



# **REPORT**

**Technical Visit**

**to**

**THE ISLAMIC REPUBLIC OF IRAN**

**20 - 22 February 2007**



**Technical Visit to the Islamic Republic of Iran  
(IHO Work Program 2007, Tasks 2.1.7 and 2.1.10)  
20 - 22 February 2007**

**I.- General Information.**

One of the strategic issues identified in the International Hydrographic Organization (IHO) Strategic Plan is Capacity Building, which is essentially to the building of effective national organizations where such development is needed or the improvement of existing capabilities. Therefore advisory visits to assess requirements and shortcomings, as well as the promotion and coordination of technical cooperation are very important.

The IHO Program 2 “Capacity Building” addresses principally the requirements for Member States to fulfil their roles. Nevertheless there are still several other States that do not yet have any hydrographic capability, and therefore IHO needs to support and encourage those countries to establish such capability. Raising global awareness of the importance of hydrography and encouraging the establishment of new Hydrographic Offices are vital to achieve a global coverage of effective hydrographic services, which is the role of the IHO.

In this line, Program 2 “Capacity Building” of the IHO Work Program 2007, has included the following Tasks:

- a) Task 2.1.7. Carry out visits of Technical Cooperation to the following countries and organizations: ROPME Sea Area Hydrographic Commission (RSAHC) & North Indian Ocean Hydrographic Commission (NIOHC) including Egypt, Sudan and Djibouti and others to be determined (with the participation of the International Hydrographic Bureau (IHB) the IHO Secretariat).
- b) Task 2.1.10 Technical Visits to be paid by IHB to the RSAHC and NIOHC Technical visits including Egypt, Sudan, Djibouti, Iran, Kuwait and Qatar. Possible also Saudi Arabia, Eritrea and Yemen (if not executed in 2006) to include contact with PERSGA national representatives and IMO regional representative), first quarter 2007.

The inclusion of these technical visits in the IHO Work Program was due a decision of the 2nd RSAHC and the approved IHO Capacity Building Work Program for 2007.

In November 2006, the IHB started organizing these Technical Visits. Due to the complexity of the coordination required, the IHB decided to prepare various travel options and, after receiving a positive response from the Islamic Republic of Iran, it was planned to undertake the visit from the 20 to 22 February 2007. The IHB was aware that the Islamic Republic of Iran was seeking ways to improve its facilities and personnel skills, and the visit was programmed with this objective in mind.

**II.- Participants and Programme**

The participants were Capt. Hugo GORZIGLIA, IHB Director, coordinator of the RSAHC and in charge of Capacity Building (CB) matters and Capt. Federico BERMEJO, IHB Professional Assistant for CB and training matters. The visit programme included a joint meeting with the Port and Shipping Organization (PSO), National Cartographic Center (NCC) and the National Geographic Organization (NGO), at the PSO premises, and some professional visits. The visit program is provided in Annex A.

### **III.- Ports and Shipping Organization (Meeting and visit)**

#### **III.1. Status of the I.R. of Iran**

Iran has been an IHO Member State since 1st July 1961.

According to national law, the Ports and Shipping Organization has responsibility for all maritime activities including :



Control of Safety of navigation in Iranian territorial waters and waterways.

Hydrographic Surveys.

On the other hand, the National Cartographic Center together with National Geographic Organization are responsible for Cartography and Hydrography. These two organizations cooperate in order to improve the marine based activities, especially in hydrographic fields.

The PSO is also the national authority in the Islamic Republic of Iran responsible for collecting and issuing coastal and local warnings in sub-region of NAVAREA IX.

#### **III.2. Organization and staff**

Mr. S. Ali Estiri, Director General of Maritime Affairs of the Ports and Shipping Organization (PSO) and his staff, made the arrangements for this visit. Mr. Ali Moradi, Senior Marine Safety Officer and Mr. Daryoush Shahrzad Hosseini, Marine Safety Officer were designated as accompanying persons during the period of the visit.

The excellent arrangement made by PSO, made it possible for the NCC and the NGO to participate in the technical meeting. Therefore the main agencies with responsibilities for hydrography, nautical cartography and safety of navigation were present for this event

#### **III.3. Meeting at the PSO**

III.3.1 The Deputy-Minister of Roads and Transportation and Managing Director of the PSO, Dr. A.Taheri, chaired a round table discussion meeting concerning hydrographic matters. The General Director of Maritime Affairs (PSO), Dr. S.A. Estiri, the President of the National Cartographic Centre (NCC), Eng. Yahya Mahmoudzadeh and the President of the National Geographic Organization, Mr. M.H. Nami and several staff members of the three organizations also participated. Dr. Taheri referred to the successful Second ROPME Sea Area Hydrographic Commission (RSAHC) meeting in 2006 that had re-inforced the relations between the countries in the area in the hydrographic field. The IHB technical visit should be considered as a follow-up to that meeting. He referred to the valuable work carried out by the IHO Capacity Building Committee and stated that the ENC development in his country was a clear objective. He also reported that Iran was carefully preparing its attendance at the 17th IH Conference in May 2007.

III.3.2 The IHB Director explained the objective of the technical visit and emphasized that the main objective of the Organization was to contribute to maritime safety. Nevertheless hydrography goes beyond this main objective as it also contributes to several other national activities. He further stressed that the SOLAS signatory States must be pro-active in fulfilling the adopted regulations, in particular, Regulation 9 "Hydrographic Services" of SOLAS Chapter V. He mentioned that ENC production, distribution and updating were topics of high interest and in this respect announced that the IHO Capacity Building Committee has approved the holding of an ENC Workshop for the RSAHC, an event that had been programmed for 2007 and which has been now postponed (due to human resources availability), until 2008, probably to take place in conjunction with the 3<sup>rd</sup> RSAHC and the 2008 CBC Meeting, to ensure a wide participation.

III.3.3. After this general presentation, Dr. Taheri went around the table offering the participants, the possibility to express their views as regards their organization's hydrographic component. Among other matters discussed by the participants, the following subjects are highlighted as they were of interest to all. A brief summary of the discussion/comments follows each subject:

#### III.3.3.a) Environmental protection of the Persian Gulf.

NGO highlighted the particular characteristic of the Persian Gulf, as regards its environmental fragility, seeking information as to how the IHO could contribute to its protection. The IHB team indicated that the protection of the marine environment is one of the IHO's objectives, which should be successfully achieved if reliable nautical charts and other information were available to the mariner. To facilitate and coordinate regional hydrographic surveys and exchange of data, the IHO encourages the establishment of Regional Hydrographic Commissions, and the ROPME Sea Area Hydrographic Commission (RSAHC), covering the Persian Gulf was one of which the I.R. of Iran is a member. The coordinated actions within the RSAHC should contribute to the environmental protection of the Persian Gulf. It is understood that environmental issues are of common concern and therefore should be better dealt with a regional view.

#### III.3.3.b) Progress of development of IHO standards, especially the IHO Standards for Hydrographic Surveys (S-44).

This was another subject raised by the NGO. NGO wanted to know about the procedure in establishing standards and particularly on the way forward as regards the Standards for Hydrographic Surveys (S-44). The IHB team explained that in order to achieve the IHO's objective related to "*bring about the greatest possible uniformity in nautical charts and documents*", it was necessary to develop, agree, adopt and use standards. In general all IHO bodies in one way or another, while studying methodologies and setting best practice procedures, are establishing standards that are contained in different IHO publications. It was indicated that IHO is not a regulatory organization, but it has been the practice that when the International Maritime Organization (IMO) produces regulations on any technical matter referring to hydrography and nautical charting, it refers to the IHO specifications and resolutions. In brief, the development of standards is an ongoing task for all IHO bodies.

With regard to S-44, it was reported that after some years of being dormant, the WG is active again with the task to update the existing S-44, mainly, incorporating some guidelines concerning the use of multibeam. Captain Gorziglia invited the I.R. of Iran to actively participate in this task and any other tasks dealing with standards as it was very important to have the input of IHO Member States. A silent attitude is of no benefit at all to the Organization as a whole.

### III.3.3.c) Information about Hydrographic Offices.

NGO highlighted the importance of providing communications on the progress other Hydrographic Offices (HOs) were making with technical matters. NGO wanted to know the actions adopted by the IHB to facilitate this exchange of information. The IHB team explained the objective and content of the IHO web page, emphasizing that it was not up to the IHB to keep the Member States updated information in the IHO web pages. This was considered a national responsibility, as each HO is the source of its own information. What the IHB does is to set up a link to facilitate the connection between Member State HOs. As regards the other parts of the IHO web, it was indicated that the IHB does its best to keep RHCs and other bodies' sections as updated as possible, but the key issue is that the IHB needs to receive the information to be posted. It was also indicated that if any HO needs any information, a request should be made to the IHB. In its coordination role, the IHB shall take action to facilitate the search of information.

### III.3.3.d) Establishment of a Special Working Group.

The NCC, considering the special characteristics of the Persian and Oman Gulf considered that a Special Working group should be established to deal with this subject. Nevertheless it was not specified what particular subject should be considered. The IHB team briefed the participants on the objective of the RHCs and on the procedures to establish any body with a particular objective. It was emphasized that any such initiative should be discussed within the RSAHC, and if agreement was reached, a special WG could be established simply by Commission decision.

### III.3.3.e) ENC production and distribution.

The NCC explained that they have several ENCs ready but would need support to speed up the production process and to solve the distribution issue. The team commented that many HOs were taking advantage of the existence of the two RENCs, one in Norway and one in the UK. Liaising with any or both of them would provide a much better view on the best way forward. In fact, if after a great effort in the collection and processing of hydrographic data no chart is made available, then a solution should be found, and probably contacting the RENCs would be appropriate. The importance of validating the ENCs produced was also discussed. This task can also be done at the RENCs, before having them sent to the end user.

The team explained all the efforts IHO is making to foster the production of ENCs and to improve coverage, and to facilitate Member States to put ENC production on the market as soon as possible. Explanations on carriage requirements and IHO actions in this regard were also provided. The I.R. of Iran was encouraged to reply to the Circular Letter requesting IHO Member States to identify the charts that should be considered as the minimum required for safe navigation.

### III.3.3.f) IHO Working Groups and Committees.

The NCC referred to the I.R. of Iran participation in IHO activities and their willingness to be more involved. The IHB team stressed that participation was very much encouraged. It was explained that no one IHO Member State participates in all IHO bodies, but to be successful a MS should be aware of the on going development within the different working groups. Participation by correspondence and by e-mail are alternatives that should be explored. The important thing is to flag the technical position in a timely manner for consideration by the experts on the different bodies.

Regional Hydrographic Commission meetings provide an unique opportunity to identify regional common problems and as stated before, to seek a common acceptable solution. Regional representation in some bodies could also be considered viable, as for example in the Capacity Building Committee.

### III.3.3.g) Training Programmes.

Training issues were of general concern and in consequence were discussed in some detail. It was reported that the University of Azad runs a program with a hydrographic component, but it is not internationally recognized. The IHB team suggested that the university could be approached to find out whether they would be interested in having their program submitted to the FIG/IHO/ICA International Advisory Board for advice and possible future recognition, but it was felt that it was better to have training within the NCC.

PSO and NCC indicated that they were ready to organize and host any required course, aimed at speeding up the availability of ENC. Also the importance of holding an MSI workshop was stressed. The team expressed its appreciation on behalf of the IHO for this offer, and provided information on the future training events included in the CB Work Program for the period 2008/2012, the timing of which might well be improved due to this kind offer. This possibility would be considered at the next CBC meeting in June 2007.

The IHB reported that the International Maritime Academy, as it had existed was no longer in place as it has ceased all activity, but a new structure, based on IMA, was under study by the Italian Government. The IHB indicated that IMA in fact had been very helpful to the IHO in advancing in hydrographic and nautical cartographic training, and that we were still optimistic, but the possibility of other institutions assuming its function did exist. The establishment of any regional training facility would contribute to improving hydrocartographic capability. The IHB representatives recalled that, at the Second RSAHC meeting, Oman raised the point that training was considered to be an important regional issue and asked the Commission whether it might be possible to establish a regional academy along the lines of IMA. The agreement was to provide the RSAHC Chairman with training information by 31 December 2006 in order to have a document for the next RSAHC meeting and adopt a decision with regard to a regional academy.

As regards MSI training, the IHB indicated that the Capacity Building Committee (CBC) in conjunction with the Committee on Promulgation of Radio Navigational Warnings (CPRNW), have started a new series of courses, based on a course delivered in Oman several years ago. One of these courses will be delivered in 2009 specifically for the RSAHC. Participants thought that it would be better to advance the delivery of such a course.

At the end of the round table, discussions which took up all the morning, Captain Gorziglia, considering the different subjects discussed and the excellent participation of the main national agencies concerned with hydrography, suggested that thought be given to continue along that line, with this gathering acting as a National Hydrographic Committee. This would foster initiatives of national and regional interest. He offered the IHB's support to progress the initiatives identified.

Finally, Dr. Taheri expressed his thanks to the IHB delegates for the technical visit and their participation. He stated that both Iran and the IHB are prepared to enhance cooperation and to work together to develop programmes. He also added that hydrography is a very important topic and that some aspects of the hydrographic development require a long time to be achieved, but Iran has the capabilities to progress and can make use of its experience in the field of maritime safety. He stressed that the maintenance and improvement of international relations and IHO Member States inter-action were very important.

#### **IV.- Other visits paid**

##### IV.1 National Cartographic Center.

In the afternoon of 21<sup>st</sup> February the IHB representatives were invited to pay a visit to the National Cartographic Centre. The IHB delegation was received by the Technical Deputy, Mr. Mohammad Sarpoulaki, the Manager of the Hydrographic Department Mr. M.H.Khoddam Mohammadi, the Technical Deputy of the Hydrographic Department, Mr. Mohammad Hossein Moshiri and staff of the Hydrographic Department.

Following a tour of the facilities, where emphasis was put on the photogrammetric component of the surveys, the delegates were provided with an institutional presentation of the organization and details of the Hydrographic Department.

The presentation was followed by a round table where participants made different comments on the activities underway. During the round table the need to have access to tidal prediction training was identified. It was noted that IOC runs a project known as GLOSS that delivers some courses that could suit their needs; a possibility to be explored.

The visit ended with a presentation of the work in progress in relation to digital cartography, that included topographic charts.

##### IV.2 Visit to Bandar-Abbas.

On the evening of 21<sup>st</sup> February, the IHB representatives, accompanied by their hosts, travelled by plane to Bandar Abbas, in the south of the country, to visit the Shahid Rajaee Port and the hydrographic units of the National Cartographic Centre operating in the Persian Gulf. The visit took place on the 22<sup>nd</sup>.

Captain Gorziglia and Captain Bermejo were received by the Deputy Director of the Port Authority and a visit was made of one of the six survey vessels operating in this area, based in the port of Bandar Abbas. The technical staff of NCC gave the IHB delegates a full presentation about the facilities, equipment and methodologies used, and recent work undertaken by the vessel. This presentation was followed by a general discussion with the hydrographic staff, a very enthusiastic group of surveyors. Afterwards, the NCC Service of Public Relations interviewed Capt. Gorziglia.

It was noted that NCC has not yet acquired a multi-beam echo-sounder and carries out hydrographic surveys with single beam equipment. Data are collected at the NCC where field quality control and processing takes place. When data is ready, it is sent to the PSO to be processed. The basic equipment used on board the six hydrographic vessels is HYPACK and sonar DESO 30.

The hydrographic surveyors indicated that some ENC have already been produced but not yet distributed. Concern was expressed on this situation, as the mariner is not receiving the benefit of the hydrographic surveys conducted.

Training was also a topic of concern for NCC. Usually, basic courses on the functioning of equipment purchased is organized by the manufacturers, but, since the closure of IMA (Trieste) the main source of training for the NCC has now disappeared and therefore, both its replacement by other training institution or the creation of a regional school are topics of paramount importance for the country. Hydrographic surveyors expressed their need to be well trained on multibeam technology. The IHB team, based on past experiences, suggested that any purchase of equipment must include a basic operation training, and more in depth training after some years of practice with the new technology incorporated in the whole process.

It was very motivating for the technical team to have had the opportunity to discuss with the people that work in the field and share their experiences and concerns.



## **V Conclusions and Recommendations.**

As a result of the discussions held, the IHB representatives would like to offer the following conclusions and recommendations to the hydrographic authorities of the I. R. of Iran.

V.1.- The I.R. of Iran has a privileged geographic position and an historic maritime legacy and its hydrographic and related authorities are full aware of the importance of hydrography; nevertheless Iran is not apparently taking advantage of being an IHO Member State. It is therefore recommended that Iran considers playing a much more active role within the IHO RSAHC and the IHO technical committees and working groups. Within the RSAHC all issues aimed at the protection of the marine environment of the Persian and Oman Gulf could be considered, including the establishment of any Working Group to consider any particular matter of common interest. In brief, it is our opinion that coordination structures already are in place within the IHO, and it is up to the I. R. of Iran to take advantage of them by active participation, proposing initiatives and making its experience available, among others, for the establishment of specialized groups. It is also recommended considering participation in IHO groups working on the establishment of standards. Information about the formation of Working Groups created to consider special regional cases, such as the Black and Azov Seas Working Group, has already been sent by the IHB to PSO.

V.2.- The IHB Technical Visit was very well organized by the PSO, capturing the attention of the main national agencies related to hydrography that actively participated in the meeting with IHB representatives. As it was seen, these three agencies in fact constitute the basic components of a National Hydrographic Committee to progress further in the provision of hydro-cartographic services and products. It is therefore recommended to enhance the coordinated work achieved to date probably including representatives of other agencies such as the meteorological national component and the national agency representing the I.R. of Iran at the Intergovernmental Oceanographic Organization (IOC), an organization that could provide capacity building and training opportunities on specialized subjects, such as tidal prediction.

V.3.- The discussions made it very clear that communications between IHO MSs is a key issue. Despite the efforts made by the IHB to maintain the IHO web site duly updated, it has to be kept in mind that almost all information sources are outside the IHB, and the IHB relies on the information provided by MSs. and the Chairmen of the different IHO bodies. It is recommended to make extensive use of the IHO website, and in case information is missing from this site the IHB should be contacted for advice. One of the IHB's objectives is to facilitate communication between IHO MSs.

V.4.- It was made evident to the IHB team that the result of costly hydrographic surveys conducted and processes have not been made available to the mariner in the format of an ENC. It seems that lack of confidence in the evaluation and distribution steps are preventing Iran from making ENC available. It is recommended to approach one of the two RENCs, or a convenient IHO HO to find a suitable solution that would allow I.R. of Iran to improve safety to navigation in its waters, and contribute to reducing the risk of maritime environmental impact in such vulnerable waters. It is very difficult to justify the provision of resources, human and economic, if no improvement in the availability of nautical charts exists. It is further recommended to analyze the situation in depth and to identify precisely the problem, seeking IHB advice on the way such a problem can be solved.

V.5.- For the time being the I.R. of Iran cannot rely on the International Maritime Academy (IMA), for its hydrographic and nautical cartographic training needs as the Academy has ceased its activities. It is therefore recommended to explore a regional solution as anticipated in the discussions at the second RSAHC Meeting in May 2006. The RSAHC Chairman should be provided with the information on training facilities, in order to have a discussion document at the next RSAHC meeting in 2008, as agreed.

V.6.- Both, PSO and NCC have offered their institutional capabilities to organize different training events, including ENC, Multibeam, MSI as well as others to be identified. This kind offer fully complies with the objectives of the IHO and therefore is supported by the Organization. In order to progress any of these initiatives it is recommended to work closely with the IHB in order to fix a suitable timetable for the preparation of the event capturing the highest priority, either at a national or regional level. If support is expected from the IHO Capacity Building Committee, it is recommended that initiatives be submitted to the CBC for consideration at its meeting in early June (2007), through the Chairman of the RSAHC.

Monaco, 22 March 2007.



Hugo Gorziglia  
Captain – Chilean Navy  
IHB Director

Annexes:

“A” IHB Technical Visit Program.

## ANNEX A

### **IHB TECHNICAL VISIT PROGRAM**

Tuesday 20 February 2007

Time	Event
2100	Arrive to Air Port. Transport to Hotel.

Wednesday 21 February 2007

Time	Event
0900-1030	Meeting with PSO, NCC and NGO Heads.
1100-1230	Meeting with other related people.
1400-1630	Visit NCC capabilities.
2000	Flight to Bandar Abbas (Port)

Thursday 22 February 2007

Time	Event
0830-1730	Visiting Bandar Abbas (Shahid Rajaee Port Complex)
1950	Flight to Tehran
2400	At Airport for Departure at 0200