

Report of the Data Quality WG (DQWG)

Submitted by:	Mr Antti CASTRÉN, Chairman, DQWG
Related Documents:	Report of the 10th DQWG meeting (7-9 Jul 2015), Brest, France Data Quality Model (version July 2015, working document)
Related Projects:	

Chair:	Mr Antti CASTRÉN, Finland
Vice-Chair:	Mr Sean LEGEER, NOAA, USA
Secretary:	Mr Eivind MONG, Jeppesen
Member States:	Australia, Brazil, Finland, France, Italy, Netherlands, Norway, Sweden, UK, USA
Expert Contributor Organisations:	Caris, Jeppesen
<i>see Annex A for full details</i>	

Meetings Held During Reporting Period

DQWG10 7-9 July, 2015, Brest, France

Next Planned Meeting

DQWG11 (tentative) May 10-12 2016 in Silver Springs, USA

Work Program and Progress on HSSC Action Items

Group has so far mainly concentrated on the data quality topics relating to S-101 and specially on the categorizing of the data quality of bathymetric data. The revised data model for data quality in S-101 is believed to gain more support among the member states, since it takes better into account varying levels for data quality needed in diverse environments.

The previously identified problems with data quality indicator(s) in S-57 were written down and the solutions and stakeholders were found.

Educating the mariner on data quality has proven to be a very challenging topic. The group has discussed the topic within the group as well as external experts.

Problems Encountered

The resources allocated for group's work by its active members vary from 5 up to 30 days per annum. This has affected working methods in such a way that results achieved have previously been based almost solely on work done during meetings. During previous meeting the group discussed about working methods and identified future tasks which could be covered by correspondence.

Any Other Items of Note

Satellite derived bathymetry and crowd sourced bathymetry have increased their importance within last 12 months. Therefore DQWG will investigate these topics next year so far that there will be at least understanding of data quality aspects these methods bring to the table.

Conclusions and Recommended Actions

In order to streamline and focus the priorities of work items are recommended to be changed as proposed in Annex B.

Group will work more closely with those WGs which are responsible for one or more S-1xx product specifications in order to identify the data quality topics and challenges within the respective product specification(s) in due time in the future. In addition general guidelines for data quality topics will be created.

Justification and Impacts

Creating a road map and general guidelines for data quality items within S-10x products will benefit the overall progress of the various product specifications as well as timing and resource allocation of the working groups involved.

Action Required of HSSC

The HSSC is invited to:

- a. note the report
- b. endorse the work plan 2015-2016

Annex A HSSC7-05.7A

Membership of DQWG

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DQWG Proposed Work Plan - 2016 to 2017

DQWG Tasks

- A. 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 "IHO Universal Hydrographic Data Model" (IHO Task 2.5.2)
- B. Monitor and further develop quality indicators for hydrographic data (IHO Task 2.5.2)
- C. Maintain and extend as needed existing quality indicators in S-57 "IHO Transfer Standard for Digital Hydrographic Data", including the education of both the mariner and the cartographer, and the development of documentation (IHO Task 2.5.2)
- D. Maintain and extend as needed the presentation of data quality, as provided in S-52 "Specifications for Chart Content and Display Aspects of ECDIS" and its Presentation Library (IHO Task 2.5.2)
- E. 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 (IHO Task 2.5.2)
- F. Propose new data quality topics and other applications for consideration by HSSC (IHO Task 2.5.2)
- G. Maintain and extend data quality related elements of S-100 "IHO Universal Hydrographic Data Model" (IHO Task 2.5.2)
- H. Maintain and extend data quality related elements of S-101 "ENC Product Specification" and other S-100-based Product Specifications (IHO Task 2.5.2)
- I. Conduct the annual meetings of DQWG (IHO Task 2.5.1)

Task	Work Item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-Completed	Contact Person	Affected Pubs/Standard	Remarks
A.1	Review ISO 19113, 19114, 19115 and 19157 and make recommendations for inclusion in S-100	M		2010	Permanent	O	NCWG	S-100	Ongoing task to keep S-100 data quality in line with ISO standards.

B.4	Develop the hierarchy approach by formalizing the hierarchy and the algorithm that drive the display	H	HSSC-7	2013	2015	C	Mike Prince	S-101	Hierarchy formalized, will be presented in HSSC7
C.4	Investigate possible methods for how to educate practicing mariners on data quality issues.	M	DQWG9		Permanent	O	DQWG		Investigate in liaison with training institutions the adequacy of existing HO documentation on the quality aspects of the practical use of ENCs. IHO CL 51/2013 issued on this topic. To include the recommendations of HSSC5-INF4, interface with IMO/HTW (Action HSSC5/45 refers).
E.1	Develop logic for indicators in current and proposed approaches.	H	DQWG9	2010	2014	C	Mike Prince	-	
E.2	Demonstrate methods to mariners.	M	Follows S-100 demonstrator	2012	2016	O	Antti Castrén	S-101	Build possible methods into ENC and ECDIS to demonstrate effectiveness.
E.3	Demonstrate methods to mariners	M	Follows E.1	2014	2017	P	Antti Castrén		Consider using the Singapore Strait Marine Electronic Highways (MEH) project as a test case (Action HSSC5/47 refers).
F.1	Investigate areas of quality concern (other than survey / bathymetry)	M	DQWG9	2010	Permanent	C	Eivind Mong	-	SNPWG has responded, liaison is ongoing.Moved to H.1
F.2	Investigate data quality related topics concerning crowd sourced hydrographic information	M	DQWG11	2016	2017	P	Antti Castrén	S-44?	Liaison with IRCC's working group

F.3	Investigate data quality related topics concerning satellite derived bathymetry	M	DQWG11	2015	2017	P	Antti Castrén	S-44?	The topic was introduced during DQWG10
G.1	Create and maintain general guidelines regarding data quality within IHO	H	DQWG11	2015	2016	O	Antti Castrén	S-100, S-10x	
H.1	Liaise with other working groups and create road map with timeline for data quality items within S-10x	H	DQWG11	2015	Permanent	P	Antti Castrén	S-10x	
I.1	Conduct the annual meeting of DQWG	H	DQWGnn	2015	Permanent	O	Antti Castrén		Conduct annual meeting in late spring each year.