



9th Test Strategy Meeting

S-100 Validation Tests Progress

Agenda Item 6.1

7 - 10 March 2023 / Seoul, Republic of Korea

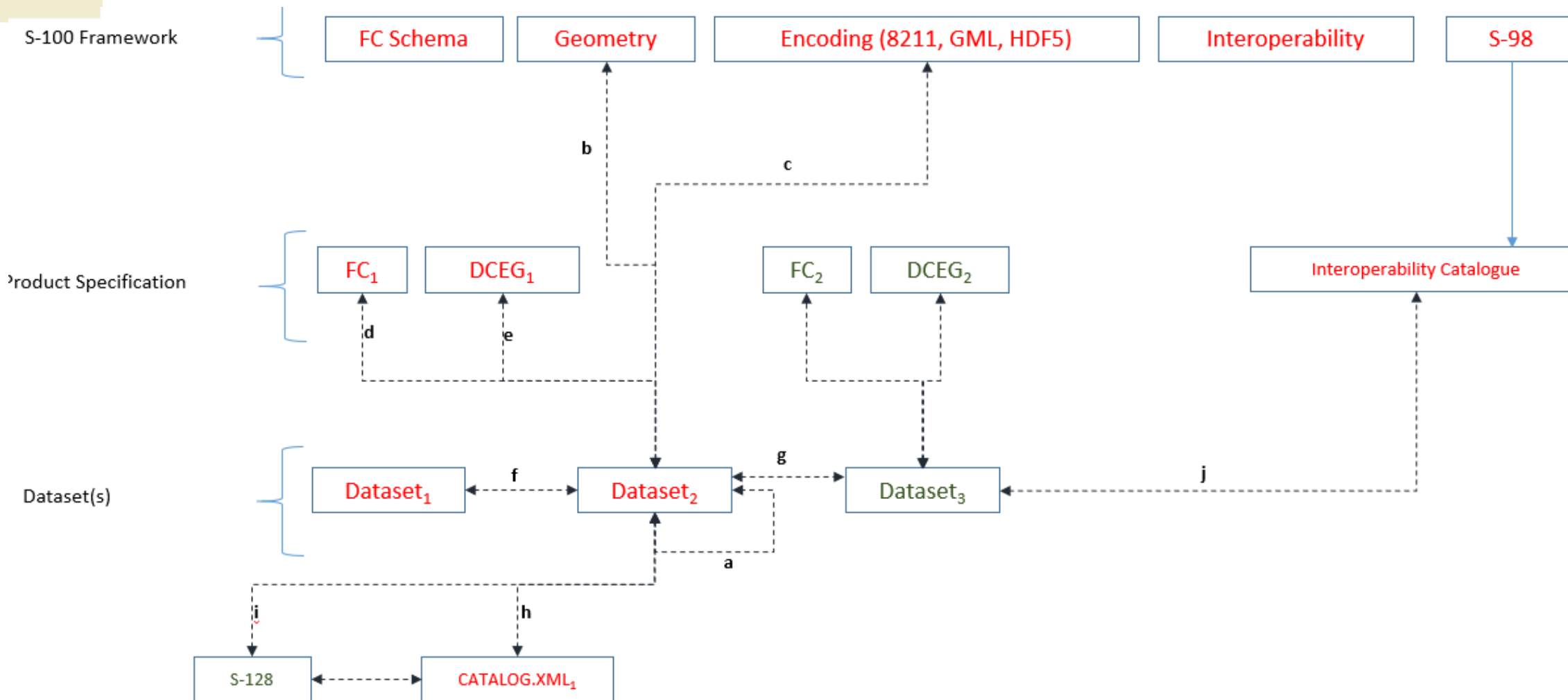


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S-100 VALIDATION TESTS – CURRENT STATUS

International Hydrographic Organization

- Workshop held in December



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S-100 VALIDATION TESTS – CURRENT STATUS

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Validation	Against	Who?	Notes / Examples
a	Dataset against itself	Data Producer	Incorrect ordering of features
b	S-100 Geometry Schema	Data Producer	Things which contravene the geometry model, e.g. clockwise/anticlockwise rings, unused curves
c	S-100 Encoding (Part 10a, b or c)	Data Producer	Formatting problem with encodings, corrupt ISO8211, non-conformant GML, incorrect HDF5 group names, incorrectly formatted attributes (e.g. dates, Booleans or unknowns), bad filenames
d	Product Specification Feature Catalogue	Data Producer	Names of attributes or features which aren't in the feature catalogue. Missing mandatory attribution
e	Product Specification DCEG		Bad combination of attributes
f	Against other datasets of the same type	Aggregator	Horizontal/vertical consistency
g	Datasets of a different type	Aggregator	e.g. S-102 depths <u>shoaler</u> than S-101 depths
h	Part 17 Catalogue (and Part 15)	Aggregator	Bad digital signatures, coverage of dataset doesn't match coverage in catalogue, incorrect encoding or mismatch of producer code
i	Corresponding S-128	Distributor?	Mismatch of coverage or dataset name.
j	Against interoperability catalogue	Producer	Incomplete substituted layer (L2), mismatch of positions (L1)



5 Initial register of tests.

This is an initial register of tests compiled using individual product specifications, and mapping between features in different product specifications. The column headings are as follows:

1. Category. The broad area of functionality the test refers to
2. Description. Description of the conditions the test is attempting to capture.
3. Inputs. Whether tests are designed to be run on single datasets or between datasets of different type/product.
4. Products. Which products the test is focused on
5. Classification "C" – critical, "W" – warning. A draft classification based on possible user/ECDIS impacts.

Propose adding Standard/document to refer to

Category	Description	Inputs	Products	Classification
Dataset Coverage and Datums				
	Spatial limits must match CATALOG.XML	Dataset / CATALOG.XML	All	C
	Temporal limits must match CATALOG.xml	Dataset / CATALOG.XML	All	C
	Temporal limits start must be before temporal limits end	CATALOG.XML	All	C
	Spatial limits must be well defined polygon(s)	CATALOG.XML	All	C
	Horizontal Datum must be WGS84. horizontalDatumValue = 4326 and horizontalDatumReference = "EPSG"	Dataset	All	C
Data Values	Depth must be negative up	Dataset	S-102	C
	All depth values must be Real numbers	Datset	S-102	C
	All Water Level values must be real numbers	Dataset	S-104	C
	All Current speed numbers for Current Speed shall be real numbers. All trend indicators shall be integers, 1, 2 or 3	Dataset	S-104	C
	-90.0°<gridOriginLatitude<90.0° and -180.0°<gridOriginLongitude<180.0°	Dataset	All	C

Categories:

- Dataset Coverage and Datums
- Data Values
- Coverage
- Grid Structure
- Resolution
- Dataset Metadata
- Cross Validation



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- Decision to just focus on navigation only products for now
- Agreed to use proposed structure for tests, amend if required
- Participants to group established
- Requested Test Beds to provide input
- GitHub page identified
 - One had been created in Jan 2022



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S-100 VALIDATION TESTS – NEXT STEPS

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- Side discussion at TSM
- Hoping to complete work by correspondence
 - Discuss with S-101 PT whether we can hold side meeting at Brest, France in June and Lombok, Indonesia in September
- Hold VTC in near future and then set up regular meetings



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S-100 VALIDATION TESTS – NEXT STEPS

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Tasks:

- Updating draft S-100 Validation diagram & table
 - Identify different types of validation & who is responsible for them
- Need to contact relevant Product Specification owners, in particular S-104 & S-111 as Edition 2.0.0 are scheduled earlier.
- Input tests already identified into the proposed structure – primarily S-101 PT work
- Review DQWG documents
- Start on S-100 validation document - draft due for S-100 WG 8
- Produce timeline, if useful
- Request to HSSC for designated home for S-100 Validation (own specification or annex)