



IHB File No. S3/8152

CIRCULAR LETTER 117/2005  
21 November 2005

### IMPLEMENTATION OF QUALITY MANAGEMENT PRACTICES

- References: 1) IHB Circular Letter 71/2004 dated 2 November 2004.  
2) IHB Circular Letter 49/2005 dated 11 May 2005.

Dear Hydrographer,

The WEND principle 4.1 states:

*"A recognized standard of quality management (e.g. ISO 9000) should be employed to ensure a high quality of the ENC services."*

Additionally, Task T4.2.4 of the IHO Work Programme instructs the IHB to "Monitor and inform Member States about developments in quality management, and encourage quality management accreditation (ISO 9000), to strengthen the position of hydrographic offices as quality service providers."

To this end, Circular Letter 71/2004 requested, *inter alia*, that Member States report on the status of implementing quality management practices. The results of this request (Doc. WEND9-3C refers) were briefed to the WEND Committee during the 9<sup>th</sup> WEND (Monaco 7-8 April 2005). This resulted in an action for "*MS to seek / provide ... Quality Management System implementation* », as reported in CL49/2005 (Annex A, Action 4 refers). Subsequently, the 17<sup>th</sup> CHRIS (September 2005) felt these results should again be brought to the attention of Member States, prompting this Circular Letter (see attachment). Member States requiring assistance in implementing quality management practices may find it beneficial to liaise with those Member States that have already successfully implemented such practices.

To the extent that Member States provide the IHB with updated information, this data base will be maintained on the IHO website under the WEND Committee for the use of Member States as necessary.

On behalf of the Directing Committee

Yours sincerely,

Director

)Rear Admiral Kenneth BARBOR

Encl: Doc. WEND9-3C - Implementation of Quality Management Practices

## Implementation of Quality Management Practices

<b>Submitted by:</b>	IHB
<b>Executive Summary:</b>	WEND Principle 4.1 prescribes that a recognized standard of quality management should be employed to ensure a high quality of ENC services. This paper reports on the status of the implementation of quality management systems within the IHO and provides several points of contact within the IHO Member States where assistance may be sought as Member States progress towards implementation of a quality management system.
<b>Related Documents:</b>	<ul style="list-style-type: none"> <li>• IHO Technical Resolution K 2.19 "Principles of the Worldwide ENC Database"</li> <li>• Circular letter 71/2004 of 2 November 2004</li> </ul>
<b>Related Projects:</b>	None

### Introduction / Background

The WEND principle 4.1 states,

*"A recognized standard of quality management (e.g. ISO 9000) should be employed to ensure a high quality of the ENC services."*

Additionally, Task T4.2.4 of the IHO Work Programme instructs the IHB to "Monitor and inform Member States about developments in quality management, and encourage quality management accreditation (ISO 9000), to strengthen the position of hydrographic offices as quality service providers."

Several Member States' Hydrographic Offices have achieved this distinction of quality management and others are in the process of acquiring this certification. A questionnaire was distributed through Circular Letter 71/2004 to better assess the status of quality management implementation among the Member States and to provide points of contact for advice and assistance to those Member States seeking to implement quality management practices. A summary of the replies received are annexed to this paper.

### Analysis/Discussion

40 Member States responded to the questionnaire. 9 Member States have implemented a quality management system covering aspects of their operations to include ENC services. Another 9 Member States are in the process of implementing such a system. 17 Member States indicated they needed assistance in the process of implementing a quality management system.

### Conclusions

While there are noteworthy examples of successful implementation of a quality management system, many more Member States have yet to adopt such procedures.

### Recommendations

Member States that have not done so are encouraged to implement a quality management system. Member States are invited to use the information provided in the annex to establish bilateral cooperative programs to assist Member States with the implementation of a quality management system.

### Justification and Impacts

Implementation of a quality management system is not a simple procedure; however, assurance of quality and the continuing improvement of procedures, products and services warrant expenditure of time and resources required to implement such a system.

### Action Required of WEND

The WEND Committee is invited to take note of the results of the questionnaire.

## IMPLEMENTATION OF QUALITY MANAGEMENT FOR ENC PRODUCTION

## REPLIES to CL 71/2004 (Annex B)

- Notes:** a) Only the lines/questions where there have been replies appear in the following table.  
 b) The questions in Annex B to CL 71/2004 are reproduced below.

1. Is your Hydrographic Office certified as implementing a quality management system? Yes - No, but progressing towards - No
2. If yes,
  - a. To what standard are you certified (i.e. ISO 9001:2000)?
  - b. What certification authority awarded your certificate (e.g. Det Norske Veritas)?
  - c. What is the scope of your certificate (i.e. All processes and services related to provision of maritime geographic information to enhance safety of navigation)?
  - d. Contact information for a Point of Contact available to provide advice to other Hydrographic Offices seeking certification.
3. If progressing towards,
  - a. What standard(s) are you using (i.e. ISO 9001:2000)?
  - b. What is the scope of your activities for which you are seeking certification (e.g. All processes and services or a subset of your processes and activities)?
  - c. What percentage have you completed and when do you expect to seek certification?
  - d. Are there areas of implementation where you need assistance and if so what specific assistance do you need?
4. If no,
  - a. Do you intend to implement a quality management system?
  - b. Do you need assistance in making this decision or beginning this process?

Country	Questions	Comments
ALGERIA	1	NO
	4	a- YES
		b- YES
ARGENTINA	1	No, but progressing towards
	3	a- ISO 9001-2000
		b- Subset of processes

Country	Questions	Comments
		c- 10%
		d- We would like to know if the IHB can inform us on other Hydrographic Services' experiences of Quality Standards or liaise with them to obtain assistance on this matter.
AUSTRALIA	1	No, but progressing towards
		a- ISO 9001-2000
	3	b- The registered certificate will cover the quality management system for the design, development, production and distribution of nautical charting products and services, and the support provided to the Hydrographic Survey Force to enable hydrographic data acquisition
		c- 75% complete with a preliminary audit of the quality management system to be carried out in March'05 and the certification audit in May'05. The certification authority awarding the certificate is SAI-Global.
		d- At this point there are no areas where we need assistance, however the further development of an ISO 9001 outcome for ENC production could be enhanced through the increased involvement of quality managers in IHB quality forums.
BELGIUM	1	No
	4	a- We are very interested to implement a quality management system. However, due to a shortage of personnel (and financial means) we cannot start with this implementation before 2007.
		b- In due time, we can use some assistance in beginning this process.
CANADA	1	Yes
	2	a- ISO 9001-2000
		b- Deloitte & Touche
		c- All Processes and Services
		d- Mr Sean Hinds <a href="mailto:Hindss@dfm-mpo.gc.ca">Hindss@dfm-mpo.gc.ca</a>
CHILE	1	No, but progressing towards
		a- Yes (ISO 9001.2000)
	3	b- To certify the production process of the hydrographic-cartographic data
		c- In process
		d- Not for the moment
CHINA	1	YES
		a- ISO 9001.2000
	2	b- China Class Society
		c- All processes and services related to provision of chart and ENC
		d- Mr Pan WEIPING tel: +86 21 65680046 - email: <a href="mailto:panweiping@shmsa.gov.cn">panweiping@shmsa.gov.cn</a>
COLOMBIA	1	NO
	4	a- YES
		b- YES

Country	Questions	Comments	
CROATIA	1	NO	
	4	a- YES b- NO	
CUBA	1	NO, but in progress	
	3	a- ISO 9001.2000 b- For all processes and services in the production of ENCs c- we are presently in the final phase. We hope to be complete by the end of 2006. d- We need exchanges in overall experience and especially in the completion of audits of ENC products.	
		1	YES
		2	a-ISO 9001.2000
ECUADOR	3	a- ISO 9001.2000 b- Certify INOCAR - Cartographic Process c- Up to now we have 40% the process will be finished in July 2005. d- Updating, distribution, validation of ENC	
		1	No, but progressing towards
		3	a- ISO 9001.2000 b- Cartography and Hydrographic Survey c- 80% d- No
	FINLAND	1	No, but progressing towards
3		a- Not decided, but likely ISO 9001 b- All processes and services c- Not decided on time schedule (due heavy workflow of other high priority tasks). Hydrographic processes have been described) d- No	
		1	YES
		2	a- ISO 9001.2000 b- COFRAC c- Collection of hydrographic data and nautical information, elaboration and dissemination of information and nautical publications in answer to the needs of safety of maritime navigation. d- Ing André Bertrand - <a href="mailto:Bertrand@shom.fr">Bertrand@shom.fr</a>
FRANCE	1	YES	
	2	a- ISO 9001.2000 b- COFRAC c- Collection of hydrographic data and nautical information, elaboration and dissemination of information and nautical publications in answer to the needs of safety of maritime navigation. d- Ing André Bertrand - <a href="mailto:Bertrand@shom.fr">Bertrand@shom.fr</a>	
GERMANY	1	YES	
		a- ISO 9001.2000	

Country	Questions	Comments
	2	b- DQS GmbH Deutsche Gesellschaft zur Zertifizierung von Managementsystems, Frankfurt am Main c- All processes and services related to provision of marine geographic information to enhance safety of navigation and all other purposes (incl: sea surveying, cartography, production), as well as other tasks of BSH. d- Email to <a href="mailto:juergen.sehiz@bsh.de">juergen.sehiz@bsh.de</a> management representative of BSH. Tel: +49 40 31901020
GREECE	1	NO
	4	a- YES b- We are interested in any assistance you may provide.
ICELAND	1	NO
	4	a- YES
INDIA	1	No, but progressing towards
	2	a- ISO 9001.2000
		b- Navigational Product Services
		c- 40% Expected to be competed by 2007
	d- No	
JAPAN	1	NO
	4	a- YES b- NO
KOREA, Rep of	1	NO
	4	a- YES, we intend to implement a quality management system in 2-3 years b- YES, we need assistance and advice of IHO Member States that have already introduced and implemented a quality management system to introduce and implement this process.
KUWAIT	1	NO
	4	a- YES b- YES
MAROCCO	1	NO
	4	a- Probably in the future b- YES
NETHERLAND	1	No, but progressing towards
		a- European Foundation for Quality Management (EFQM-model) and ISO 9001.2000

Country	Questions	Comments
	2	<p>b- The Scope is "all in progress" with focus and in depth analysis/control of production and distribution of nautical products (charts and publications; paper and digital). There is no difference in scope or priority between the nautical products: at present both ENCs and paper nautical charts are derived from the same source database and therefore is distinction in the scope on product level illogical. This concept and scope will be maintained when implementing the next production system. NL implements a new production system based on the "single source database solution"; this is more or less an optimisation of the present system/process.</p> <p>c- 20% completed; certification approximately 2008</p> <p>d- Assistance foreseen in process identification, administration and audit. In general support is available within the NL defence organisation.</p>
NEW ZEALAND	1	NO
	4	<p>a- NO</p> <p>b- NO</p>
NORWAY	1	YES
	2	a- NS-EN ISO 9001.2000
		b- Det Norske Veritas
		c- All processes and services
	d- Contact: Quality Manager Trond Skyseth, email: <a href="mailto:trond.skyseth@statkart.no">trond.skyseth@statkart.no</a>	
OMAN	1	NO
	4	<p>a- YES</p> <p>b- YES</p>
PAKISTAN	1	NO
	4	<p>a- YES, with the installation of ENC production system, all reports, procedures and documentation will be done as per the quality management system ie; (ISO 9001)</p> <p>b- YES, all possible assistance to establish and improve the quality management system. Any software or documents in this respect could help a lot.</p>
PERU	1	NO
	4	b- YES
PHILIPPINES	1	NO
	4	<p>a- YES</p> <p>b- YES</p>
PORTUGAL	1	NO but progressing towards
		a- ISO 9001-2000
		b- Nautical Cartography, which include Paper Charts and Electronic Navigational Charts

Country	Questions	Comments
	3	c- Process underway and the expected date of completion of the certificate will be 2006 d- At the Beginning of the process, IHPT will be supported by national or local experts. Later, IHPT may need IHB support
SERBIA MONTENEGRO	1	NO
	4	a- YES b- YES
SINGAPORE	1	YES
		a- ISO 9001 - 2000 b- Lloyds Register
	2	c- ENC Production, quality assurance an updating d- Mr Jamie CHEN
SLOVENIA	1	NO
	4	a- NO b- NO
SOUTH AFRICA	1	NO
	4	a- YES b- NO
SPAIN	1	NO
	4	a- YES b- Not for the moment.
SWEDEN	1	YES
		a- ISO 9001-2000 b- Lloyds register Quality Assurance
	2	c- All processes and services related to provision of maritime geographic information to enhance safety of navigation d- Hydrographic Office, Swedish Administration
TUNISIA	1	NO
	4	b- YES
TURKEY	1	NO
	4	a- TN-DHNO intends to implement a quality management system and seeks the assistance of some HOs or the IHB which are already certified to some standards and have established a quality management system. b- YES, TN-DHNO needs the assistance to begin the process.
UNITED KINGDOM	1	YES
		a- ISO 9001-2000 the TickIT Guide Issue 5



Country	Questions	Comments
	2	b- Lloyds Register Quality Assurance Ltd c- Provision of nautical charts (including the processing of non-encrypted ENC data), publications and other hydrographic services, to meet UK national , Defence and Civil needs. Provision of cartographic training services. Provision of RENC services. Development of computer systems and the provision of IT services to the UKHO in accordance with TickIT d- Kevin Moorhouse; Quality Systems Manager email: <a href="mailto:kevin.moorhouse@ukho.gov.uk">kevin.moorhouse@ukho.gov.uk</a>
USA (NOAA)	1	NO
	4	a- ISO 9001 certification is under consideration b- What kind of assistance is available?