

Cross check of DQ chapters of S-1xx PS



PUBLISHED S-1XX PRODUCT SPECIFICATIONS

International Hydrographic Organization

S-101	ENC Product Specification (Edition 1.0.0, December 2018)	<u>Link</u>
S-102	Bathymetric Surface Product Specification (Edition 2.0.0, October 2019)	<u>Link</u>
S-111	Surface Currents Product Specification (Edition 1.0.0, December 2018)	<u>Link</u>
S-121	Maritime Limits and Boundaries Product Specification (Edition 1.0.0, October 2019)	<u>Link</u>
S-122	Marine Protected Areas (Edition 1.0.0, January 2019)	Link
S-123	Marine Radio Services (Edition 1.0.0, January 2019)	Link
S-127	Marine Traffic Management (Edition 1.0.0, December 2018)	<u>Link</u>
S-129	Under Keel Clearance Management (Edition 1.0.0, June 2019)	Link

https://iho.int/en/standards-and-specifications



S-97 IHO GUIDELINES FOR CREATING S-100 PS

International Hydrographic Organization



https://iho.int/en/standards-and-specifications



S-97 PART C – DATA QUALITY

International Hydrographic Organization

PART C -	– DATA QUALITY	77
C-1	OVERVIEW	77
C-2	INTRODUCTION	77
C-3	REFERENCES	77
C-4	TERMS AND ABBREVIATIONS	
C-4.1	TERMS	78
C-4.2	ABBREVIATIONS	79
C-5	OVERVIEW OF DATA QUALITY MEASURES	80
C-5.1	DATA QUALITY MEASURES	81
C-6	RECOMMENDATIONS FOR PRODUCT SPECIFICATION DEVELOPERS	82
C-6.1	COMPLETENESS > COMMISSION / OMISSION	82
C-6.2	LOGICAL CONSISTENCY > CONCEPTUAL CONSISTENCY	82
C-6.3	LOGICAL CONSISTENCY > DOMAIN CONSISTENCY	83
C-6.4	LOGICAL CONSISTENCY > FORMAT CONSISTENCY	83
C-6.5	LOGICAL CONSISTENCY > TOPOLOGICAL CONSISTENCY	83
C-6.6	POSITIONAL ACCURACY	83
C-6.7	THEMATIC ACCURACY	84
C-6.8	TEMPORAL QUALITY	85
C-6.9	AGGREGATION	85
C-6.10	USABILITY	86
C-7	DATA QUALITY MEASURES	87
C-8	MINIMUM STANDARD FOR DATA VALIDATION	



CROSS CHECK MATRIX TOOL

International
Hydrographic
Organization

RECOMMENDATIONS	101	102	111	121	122	123	127	129
1. Completeness								
2. Conceptual consistency								
3. Domain consistency								
4. Format consistency								
5. Topological consistency								
6. Positional accuracy								
7. Thematic accuracy								
8. Temporal quality								
9. Aggregation								
10. Introduction to DQ paragraph								

Y = YES, N = NO, N/A = not applicable



International Hydrographic Organization

C-6.9 Aggregation

Data Quality specified at upper level (for example series) is applicable at lower level (for example dataset), see Table C-6-1 (quoted from ISO 19157) below. If the Data Quality differs between the upper and lower level, then supplemental information should be provided at the lower level.

Upper level	Series			
	Dataset			
	Subset			
+	Feature type	Attribute type		
Lower level	Feature instance	Attribute instance		

Table C-6-5 - Hierarchical levels

In the case of aggregation of different quality results, the standalone quality report should provide full information on the original results (with evaluation procedures and measures applied); the aggregated result; and the aggregation method, whereas the metadata may describe only the aggregated result with a reference to the original results described in the standalone quality report.



International Hydrographic

Organization

INTRODUCTION TO DATA QUALITY

Introduction to data quality

Data quality allows users and user systems to assess fitness for use of the provided data. Data quality measures and the associated evaluation are reported as metadata of a data product. This metadata improves interoperability with other data products and provides usage by user groups that the data product was not originally intended for. The secondary users can make assessments of the data product usefulness in their application based on the reported data quality measures.

For <this Product Specification> the following Data Quality Elements have been included⁸:

- Conformance to this Product Specification;
- Intended purpose of the data product;
- Completeness of the data product in terms of coverage;
- Logical Consistency;
- Positional Uncertainty and Accuracy;
- Thematic Accuracy;
- Temporal Quality;
- Aggregation measures;
- Validation checks or conformance checks including:
 - o General tests for dataset integrity;
 - Specific tests for a specific data model.

Recommendation 10: Paragraph "Introduction to data quality" to be used as a template by all S-100 based Product Specifications.



DQWG is invited to



- Note this presentation
- Create a subWG
- Start the cross checking of the S-1xx Product Specification
- Correspond by e-mail or VTC as considered necessary
- Report their result to the DQWG