

**ISLAMIC REPUBLIC OF IRAN**

**Ministry of Roads and Urban  
Development**



**Ports and Maritime Organization**  
**(PMO)**

**National Report to the 8<sup>th</sup> ROPME Sea Area  
Hydrographic Commission**

**Islamabad  
Islamic Republic of Pakistan  
18-20 February 2019**

## **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. The main task of this Committee is to monitor the implementation of activities, such as hydrography, production and publishing of navigational charts, with the aim of enhancing the safety of navigation in Iranian waters and ports. 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 domestic parties (e.g. offshore constructions, research activities etc.).

### **Objectives:**

The objectives of the Committee are:

- 1- Co-ordination of national hydrographic activities;
- 2- Establishing full coverage of chart mosaic for the Iranian waters and ports;
- 3- Harmonization of national nautical charts, documents and publications; and
- 4- Establishing bilateral or multilateral co-operation with other IHO members and regional States.

## **1. Hydrographic Office/Service**

<b>PORTS AND MARITIME ORGANIZATION (PMO)</b> <b>Directorate General of Maritime Safety and</b> <b>Marine Environment Protection</b> <b>No. 1, Shahidi Street, Shahid Haghani Highway, Vanak Square</b> <b>Tehran, Iran</b>	
<b>Department of which the Hydrographic Officer is Part</b>	Ministry of Roads and Urban Development
<b>Principal functions of the H.O.</b>	Safety of Navigation Hydrographic Survey Notice to Mariners Chart Production ENC Production MSI Services
<b>National Day</b>	-
<b>Telephone:</b> <b>Fax:</b>	+9821 84932717, +9821 84932177, +9821 84932810 +9821 8493 2190
<b>E-mail of Contact Person:</b>	<a href="mailto:akrostami@pmo.ir">akrostami@pmo.ir</a> Akbar ROSTAMI <a href="mailto:sparizi@pmo.ir">sparizi@pmo.ir</a> Saeid PARIZI <a href="mailto:gebrahimi@pmo.ir">gebrahimi@pmo.ir</a> Gita B. ERAHIMI
<b>Date of establishment and Relevant National Legislation</b>	June 1961
<b>Name and Rank of Director or Head</b>	<b>Mr. ALI REZA KHOJASTEH</b> Director General of Maritime Safety and Marine Environment Protection Tel: +9821 84932171 Fax: +9821 8493 2190 E-mail: <a href="mailto:akhojasteh@pmo.ir">akhojasteh@pmo.ir</a>

<b>Tonnage</b>	<b>2018 = 3,103,698 GT</b>
<b>Staff employed - Hydrographers (Name and rank of managing staff)</b>	Mr. M. AKBARI Mr. S. R. NOURBAKHS Mr. P. ZAREIAN
<b>Cartographers (Name and rank of managing staff)</b>	Ms. A. MOJTAHEDI Ms. A. SADEGHIAN Ms. M. ABDOL HOSSEIN Mr. A. VARNIK Mr. KH. SEPAHVAND Mr. M. JOKAR
<b>Administrators (Name and rank of managing staff)</b>	Mr. A. ROSTAMI Mr. E. KAZEMI Mr. A. SOLTAN POUR
<b>Other staff</b>	150 Persons
<b>No. of Paper Charts Published No. of ENC Charts Produced</b>	<b>2,927 Digital Charts in CARIS format 138 Cells</b>
<b>Surveying vessels/Aircraft</b>	<b>Displacement    Date Launched    Crew</b>
IRAN ABNEGAR hydrographic 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)	-                         2008                      4
<b>Other information of interest</b>	<p>According to the Iranian national law, Ports and Maritime Organization (PMO) has the responsibility for all maritime activities, including:</p> <ol style="list-style-type: none"> <li>1- Maritime safety and marine environment protection;</li> <li>2- Aids to navigation in Iranian territorial waters and waterways;</li> <li>3- All the activities related to hydrography, as well as ENC and paper chart production are coordinated by the National Hydrographic Committee, established in 2003 in PMO.</li> </ol> <p>* Other governmental organizations, such as NCC (National Cartography Center) &amp; NGO (National Geographical Organization) have the responsibility of hydrographic survey and also ENC and paper chart production in territorial waters and waterways.</p>

## **2. Hydrographic Surveys**

### **a) Since February 2017, our new surveys have covered:**

- Parts of Persian Gulf, including coastal areas of Bushehr, Khark Island, Kangan, Genaveh, Ameri, Lavar, South Pars Oil Field and Kowr-e Musa.
- Amirabad Port in Caspian Sea.

**b) New technologies and/or equipment:**

- DGPS with radio ability
- Motion sensors
- Single beam echo sounders
- Multi-beam echo sounders
- 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

**c) New ships which are doing the hydrographic surveys are: N/A**

**d) Problem encountered: N/A**

**3. New Charts & Updates**

**a) ENCs:**

- Released ENCs until February 2017: 34 cells
- Feb. 2017- Feb. 2019, I.R. of Iran has produced:
  - 29 new ENC cells released from Persian Gulf and Gulf of Oman, and 2 ENCs from Caspian Sea; and
  - 33 updated cells & 26 edited cells

**b) ENC Distribution Method**

- An agreement in this regard has been signed with PRIMAR.

**c) RNCs**

- Not applicable – Iranian charts are in vector format.

**d) INT Charts**

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

No.	National No.	INT Chart No.	Product Title	Scale
1	IR3002	7208	Bandar-e Shahid Bahonar to Jazire-ye Hormoz	1:30000
2	IR3010	7210	Jazire-ye Qeshm to Jazayer-e Hormoz & Larak	1:50000
3	IR3012	7207	Approaches to Bandar-e Shahid Bahonar and Bandar-e Shahid Rajai	1:50000
4	IR3016	7237	Bandare-e Lengeh	1:25000
5	IR3017	7305	Bushehr	1:25000
6	IR3021	7302	Approaches to Bandar-e Genaveh	1:25000
7	IR3025	7228	Khalij-e Nay Band	1:25000
8	IR3027	7309	Bandare-e Taheri	1:25000
9	IR3031	7306	Jazire-ye Kharg	1:25000
10	IR3040	7240	Khalij-e Nay Band and Approaches to Bandar-e Pars	1:30000
11	IR3050	7308	Bandar-e-Shahid Rajae	1:10000
12	IR3051	7283	Bandar-e-Emam Khomeini	1:25000
13	IR3052	7280	Khowr-e-Musa Middle Part	1:25000
14	IR3054	7231	Approaches to Bandar-e Kaveh	1:30000
15	IR3056	7257	Damaghe- ye Motaf	1:25000
16	IR3059	7247	Approaches to Bandar-E Javadol Aemmeh	1:25000
17	IR3060	7234	Jazire-ye-Kish	1:25000
18	IR3070	7205	Bandar-e-Shahid Rajai	1:25000
19	IR3072	7297	Bahregan to Oil Field to Emam Hassan	1:100000
20	IR3073	7304	Bandar-e Genaveh to Jazireh-ye Kharg	1:100000
21	IR3074	7307	Bandar-e Bushehr to Bandar-e Rostami	1:100000
22	IR3075	7251	Bandar-e Rostami to Kangan Oil Field	1:100000
23	IR3076	7253	Kangan Oil Field to Kangan	1:100000
24	IR3077	7256	Bandar-e Pars to Tombak & Teben	1:100000
25	IR3078	7242	Bandar-e Javadol_ Aemmeh to Jazireh-ye Lavan	1:100000
26	IR3079	7221	Jazireh-ye Kish to Jazireh-ye Hendurabi	1:100000
27	IR3080	7217	Bandar-e Lengeh to Jazireh-ye Siri	1:100000
28	IR3081	7214	Jazireh-ye Tonb-e Bozorg to Jazireh-ye Abu Musa	1:100000
29	IR3087	7320	Moghuyeh	1:25000
30	IR3088	7311	Hasineh	1:25000
31	IR3082	7225	Khuran & Jazireh-ye Qeshm (East Part)	1:100000
32	IR3086	7263	Bostaneh	1:25000
33	IR3089	7310	Bandar-e Aftab	1:25000
34	IR3090	7323	Bandar-e Charak to Jazire- ye Kish	1:50000
35	IR3091	7274	Bandar-e Chiruye	1:25000
36	IR3095	7276	Jazireh-ye Larak	1:25000
37	IR3096	7262	Khalij-e Nay Band (West)	1:25000
38	IR3111	7269	Damaghe- ye Motaf East	1:25000
39	IR3112	7271	Dayyer- West	1:25000
40	IR5001	7184	Part A: Khalij-e Chabahar East Part	1:25000
41	IR5002	7184	Part B: Khalij-e Chabahar Wes Part	1:25000
42	IR5003	7190	Jask	1:25000

**e) 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 – 2018: In all Iranian Coastal water, more 2927 sheets produced
- Feb. 2019: 17 sheets of paper charts are under production

<b>1-Digital Nautical Charts</b>				
<b>Scale</b>	<b>Persian Gulf &amp; Gulf of Oman</b>		<b>Caspian Sea</b>	
	Completed charts	Undergone charts	Completed charts	Undergone charts
1:25000 & larger	2772	8	40	4
Between 1:25000 & 1:100000	19	4	1	-
1:100000 & smaller	88	1	7	-
<b>Total</b>	<b>2879</b>	<b>13</b>	<b>48</b>	<b>4</b>
<b>2- Electronic Navigational Charts (ENC)</b>				
<b>Persian Gulf &amp; Gulf of Oman</b>			<b>Caspian Sea</b>	
<b>125 cells</b>			<b>13 cells</b>	
<b>3- International Charts (Int. charts)</b>				
<b>Persian Gulf &amp; Gulf of Oman 42 charts</b>				
<b>4- Tidal Observation of Persian Gulf &amp; Gulf of Oman</b>				
<b>Permanent tidal stations</b>			<b>Temporary tidal stations</b>	
<b>15</b>			<b>60</b>	
<b>5- Caspian Sea level monitoring</b>				
<b>5 Station</b>				

**f) Other charts, e.g. for pleasure craft: N/A**

**g) Problems encountered:** Difficulty in updating our ENC production software package (SevenCs).

#### **4. New publications & updates:**

- a) **New publications:** Nil
- b) **Updated publications:**
  - Tidal software and table 2019
  - Tide prediction is available on this website: ([www.iranhydrography.ncc.org.ir](http://www.iranhydrography.ncc.org.ir))
  - Online sea level monitoring in 19 tide gauge station along Persian Gulf, Gulf of Oman and Caspian Sea
- c) **Means of delivery, e.g. paper, digital: We have not published any of the INT Charts we have prepared to date.**
- d) **Problems encountered:** Nil.

#### **5. Maritime Safety Information (MSI) use the WNWNS TEMPLATES**

##### **a) Existing infrastructure for transmission:**

Ports and Maritime Organization (PMO) of I.R. of Iran is the national authority for collecting and disseminating coastal and local warnings in the NAVAREA IX.

1- VTS centers: 3 stations (2 in Persian Gulf and 1 in Caspian Sea) are working on operational 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 WNWNS.

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:

- **Broadcast systems:**

- 1) **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 with NAVTEX receivers.

- 2) **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 Fereydoonkenar Port in the Caspian Sea area.

- **Bandar Bushehr - in North Part of Persian Gulf**

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, 2000 UTC

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

- **Bandar Abbas – in East Part of Persian Gulf**

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

- **Bandar Fereydoonkenar - in Caspian Sea**

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

• **Type of messages transmitting by the NAVTEX stations:**

i. Navigational Warnings

ii. Meteorological Warnings

iii. Meteorological Forecast

iv. Search & Rescue Information and Pirate Attack Warnings

v. Shooting Warnings

**b) New infrastructure in accordance with GMDSS Master Plan: Nil**

**c) Problem encountered: N/A**



6. IHO C-55

26 March 2018

Iran (I)

Hydrographic surveying / Levés hydrographiques / Levantamientos hidrográficos

Survey coverage Couverture hydrographique Cobertura hidrográfica		Depth < 200m Profondeur < 200m Profundidad < 200m			Depth > 200m Profondeur > 200m Profundidad > 200m			
<div style="display: flex; flex-direction: column; gap: 5px;"> <div style="display: flex; align-items: center;"> <div style="width: 15px; height: 15px; background-color: #90EE90; border: 1px solid black; margin-right: 5px;"></div> <span>Adequately surveyed Correctement hydrographié Adecuadamente levantado</span> </div> <div style="display: flex; align-items: center;"> <div style="width: 15px; height: 15px; background-color: #FFFF00; border: 1px solid black; margin-right: 5px;"></div> <span>Re-survey required Nécessitant de nouveaux levés Requiere nuevo levantamiento</span> </div> <div style="display: flex; align-items: center;"> <div style="width: 15px; height: 15px; background-color: #FF0000; border: 1px solid black; margin-right: 5px;"></div> <span>Never systematically surveyed Jamais hydrographié systématiquement Nunca levantado sistemáticamente</span> </div> </div>	93	10	0	73	0	30		
	Notes Notes Notas							

Maritime Safety Information / Renseignements sur la sécurité maritime / Información sobre seguridad marítima

GMDSS implementation Mise en œuvre du SMDSM Implementación SMSSM	Status Status Estado	Notes Notes Notas
Master plan Plan cadre Plan principal	YES	
A1 area Zone A1 Zona A1	YES	
A2 area Zone A2 Zona A2	YES	
A3 area Zone A3 Zona A3		
NAVTEX NAVTEX NAVTEX	YES	
Safety NET Safety NET Safety NET		

## Iran (I)

Nautical charting / Cartographie marine / Cartografía náutica

Coverage of charts published Couverture des cartes publiées Cobertura de cartas publicadas		Offshore passage Navigation au large Pasaje offshore			Landfall and Coastal passage Atterrisage et navigation côtière Rocalada y Pasaje costero			Approaches and Ports Approches et ports Aproches y puertos		
%	Covered by INT or other paper charts meeting S-4 Couvert par des cartes papier INT ou autres conformes S-4 Cubiertas por cartas de papel INT o otras cumpliendo S-4	80	0	20	95	0	70	90	0	90
%	Covered by RNC meeting S-61 Couvert par des RNC conformes S-61 Cubiertas por RNC cumpliendo S-61									
%	Covered by ENC meeting S-57 Couvert par des ENC conformes S-57 Cubiertas por ENC cumpliendo S-57									
		INT	RNC	ENC	INT	RNC	ENC	INT	RNC	ENC
Paper charts showing depth in meters Cartes papier avec les profondeurs en mètres Cartas de papel con profundidades en metros	100 %	Paper charts referenced to a satellite datum Cartes papier rapportées à un système géodésique satellite Cartas de papel referidas a un datum satelital			0	Data source Source des données Origen de los datos				
Notes Notes Notas										

Maritime Safety Information / Renseignements sur la sécurité maritime / Información sobre seguridad marítima

Navigational information Informations nautiques Información náutica	Status Status Estado	Notes Notes Notas
Local warnings: Avertissements locaux Avisos locales	YES	via VHF and Navtex
Coastal warnings: Avertissements côtiers Avisos costeros	YES	via VHF and Navtex
NAVAREA warning: Avertissement NAVAREA Aviso NAVAREA		
Information on ports and harbours Information sur les ports et rades Información sobre puertos	YES	via VHF and Navtex

**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 = 93% adequately surveyed &lt;200m

B1/B2 = 10% requiring re-survey at larger scale or to modern standards &lt;200m

C1/C2 = 0 % which has never been systematically surveyed &lt;200m

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

A1/A2 = 73% adequately surveyed &gt;200m

B1/B2 = 0% requiring re-survey at larger scale or to modern standards &gt;200m

C1/C2 = 30 % which has never been systematically surveyed &gt;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
80	0	20	95	0	70	90	0	90

Percentage of metric paper charts

100

Percentage of paper charts on a satellite datum

0

## **7. Capacity Building**

### **a) Offer of and/or demand for Capacity Building:**

Since last RSAHC meeting, which Mr. Jeff Bryant had resigned from RSAHC CB Coordinator, we were not able to get our capacity-building funds for our planned programs in year 2018 for RSAHC Region.

### **b) Training received:**

- MSI Workshop (3 days) in Turkey from 11 to 13 September 2018, as Phase 1.3 of the Capacity-Building Program under MBSHC Region;
- Phase 1 Skill Course (5 Days), an introduction to the assessment and promulgation of navigationally significant data in India from 28 January to 2 February 2019, as phase 1.2 of the Capacity Building program under NIOHC Region.

### **c) Training needed:**

I.R. of Iran is requesting the following courses, under Capacity-Building Program for the years 2019 & 2020:

- Technical Implementation Visits – Phase 0.3 of the CB Program (2019)
- MBES Processing (5 days) – Phase 2.3 of the CB Program (2019)
- MSDI and Database Management (5 days)- Phase 2.4 of the CB Program (2019)
- Basic ENC and ENC Production course (10 days) – Phase 3.1 of the CB Program (2020)
- ENC Production and QA (5 days) – Phase 3.2 of the CB Program (2020)
- Category “A” Hydrographic Program – Phase HA of the CB Program (2020)
- Category “B” Hydrographic Program – Phase HB of the CB Program (2019)

We also need some courses as follows:

- Training course on implementation of Side Scan Sonar
- Training Course on collection, interpretation of the collected data is required.

### **d) Training Offered:**

National Cartographic Center (NCC) is capable to offer:

- Training course on Sea Level data collection,
- Analysis and prediction

### **Official Technical Visit:**

I.R. of Iran has requested from CBSC16 and IHO secretariat to have a Technical Implementation Visit by IHO staff - phase 0.3 of the CB program (2019)

### **e) Status of national, bilateral, multilateral or regional development project with hydrographic component (In progress, planned, under evaluation or study):** Nil

### **f) Definition of bids to IHOCBC:**

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

**In addition, to promote technical hydrographic knowledge between RSAHC States, short courses can be held in English, by the Islamic Republic of Iran.**

## **8. Oceanographic Activities**

### **a) General**

- Establishment of Water Level Monitoring Network of Persian Gulf, Gulf of Oman & Caspian Sea
- Current metering
- Seabed classification
- Collecting physical and chemical parameters of the characteristics
- Modeling & monitoring of Iranian coasts

### **b) GEBCO/IBC's activities: Nil**

### **c) Tide gauge network**

Permanent tidal stations are in Persian Gulf and Gulf of Oman indicated in following table:

<b>NO</b>	<b>Places</b>	<b>Lat.(N)</b>	<b>Long.(E)</b>	<b>Establish Date</b>
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
15	Abadan	30° 20' N	48° 17' E	2017

### **d) New equipment**

Radar sensors have been implemented in some tide gauge stations.

## **9. Other activities**

### **a) Participation in IHO working Groups:**

- Participation in IHO Assembly, Council, and other committees, sub-committees and working group meetings.
- Member of S23 Working Group

### **b) Meteorological data collection:**

- Receive collected meteorological data via Iran Meteorological Organization to enhance the safety of navigation in the Persian Gulf and Caspian Sea by the means of VHF and NAVTEX.

**c) Geospatial studies:**

Marine Spatial Planning (MSP) in Iran has started since late November 2017 in Hormozgan Province; however, it will consider the strategies of the country in the Persian Gulf and Gulf of Oman as a whole. This plan will be in full coordination with the outcomes of Integrated Coastal Zone Management (ICZM) of Iran.

**d) Disaster prevention:**

NCC is cooperating with IOC/UNESCO as a part of world sea monitoring & early tsunami warning network with two tide gauge stations in Jask & Chabahar.

In addition NCC also cooperates with Asia & Pacific Center Management. (APDIM)

**e) Environmental protection:**

The Persian Gulf and Gulf of Oman have been designated as Special Sea Areas under MARPOL Convention, and special considerations are therefore observed in regard with ship discharges and port reception facilities.

**f) Astronomical observations:** Nil

**g) Magnetic/gravity surveys:**

NCC is responsible for collecting land gravity data. No shipboard or airborne gravimetric has been done yet. However, marine gravity has been derived from satellite Altimetry mission data overseas.

**h) MSDI Progress:**

- Establishment of MSDI (**Marine Spatial Data Infrastructure**) Committee

**i) International:**

NCC acts as the secretary of ECO geomatics committee (10 countries) to coordinate geomatics regional activities.

**j) Etc:**

Our Future plans are:

- Production of harbor & berthing charts
- Completion of approaches & coastal charts
- Development of tidal stations & current observations
- Producing Tidal Model for Persian Gulf and Gulf of Oman

## **10. Conclusions**

Iranian National Hydrographic Committee (IRNHC) is in charge of producing and publishing the ENC's for coastal and territorial waters of I.R. of Iran (the Persian Gulf, Gulf of Oman & Caspian Sea), as well as INT charts in the future.

All hydrographic surveying activities are in compliance the requirements of IHO Standards.

We are now engaged in complementing the ENC mosaic for the remaining areas. Iran is prepared to cooperate at the regional and international levels in all relevant hydrographic issues, under the framework of the RSAHC, particularly the Capacity-Building Programs.