



THIS CIRCULAR LETTER INCLUDES A REPORTING FORM
AND A NOMINATION FORM

IHB File S3/8151/DQWG

CIRCULAR LETTER 17/2010
8 February 2010

ENC DATA QUALITY INDICATORS

- References:
- A. IHB Circular Letter 36/2007 dated 3 April - 18th CHRIS Meeting, Cairns, Australia, 25-29 September 2006
 - B. IHB Circular Letter 120/2007 dated 17 December - *Enhancing the Presentation of Survey Quality in ENC*
 - C. IHB Circular Letter 32/2009 dated 12 May - *IHO S-57 Supplement 2, Announcement of Document Release*

Dear Hydrographer,

Introduction

1. As reported in reference A, a Data Quality Working Group (DQWG) was established by the CHRIS Committee (now HSSC) in 2007 to investigate how the quality of survey data could be better presented to the mariner. Reference B reported that further investigations were required regarding the use and display of quality indicators for ENC data. This resulted in an initial recommendation to amend the S-57 definitions for the S-57 object attribute CATZOC. These recommended changes were subsequently agreed by Member States and announced in reference C.

2. The DQWG is now continuing its work by considering appropriate Data Quality Indicators for S-101, the next generation ENC Product Specification, as well as developing improved ways of displaying the quality of chart data in S-101 ENCs to the user. In this connection, the DQWG must determine whether the existing ENC data quality indicators will be appropriate or whether new indicators will need to be developed. The DQWG is therefore seeking information, based on existing ENC Producers' experience, or any other relevant feedback from users that will be helpful to the work of the DQWG.

Survey of Current Use of Data Quality Indicators in S-57 ENCs

3. To assist the DQWG, Member States already producing ENCs are requested to report which of the current S-57 data quality indicators they are using to populate their ENCs, using the Response Form in Annex A. Annex B shows the metadata hierarchy and the data quality indicators available in the S-57 ENC Product Specification. The form in Annex A should be returned to the IHB **by 31 March 2010**.

Request for Increased Membership of the DQWG

4. The Chair of the DQWG (Mr. Chris Howlett, UKHO) has also reported that the number of experts actively contributing to the activities of the DQWG is fairly limited. He is therefore seeking increased participation from Member States and from Expert Contributors. The Terms of Reference for the DQWG are contained in Annex C. The current membership list for the DQWG is provided on the IHO website at:

www.iho-ohi.net/mtg_docs/com_wg/DQWG/DQWG_MISC/DQWG_Members.pdf.

5. Member States are invited to nominate suitably experienced representatives to help to continue the work of the DQWG, and/or confirm their existing nominee(s), by completing the Response Form in Annex D. This form should be returned to the IHB **by 31 March 2010**.

On behalf of the Directing Committee
Yours sincerely,



Robert WARD
Director

Annexes:

- A. ENC Data Quality Indicators - Reporting Form
- B. S-57 Quality Indicators - Hierarchy of Meta Data
- C. Terms of Reference for the DQWG
- D. Nomination for Membership of the DQWG

ENC DATA QUALITY INDICATORS - REPORTING FORM

(to be returned to the IHB by 31 March 2010
E-mail: info@ihb.mc - Fax: +377 93 10 81 40)

Member State:

Contact: E-mail:

Which of the existing Data Quality Indicators are populated in your ENCs?

Please complete the following table. If you do not use or populate a particular S-57 Object or Attribute please indicate the reason in the comment column. Any other comments (for example, *the meaning of attribute is unclear or ambiguous*) will be helpful.

Object / Attribute	Used or Populated (Yes / No)	Comment
M_ACCY		
HORACC		
POSACC		
SOUACC		
VERACC		
M_QUAL		
CATZOC		
M_SREL		
SURATH		
SURSTA		
SUREND		
TECSOU		

Additional comments (if required)

Name/Signature: Date:

S-57 QUALITY INDICATORS - HIERARCHY OF META DATA

The following table, reproduced from Table 3.3 of S-57 Appendix B.1, indicates :

- individual attributes that supersede meta object attributes,
- meta object attributes that supersede the data set subfields.

The Data Quality Indicators are contained in the DSID and DSPM fields.

Field	Subfield	Meta object class	Meta object attribute	Geo or spatial object attribute
DSID	AGEN	The use of M_PROD is prohibited		
DSID	UADT	The use of M_PROD is prohibited		
DSID	ISDT	The use of M_PROD is prohibited		
DSPM	H DAT	The use of M_H DAT is prohibited		The use of HORDAT is prohibited
DSPM	V DAT	M_V DAT	VER DAT	VER DAT
DSPM	S DAT	M_S DAT	VER DAT	VER DAT
DSPM	C SCL	M_C SCL	C S CAL	
DSPM	D UNI	The use of M_UNIT is prohibited		The use of DUNITS is prohibited
DSPM	H UNI	The use of M_UNIT is prohibited		The use of HUNITS is prohibited
DSPM	P UNI	The use of M_UNIT is prohibited		The use of PUNITS is prohibited
		M_ ACCY	HOR ACC	HOR ACC
		M_ ACCY	POS ACC	POS ACC
		M_ ACCY	SOU ACC	SOU ACC
		M_ ACCY	VER ACC	VER ACC
		M_ NSYS	MARSYS	MARSYS
		M_ NSYS	ORIENT	Attribute ORIENT of an individual object does not supersede the meta object attribute.
		M_ QUAL	CATZOC	POSACC, SOUACC and TECSOU
		M_ QUAL	SOUACC	SOUACC
		M_ QUAL	POSACC	POSACC
		M_ SREL	SURATH	SORIND
		M_ SREL	SUREND	SORDAT
		M_ SREL	SURSTA	SORDAT
		M_ SREL	TECSOU	TECSOU

DATA QUALITY WORKING GROUP (DQWG)

Terms of Reference

Ref: 1st HSSC Meeting (Singapore, October 2009)

1. Objective

To develop appropriate methods of classifying and depicting the quality of digital hydrographic data.

2. Authority

This WG is a subsidiary of the Hydrographic Services and Standards Committee (HSSC). Its work is subject to HSSC approval.

3. Procedures

a) The WG should:

- i. Review ISO 19113 *Geographic Information-Quality Principles*, ISO 19114 *Geographic Information-Quality Evaluation Procedures*, and ISO 19115 *Geographic Information - Metadata* and propose relevant enhancements and amendments for incorporation in S-100;
- ii. Monitor and further develop quality indicators for hydrographic data;
- iii. Review and revise as needed existing S-57 quality indicators, including the education of both the mariner and the cartographer, and the development of documentation;
- iv. Review and revise as needed the presentation of data quality, as provided in S-52 and its Presentation Library;
- v. Investigate ways of ensuring that ECDIS displays provide a clear warning or indication to the mariner on the quality of the underlying survey data, through appropriate use of the attribute CATZOC and/or improvement of the existing display capabilities, and;
- vi. Propose new data quality topics and other applications for consideration by HSSC.

b) The WG should work by correspondence, group meetings, workshops or symposia. Permanent or temporary sub-working groups may be created by the WG to undertake detailed work on specific topics such as: quality indicators for hydrographic data, tidal information, etc. The WG should meet as necessary. When meetings are scheduled, and in order to allow any WG submissions and reports to be submitted to HSSC on time, WG meetings should not normally occur later than nine weeks before a meeting of the HSSC.

c) The WG should liaise with other relevant HSSC WG's and other IHO bodies, such as S-44 WG, and international bodies as appropriate and as instructed by HSSC.

4. Composition and Chairmanship

a) The WG shall comprise representatives of IHO Member States (M/S), Expert Contributors and Accredited NGO Observers.

b) Decisions should generally be made by consensus. If votes are required on issues or to endorse proposals presented to the WG, only M/S may cast a vote. Votes shall be on the basis of one vote per M/S represented.

c) Expert Contributor membership is open to entities and organisations that can provide a relevant and constructive contribution to the work of the WG.

d) The Chair and Vice-Chair shall be a representative of a Member State. The election of the Chair and Vice-Chair shall be decided at the first meeting after each ordinary session of the Conference (Conference to be replaced by Assembly when the revised IHO Convention enters force) and shall be determined by vote of the Member States present and voting.

- e) If the Chair is unable to carry out the duties of the office, the Vice-Chair shall act as the Chair with the same powers and duties.
- f) Expert Contributors shall seek approval of membership from the Chairman.
- g) Expert Contributor membership may be withdrawn in the event that a majority of the M/S represented in the WG agree that an Expert Contributor's continued participation is irrelevant or unconstructive to the work of the WG.
- h) All members shall inform the Chairman in advance of their intention to attend meetings of the WG.
- i) In the event that a large number of Expert Contributor members seek to attend a meeting, the Chairman may restrict attendance by inviting Expert Contributors to act through one or more collective representatives.

NOMINATION for MEMBERSHIP of the DQWG

*(to be returned to the IHB by 31 March 2010
E-mail : info@ihb.mc – Fax : +377 93 10 81 40)*

Member State:

Based on the DQWG ToR at Annex C, and taking into account the current membership (www.iho-ohi.net/mtg_docs/com_wg/DQWG/DQWG_MISC/DQWG_Members.pdf):

- Do you confirm your nominee(s), if he/she/they appear(s) in the existing membership list?

YES NO Not Relevant

- Do you wish to propose a candidate as DQWG member?

YES NO

If yes, name of candidate: **E-mail:**

Comments (if required)

Name/Signature:

Date: