. Hydrographic Services

PORTS AND MARITIME ORGANIZATION (PMO) Directorate of Marine Operation and Maritime Safety No. 1, Shahidi Street, Shahid Haghani Highway, Vanak Square Tehran, IRAN	
Department of which the Hydrographic Officer is Part	Ministry of Roads and Urban Development
Principal functions of the H.O.	Safety of Navigation, Hydrographic Survey, Notice to Mariners, Chart Production, ENC Production MSI Services
National Day	11 February
Telephone: Fax: E-mail of Contact Person:	+9821 84932717, +9821 84932152,+9821 84932810 +9821 8493 2190 akrostami@pmo.ir Akbar ROSTAMI baradaran@pmo.ir Gita EBRAHIMI
Date of establishment and Relevant National Legislation	June 1961

Name and Rank of Director or Head	Mr. ALI REZA KHOJASTEH Director General of Safety and Marine Environment Protection Tel: +9821 84932171 Fax: +9821 8493 2190 E-mail: akhojasteh@pmo.ir		
Tonnage	2016= 4885660.93 GT		
Total Budget	35, 000 ,000 €		
Staff employed- Hydrographers (Name and rank of managing staff)	Mr. E. KAZEMI Mr. S. R. NOURBAKHS Mr. P. ZAREIAN Ms. G. B. EBRAHIMI		
Cartographers (Name and rank of managing staff)	Ms. A. MOJTAHEDI Ms. A. SADEGHIAN Ms. M. ABDOL HOSSEIN Mr. KH. SEPAHVAND Mr. M. JOKAR		
Administrators (Name and rank of managing staff)	Mr. A. ROSTAMI Mr. J. VAHEDI Mr. A. SOLTAN POUR		
Other staff	150 Persons		
No. of Paper Charts Published	2912 Digital Charts in CARIS format		
No. of ENC Charts Produced	530 Cells		
Surveying vessels/Aircraft	Displacement	Date Launched	Crew
IRAN ABNEGAR Hydro. vessel	200	2000	16
EKTESHAF	1288	1984	34
NAYBAND	1188	2001	36
PERSIAN GULF 85	935	2005	15
Dolphins 1-5	36	2001	3
AKAM	1311	1966	20
Metal Vessels (Abnegar 1)	9	2003	4
Fiber glass boats (Abnegar 2)	7	2008	4
Other information of interest	<p>Ports and Maritime Organization (PMO) according to national law has responsibility of all maritime activities including:</p> <ol style="list-style-type: none"> 1- Maritime Safety and the Protection of Marine Environment; 2- Aids to navigation in I.R. of Iran's territorial waters and waterways; 3- All the activities related to hydrography, paper and ENC Chart production are being coordinated in National Hydrographic Committee (IRNHC) which is established in 2003, in I.R. of Iran's Ports and Maritime Organization. <p>* The other governmental organizations such as NCC (National Cartography Center) & NGO (National Geographical Organization) have the responsibility of hydrographic survey and also paper and ENC Charts production in territorial waters and waterways.</p>		

2. Hydrographic Surveys

New technologies and /or equipment:

- DGPS with radio ability
- Motion sensors,
- Single beam echo sounders,
- Multi-beam echo sounders
- Seabed classificatory
- Side-scan sonar
- Sub-bottom profiler
- Magnetometer
- Sound velocity probes (SVP) & CTD sensors
- Electronic tide gauges
- ADCP & current meters
- Hydrographic data collection software
- Multibeam data processing software
- Paper, digital & ENC charts producing software
- Physical & chemical laboratories
- Monitoring maritime phenomenon
- Establishment of hydrographic model

3. New Charts & Updates

ENCs

- Producing about 110 ENC cells (100 in Persian Gulf & Gulf of Oman + 10 in Caspian Sea)
- 12 cells under production

ENC Distribution Method

- An agreement in this regard has been signed with PRIMAR

RNCs

- Not applicable – Iranian charts are in vector format.

INT Charts

- Following Iranian charts are according to INT chart scheme in the area "I".

National No.	INT Chart No.	Product Title	Scale
IR3012	7207	Approaches to Bandar-e Shahid Bahonar and Bandar-e Shahid Rajai	1:50000
IR3025	7228	Khalij-e Nay Band	1:25000
IR3031	7306	Jazire-ye Kharg	1:25000
IR3050	7228	Bandar-e Shahid Rajae	1:10000
IR3051	7283	Bandar-E Emam Khomeini	1:25000
IR3052	7280	Khowr-e- Musa Middle Part	1:25000
IR3054	7231	Approaches to Bandar-e Kaveh	1:30000
IR3056	7257	Damaghe- ye Motaf	1:25000
IR3060	7234	Jazire-ye Kish	1:25000
IR3070	7205	Bandar-E Shahid Rajai	1:25000
IR3072	7297	Bahregan to Oil Field to Emam Hassan	1:100000
IR3073	7304	Bandar-e Genaveh to Jazireh-ye Kharg	1:100000
IR3074	7307	Bandar-e Bushehr to Bandar-e Rostami	1:100000
IR3075	7251	Bandar-e Rostami to Kangan Oil Field	1:100000
IR3076	7253	Kangan Oil Field to Kangan	1:100000
IR3077	7256	Bandar-e Pars to Tombak & Teben	1:100000
IR3078	7242	Bandar-e Javadol_ Aemmeh to Jazireh-ye Lavan	1:100000
IR3079	7221	Jazireh-ye Kish to Jazireh-ye Hendurabi	1:100000
IR3080	7217	Bandar-e Lengeh to Jazireh-ye Siri	1:100000
IR3081	7214	Jazireh-ye Tonb-e Bozorg to Jazireh-ye Abu Musa	1:100000
IR3087	7320	Moghuyeh	1:25000
IR3088	7321	Hasineh	1:25000
IR3082	7225	Khuran & Jazireh-ye Qeshm (East Part)	1:100000
IR3086	7319	Bostaneh	1:25000
IR3089	7322	Bandar-e Aftab	1:25000
IR3090	7323	Bandar-e Charak to Jazire- ye Kish	1:50000
IR3091	7324	Bandar-e Chiruye	1:25000
IR3095	7325	Jazireh-ye Larak	1:25000
IR3111	7269	Damaghe- ye Motaf East	1:25000
IR3112	7271	Dayyer- West	1:25000
IR3040	7240	Khalij-e Nay Band and Approaches to Bandar-e Pars	1:30000
IR3016	7237	Bandare-e Lengeh	1:25000
IR3027	7231	Bandare-e Taheri	1:25000
IR3096	7262	Khalij-e Nay Band (West)	1:25000

**Region I
(Persian Gulf, Arabian Sea)
Islamic Republic of Iran**

Catalogue of International Charts

**Part B - Region I
Jan 2017**

PERSIAN GULF – NORTHERN PART

INT. No.	Prod.	National No.	TITLE	CHART LIMITS				date	Scale		FORMAT	Printer (Nat. No.- Date NE)
				South	North	West	East	1 st Ed/NE	1:	Lat		
7280 ¹	IR	3052	Khowr-e- Musa Middle Part	30°12'.1 N	30°25'.4 N	48°51'.0E	49°01'.0E	06/14	25 000		64 x 98	
7283	IR	3051	Bandar-e Emam Khomeini	30°22'.1 N	30°30'.8 N	48°58'.0E	49°13'.3E	07/15	25 000		98 x 64	
7297 ²	IR	3072	Bahregan to Oil Field to Emam Hassan	29°40'.0 N	30°16'.0 N	49°23'.6E	50°30'.0E	06/15	100 000	28°	108 x 67	
7302	IR	3021	Approaches to Bandar-e Genaveh	29°23'.50 N	29°37'.00 N	50°22'.50E	50°32'.50E	00/05	25 000		64 x 100	
7304 ²	IR	3043 3073	Bandar-e Genaveh to Jazireh-ye Kharg	29°08'.4 N	29°45'.0 N	49°38'.4E	50°44'.0E	07/15	100 000	28°	107 x 68	
7305	IR	3017	Bushehr	28°55'.8 N	29°04'.8 N	50°41'.0E	50°56'.4E	99/14	25 000		100 x 67	
7306	IR	3031	Jazire-ye Kharg	29°10'.0 N	29°24'.0 N	50°15'.0E	50°25'.0E	02/15	25 000		65 x 104	
7307 ²	IR	3044 3074	Bandar-e Bushehr to Bandar-e Rostami	28°32'.8 N	29°12'.3 N	50°02'.0E	51°08'.0E	04/15	100 000	28°	110 x 75	

PERSIAN GULF – CENTRAL PART

INT. No.	Prod.	National No.	TITLE	CHART LIMITS				date	Scale		FORMAT	Printer (Nat. No.- Date NE)
				South	North	West	East	1 st Ed/NE	1:	Lat		
7240	IR	3040	Khalij-e Nayband and Approaches to Bandar-e Pars	27°22'.5 N	27°39'.0 N	52°26'.3E	52°38'.5E	03/15	30 000		67 x 102	
7242	IR	3078	Bandar-e Javadol_Aemmeh to Jazireh-ye Lavan	26°13'.0 N	27°12'.6 N	52°51'.0E	53°36'.0E	07/15	100 000	28°	75 x 110	
7247	IR	3059	Approaches to Bandar-E Javadol Aemmeh	26°55'.1 N	27°08'.8 N	52°57'.5E	53°07'.3E	13/15	25 000		64 x 100	
7251	IR	3075	Bandar-e Rostami to Kangan Oil Field	27°55'.2 N	28°36'.0 N	50°20'.2E	51°26'.6E	08/15	100 000	28°	110 x 75	
7253	IR	3076	Kangan Oil Field to Kangan	27°20'.6 N	28°01'.0 N	51°04'.2E	52°11'.2E	04/15	100 000	28°	110 x 75	
7256	IR	3077	Bandar-e Pars to Tombak & Teben	26°47'.9 N	27°47'.7 N	52°07'.2E	52°52'.7E	04/15	100 000	28°	75 x 110	
7228	IR	3025	Khalij-e Nay Band	27°22'.5 N	27°35'.5 N	52°30'.0E	52°40'.0 E	01/15	25 000		65 x 96	
7231	IR	3027	Bandare-e Tahery	27°34'.0 N	27°41'.0 N	52°19'.0E	52°29'.0 E	01/16	25 000		65 x 51	
7257	IR	3056	Damaghe- ye Motaf	27°42'.0 N	27°56'.0 N	51°24'.0E	51°35'.0 E	03/15	25 000		72 x 103	
7262	IR	3096	Khalij-e Nay Band -West	27°22'.5 N	27°35'.8 N	52°20'.9E	52°30'.9 E	09/15	25 000		65 x 98	
7269	IR	3111	Damaghe- ye Motaf East	27°39'.7 N	27°53'.0 N	51°33'.8E	51°43'.8 E	11/15	25 000		65 x 98	
7271	IR	3112	Dayyer- West	27°39'.7 N	27°53'.0 N	51°43'.0E	51°53'.1 E	12/15	25 000		66 x 98	

1- Omit "Plan B" INT 7299 (Produced by GB) because of new INT 7280 (Produced by IR); Khowr-e- Musa Middle Part.

2- The coordination of INT 7297, INT 7304 and INT 7307 were modified, so their Overlap is corrected.

* INT. No. should be assigned to the reds.

PERSIAN GULF – EASTERN PART

INT. No.	Prod.	National No.	TITLE	CHART LIMITS				date	Scale		FORMAT	Printer (Nat. No.- Date NE)
				South	North	West	East	1 st Ed/NE	1:	Lat		
7205	IR	3070	Bandar-E Shahid Rajai	26°57'.0 N	27°10'.6 N	56	56	07/15	25 000		66 x 100	
7207	IR	3012	Approaches to Bandar-e Shahid Bahonar and Bandar-e Shahid Rajai	26°54'.0 N	27°11'.5 N	55°56'.9E	56°27'.7E	08/15	50 000	26° 43'	102 x 65	
7208	IR	3002	Bandar-e Shahid Bahonar to Jazire-ye Hormoz	27°01'.2 N	27°11'.4 N	56°09'.9E	56°27'.7E	99/11	30 000		98 x 63	
7210	IR	3010	Jazire-ye Qeshm to Jazayer-e Hormoz & Larak	26°45'.5 N	27°12'.0 N	56°07'.9E	56°27'.5E	99/15	50 000		65 x 98	
7214	IR	3081	Jazireh-ye Tonb-e Bozorg to Jazireh-ye Abu Musa	25°50'.3 N	26°50'.5 N	54°56'.5E	55°41'.0E	05/15	100 000	28°	75 x 110	
7217	IR	3080	Bandar-e Lengeh to Jazireh-ye Siri	25°45'.0 N	26°44'.6 N	54°16'.0E	55°01'.3E	06/15	100 000	28°	75 x 110	
7221	IR	3079	Jazireh-ye Kish to Jazireh-ye Hendurabi	25°53'.3 N	26°52'.8 N	53°33'.2E	54°18'.0E	05/15	100 000	28°	75 x 110	
7225	IR	3082	Khuran & Jazireh-ye Qeshm (East Part)	26°32'.6 N	27°12'.2 N	55°30'.8E	56°36'.8E	08/15	100 000	28°	110 x 75	
7234 ³	IR	3060	Jazire-ye Kish	26°28'.8 N	26°38'.0 N	53°53'.2E	54°08'.6E	05/15	25 000		100 x 68	
7237 ⁴	IR	3016	Bandar-e Lengeh	26°23'.2 N	26°36'.5 N	54°47'.2E	54°57'.0E	00/12	25 000		65 x 98	
7228	IR	3050	Bandar-e Shahid Rajae	27°04'.3 N	27°07'.8 N	56°01'.8 E	56°07'.8 E	07/15	10 000		99 x 64	
7231	IR	3054	Approaches to Bandar-e Kaveh	26°56'.3 N	27°03'.8 N	55°57'.8 E	56°09'.8 E	03/15	30 000		66 x 46	
7319	IR	3086	Bostaneh	26°23'.4 N	26°32'.2 N	54°34'.0 E	54°49'.1 E	09/15	25 000		100 x 65	
7320	IR	3087	Moghuyeh	26°23'.2 N	26°36'.7 N	54°26'.0 E	54°36'.0 E	09/15	25 000		64 x 99	
7321	IR	3088	Hasineh	26°28'.1 N	26°41'.8 N	54°18'.0 E	54°27'.8 E	09/15	25 000		65 x 100	
7322	IR	3089	Bandar-e Aftab	26°36'.6 N	26°45'.8 N	53°50'.0 E	54°05'.5 E	08/15	25 000		100 x 67	
7323	IR	3090	Bandar-e Charak to Jazire- ye Kish	26°28'.8 N	26°46'.5 N	53°50'.0 E	54°20'.0 E	09/15	25 000		99 x 65	
7324	IR	3091	Bandar-e Chiruye	26°32'.0 N	26°45'.4 N	53°32'.1 E	53°41'.9 E	09/15	25 000		64 x 98	
7325	IR	3095	Jazireh-ye Larak	26°46'.7 N	27°00'.0 N	56°16'.0 E	56°25'.8 E	11/14	25 000		64 x 98	

GULF OF OMAN

INT. No.	Prod.	National No.	TITLE	CHART LIMITS				date	Scale		FORMA T	Printer (Nat. No.- Date NE)
				South	North	West	East	1 st Ed/NE	1:	Lat		
7184	IR	5001	Part A: Khalij-e Chabahar East Part	25°14'.9 N	25°28'.6 N	60°29'.6E	60°39'.1E	06/15	25 000		64 x 101	
		5002	Part B: Khalij-eChabahar Wes Part	25°14'.9 N	25°28'.6 N	60°23'.8E	60°33'.3E	06/15	25 000		64 x 101	
7190	IR	5003	Jask	25°36'.3 N	25°45'.1 N	57°35'.0E	57°49'.6E	09/15	25 000		98 x 65	

3- Omit "Plan F" INT 7236 (Produced by GB) because of new INT 7234 (Produced by IR); Jazire-ye Kish.

4- Omit "Plan H" INT 7236 (Produced by GB) because of new INT 7237 (Produced by IR); Bandar-e Lengeh.

*Suggestion: The scale or chart limits of Plan H in INT 7236, which is produced by GB, should be checked.

National Paper Charts

- Up to 1979: Gulf of Oman from Gwadar Bay to Sirik, 10 charts
- 1989 – 1998: Persian Gulf and Caspian Sea, 26 paper charts
- 1998 – 2016: In all Iranian Coastal water, more 2774 sheets
- 2017: 36 sheets of paper charts are under production

1-Digital Nautical Charts				
Scale	Persian Gulf & Gulf of Oman		Caspian Sea	
	Completed charts	Undergone charts	Completed charts	Undergone charts
1:25000 & larger	2729	4	40	4
Between 1:25000 & 1:100000	19	-	1	-
1:100000 & smaller	77	1	37	-
Total	2825	5	78	4
2-Electronic Navigational Charts (ENC)				
Persian Gulf & Gulf of Oman			Caspian Sea	
520 cells			10 cells	
3- International Charts (Int. charts)				
Persian Gulf & Gulf of Oman 42 charts				
4 -Tidal Observation of Persian Gulf & Gulf of Oman				
Permanent tidal stations			Temporary tidal stations	
14			60	
5- Caspian Sea level Monitoring				
6 Station				

4. New publications, updates and future planning

New publications and location of tidal stations

- Tidal software and table 2017
- Tide prediction is available on this web site: (www.iranhydrography.ncc.org.ir)
- Online sea level monitoring in 12 tide gauge station along Persian Gulf, Gulf of Oman and Caspian Sea

Tidal Observation:

Permanent tidal Stations: 14 Stations

Temporary tidal stations: 60 Stations

Permanent tidal Stations are in Persian Gulf and Gulf of Oman indicated in following Table:

NO	Places	Lat.(N)	Long.(E)	Establish Date
1	KHORRAMSHAHR	30° 26' N	48° 12' E	2001
2	BANDAR-E EMAM KHOMEINI	30° 26' N	49° 05' E	2001
3	BANDAR-E EMAM HASAN	29° 50' N	50° 15' E	1989
4	BANDAR-E BUSHEHR	28° 59' N	50° 50' E	1989
5	BANDAR-E AMERI	28° 31' N	51° 05' E	2011
6	BANDAR-E DAYYER	27° 50' N	51° 56' E	2009
7	BANDAR-E KANGAN	27° 50' N	52° 03' E	1989
8	JAZIREH KISH	26° 34' N	54° 00' E	2007
9	BANDAR-E LENGEH	26° 33' N	54° 53' E	2004
10	BANDAR-E SHAHID RAJAEI	27° 06' N	56° 04' E	1990
11	SHIP YARD-PERSIAN GULF	27° 02' N	55° 57' E	2011
12	ESKELE-YE BAHMAN(JAZ. QESHM)	26° 57.1' N	56° 16.8' E	2011
13	JASK	25° 39' N	57° 46' E	1998
14	CHABAHR	25° 17' N	60° 37' E	1990

Update publications

- 69 updates have been produced and distributed in 2015-2016.

Future planning

- Production of harbor & berthing chart
- Completion of approaches & coastal charts
- Development of tidal stations & current observations
- Real time accurate positioning in marine area
- Producing MSL Model for Persian Gulf and Gulf of Oman
- Producing SST Model for Persian Gulf and Gulf of Oman
- Producing Marine Geoid for Persian Gulf and Gulf of Oman
- Producing Tidal Model for Persian Gulf and Gulf of Oman
- Development real time tidal observation for remaining tide gauges along the Persian Gulf and Gulf of Oman.

5. Maritime Safety Information (MSI)

Existing infrastructure for transmission:

PMO (Ports & Maritime Organization) of I.R. of Iran is in the national authority of Islamic Republic of Iran for collecting and dissemination coastal and local warnings in sub – region of NAVAREA IX.

- 1- VTS Centers: established 3 stations (2 in Persian Gulf and 1 in Caspian Sea) are working in trial mode.
- 2- AIS Network: All main ports are equipped with AIS network.
- 3- Coastal warnings: Coastal MSI is promulgated by national coordinator by means of WWNWS.
- 4- Local warnings: These warnings cover inshore and inland waters, often within the limits of jurisdiction of harbor or port authorities.
- 5- The present situations regarding to the promulgation of MSI originated by I.R. of Iran as follows:

a. Broadcast systems: VHF + NAVTEX

i. VHF

Local and coastal navigation warnings including meteorological warnings and forecasts are promulgated verbally for attention of local traffic and non conventional vessels which are not equipped to NAVTEX receiver.

ii. NAVTEX

I.R. of Iran operates three NAVTEX stations to broadcast MSI, in BUSHEHR and Shahid RAJAEI Port in North part of the Persian Gulf (Within NAVAREA IX) and Freydoonkenar Port in the Caspian Sea area.

b. NAVTEX in Persian Gulf and Gulf of Oman:

i. Bandar Bushehr

Duration: 10 Min. Meteorological Information 0400, 1600

Coverage: 150 NM

Frequencies: 518 KHz for international services & 490 KHz for national services.

Transmitting hours for 518 KHz: 0000, 0400, 0800, 1200, 1600, 2000UTC

Transmitting hours for 490 KHz: 0030, 0430, 0830, 1230, 1630, 2030UTC

ii. Bandar Abbas

Duration: 10 Min. Meteorological Information 0450, 1650

Coverage: 150 NM

Frequencies: 518 KHz for international services & 490 KHz for national services.

Transmitting hours for 518 KHz: 0050, 0450, 0850, 1250, 1650, 2050UTC

Transmitting hours for 490 KHz: 0120, 0520, 0920, 1320, 1720, 2120UTC

c. Maritime Safety Information in Caspian Sea:

At present local and coastal navigational warnings are transmitted by VHF and a NAVTEX station in Freydoonkenar Port in the Caspian Sea.

i. Bandar Freydoonkenar

Duration: 10 Min. Meteorological Information 0500, 1700 Coverage: 150 NM
Frequencies: 518 KHz for international services & 490 KHz for national services.
Transmitting hours for 518 KHz: 0100, 0500, 0900, 1300, 1700, 2100UTC
Transmitting hours for 490 KHz: 0130, 0530, 0930, 1330, 1730, 2130UTC

d. Type of messages transmitting by the NAVTEX stations:

- i. Navigational Warnings
- ii. Meteorological Warnings
- iii. Meteorological Forecast
- iv. Search & Rescue Information and parrot attack Warnings
- v. Shooting Warnings

Trainings:

- Courses of hydrography & nautical cartography in NCC & NGO Academic Centers
- MSc. Courses of hydrography in Tehran University and Azad University in Tehran

6. IHO C-55 29 Feb. 2014

Basic Data:

Maritime Nation /Area: Islamic Republic of Iran
 Nation or Area code: IR
 Region ID: AS
 Nation or Area (N or A): N
 Length of Coastline (Km): about 5700 Km (Including Estuaries and Islands)
 Data for C-55 Edition No.: 5

Status of Hydrographic Surveys:

A1/A2 = % adequately surveyed 0-200m / >200m
 B1/B2 = % requiring re-survey at larger scale or to modern standards 0-200m / >200m
 C1/C2 = % which has never been systematically surveyed 0-200m / >200m

A1	A2	B1	B2	C1	C2
80	85	30	0	10	0

Status of Nautical Charting:

A = % covered by INT Charts, B = % covered by RNC C = % covered by ENC

Offshore passage /Small			Landfall Coastal passage/Medium			Approaches Ports/Large		
A	B	C	A	B	C	A	B	C
0	0	0	50	0	70	90	0	90

Percentage of metric paper charts 100 Percentage of paper charts on a satellite datum 0

7. Capacity Building

- MSc. program of hydrography in Tehran University are available, also recently Azad University in Tehran has been established the same courses.
- PHD and MSc. course of oceanography and marine physics are being offered in Modarres, Hormozgan, Khorramshahr, Chabahar, Mazandaran, Azad University in Tehran and Ahvaz branches and also PHD degree in Iran Meteorological Organization (IRIMO) and Iranian National Institute of Oceanography and Atmospheric Science.
- In addition, to promote technical hydrographic knowledge between RSAHC States short courses can be carry out in English, by Islamic Republic of Iran.

8. Oceanographic Activities

- Establishment of Water Level Monitoring Network of Persian Gulf, Gulf of Oman & Caspian Sea
- Current Metering
- Sea bed Classification
- Collecting physical and chemical parameters of the characteristics
- Modeling & Monitoring of coastal of I.R. of IRAN

9. Other activities

- Participate in IHO Conference and its other committees, subcommittees and working groups
- Receive collected meteorological data via Iran Meteorological Organization to enhance the safety of navigation through the Persian Gulf and Caspian Sea by the means of VHF and NAVTEX.
- Member of S23 Working group
- Establishment of MSDI ([Marine Spatial Data Infrastructure](#)) Committee

10. Conclusions

Iranian National Hydrographic Committee (IRNHC) is in charge of publishing the charts for Coastal and territorial waters of I. R. of Iran (the Persian Gulf, Gulf of Oman & Caspian Sea), INT charts will be published accordingly, and as a national coordinator of NAVAREA IX, (navigational warnings are timely promulgated in the area of jurisdiction).

All hydrographic surveying activities are within the requirements of IHO Standards.

ENC production also has been established and efforts are concentrated to produce ENCs for Coastal and territorial waters of I.R. of Iran (the Persian Gulf, Gulf of Oman & Caspian Sea), in the near future.

There are capabilities for providing all hydrographic services to other RSAHC Member States.

Thank you for your attention.