



# **S-100 Validation Tests sub group**

**3<sup>rd</sup> VTC Meeting**

4<sup>th</sup> September 2023



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# MEETING PROTOCOL

International  
Hydrographic  
Organization

Meeting participants are kindly requested to note the following meeting protocols;

- Please keep your camera and microphone turned “**off**” if you are not talking or presenting
- If you want to make an intervention, **please turn your camera and microphone on and, raise your hand** to indicate that you wish to speak
- Don’t forget to turn your microphone “**on**” before speaking, and “**off**” when finished
- Please use the “**Chat**” function to communicate an text information to the meeting
- If you have any problems connecting using Firefox or other browser – please try using Chrome.



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# AGENDA

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- Issues raised
  - TWCWG Feedback on IIC Validation Tests
- Initial tests Part1, Part 2, Part 4b, **Part 5**, Part 6, **Part 7(not finished)**, Part 17  
(S100ValidationTests\_x)
- Status on tasks
- Next meetings



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**ISSUES**

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- **Open Issues**

- Issue 8 (S-100\_050, S-100\_061, S100\_64)
- Issue 9 (Part 17 checks)
- Issue 10 (Checks for organization and individual information in CATALOG.XML)
- Issue 11 (Proposed checks for locale consistency between resource and discovery metadata block)
- Issue 12 (Require valueOfSounding or defaultClearanceDepth)
- Issue 7 (use of “unknown” for feature attribute binding)
- Issue 13 (Input on proposed checks relating to HDF5-format products)
- Issue 6 (naming convention)

<https://github.com/iho-ohi/S-100-Validation-Checks/issues>



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# ISSUE 8

## S100\_050, S100\_061, S100\_064 #8

Open

rmalyankar opened this issue on Jul 11 · 0 comments



rmalyankar commented on Jul 11

...

The following are rules for production, interpretation, or dataset management, rather than validation checks - they cannot be applied to check anything, instead they specify "what to do" rather "what the subject(\*) must or must not have".

S100\_050 When a datasets is cancelled it must be removed from the system

S100\_061 The start and end instants of [t]he interval calculated by combining userDefinedMaintenanceFrequency with the issue date/time must be interpreted according to Part 3 Clause 3-8

S100\_064 If both userDefinedMaintenanceFrequency and the maintenanceDate are encoded in the same discovery metadata block, the maintenanceDate supersede the userDefinedMaintenanceFrequency

(\*) dataset for 050, metadata discovery block for 061 and 064

Check 050 specifies the state of the end-user system after ingesting/integrating a cancellation; 061 and 064 specify how the end-user application must interpret certain elements in discovery metadata.

They might perhaps be rewritten as requiring verification that the producer's intent is consistent with the mandated action or interpretations, but was that the intent in including them or does it stretch the meaning of "validation check" further than we want?



Part	Check ID	Description	Classification	S-100 Part	S-100 Clause	Introduced	Modified	Internal use - uploaded date
17	S100_050	When a datasets is cancelled it must be removed from the system		17	4.4.1	5.1.0		07-07-2023
17	S100_061	The start and end instants of the interval calculated by combining userDefinedMaintenanceFrequency with the issue date/time must be interpreted according to Part 3 Clause 3-8		17	4.9.1	5.1.0		07-07-2023
17	S100_064	If both userDefinedMaintenanceFrequency and the maintenanceDate are encoded in the same discovery metadata block, the maintenanceDate supersede the userDefinedMaintenanceFrequency		17	4.9.1	5.1.0		07-07-2023



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# ISSUE 9

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## Subsumed Part 17 checks #9



Open rmaryankar opened this issue on Jul 15 · 2 comments



rmaryankar commented on Jul 15

...

Some Part 17 checks are implicitly included in S100\_20 and need not be listed as separate checks, because ordinary XML schema-validation using the S-100 generic schemas would detect breaches of the respective check conditions as originally stated.

| S100\_020 XML catalogues conform to the S-100 Metadata Profile Schemes

Checks subsumed in S100\_020 are:

| S100\_021 S-100 Exchange set contains a conforming S-100\_ExchangeCatalogue  
S100\_033 "All resources within an S-100 Exchange Set must be digitally signed and their signatures included in the Exchange Set Catalogue.  
Or The S-100\_DatasetDiscoveryMetadata attribute digitalSignatureValue is mandatory"  
S100\_052 The S100\_Datacoverage attribute boundingPolygon instance is mandatory and there can only one instance  
S100\_053 Only one defaultLocale is permitted within S100\_Exchange Catalogue  
S100\_055 If userDefinedMaintenanceFrequency is populated the lexical representation for duration is the ISO 8601 extended format PnYnMnDTnHnMnS

Recommendations:

1. Replace S100\_033 with "The digital signature is valid"
2. Replace S100\_052 with "The bounding polygon conforms to the Level 3a rules in Part 7".
3. Add a rule about whether data coverage polygons can have holes ( TBD whether the answer should be yes or no).
4. Replace S100\_053 with "The language in *defaultLocale* and *otherLocale* must be one of the languages listed in the S-100 codellists catalogue. (This file is part of the S-100 generic schemas distribution.)"
5. Add a check for repeated locales: Language/country combinations in a *defaultLocale* or *otherLocale* entry must not be repeated in an *otherLocale* attribute within the S100\_ExchangeCatalogue element's attributes, or within the same discovery metadata block for any resource.



MikusRL commented on Jul 17

...

| ..., or within the same discovery metadata block for any resource.

@rmaryankar do you mean by this anywhere in the metadata within a single exchange set across all datasets? Thanks.



rmaryankar commented on Jul 17

Author ...

| ..., or within the same discovery metadata block for any resource.

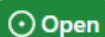
@rmaryankar do you mean by this anywhere in the metadata within a single exchange set across all datasets? Thanks.

Each instance of S100\_DatasetDiscoveryMetadata or S100\_CatalogueDiscoveryMetadata, noting that *otherLocale* is present only in those classes and S100\_ExchangeCatalogue.

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# ISSUE 10

## New checks for organization and individual information in CATALOG.XML #10



Open rmaryankar opened this issue on Jul 25 · 0 comments



rmaryankar commented on Jul 25

If discovery metadata attributes of type CI\_Organisation and CI\_Individual are populated their content must conform to Tables 17-2 and 17-3, pages 31-32.

Table and page numbers are as in Ed. 5.0.0.

This may result in more than one check, going by the tables.

Applies to S100\_DatasetDiscoveryMetadata.{producingAgency, metadataPointOfContact}



Assignees

No one—assign yourself

Labels

None yet

Projects

None yet

Milestone

No milestones

Table 17-2 – Individuals (restriction of CI\_Individual from ISO 19115-1)

Name	Path	Datasets	Other resources
Name of the individual	CI_Individual.name	<b>C</b> (documented if 'positionName' and 'partyIdentifier' not documented)	<b>C</b> (same as for dataset)
Position of the individual in an organization	CI_Individual.positionName	<b>C</b> (documented if 'name' and 'partyIdentifier' not documented)	<b>C</b> (same as for dataset)
Contact information for the individual	CI_Individual > contactInfo > CI_Contact	<b>M</b> (see note 2)	<b>M</b> (see note 2)
Identifier for the party	CI_Individual.partyIdentifier	<b>C</b> (documented if 'name' and 'positionName' not documented)	<b>C</b> (same as for dataset)

Table 17-3 – Organisations (restriction of CI\_Organisation from ISO 19115-1)

Name	Path	Datasets	Other resources
Name of the organisation	CI_Organisation.name	<b>C</b> (documented if 'positionName' not documented – see Note 1)	<b>C</b> (same as for dataset)
Position of an individual in the organisation	CI_Organisation.positionName	<b>C</b> (documented if 'name' not documented – see Note 1)	<b>C</b> (same as for dataset)
Contact information for the organisation	CI_Organisation.contactInfo > CI_Contact	<b>M</b> (see note 2)	<b>M</b> (see note 2)
Identifier for the party	CI_Organisation.partyIdentifier	<b>C</b> (documented if 'name' and 'positionName' not documented)	<b>C</b> (same as for dataset)

NOTE 1 S-100 restricts ISO 19115-1 in that documenting the 'logo' attribute of CI\_Organisation is not sufficient to allow omission of both 'name' and 'positionName'.

NOTE 2 At least one of CI\_Contact attributes phone / address / onlineResource / contactInstructions must be documented.



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ISSUE 11

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## Proposed checks for locale consistency between resource and discovery metadata block #11

 Open rmalyankar opened this issue on Jul 25 · 2 comments



rmalyankar commented on Jul 25

Checks for S100\_DatasetDiscoveryMetadata and S100\_CatalogueDiscoveryMetadata:

1. If a dataset or catalog uses a language or languages other than (or in addition to) English, every language in the dataset/catalog must be indicated in defaultLocale/otherLocale attributes in the corresponding discovery metadata block.
2. If English is one of the languages used in a dataset or catalog, it must be encoded in defaultLocale.

Check for S100\_SupportFileDiscoveryMetadata:

1. If a support file is in a language other than English, the language must be encoded in defaultLocale in the corresponding S100\_SupportFileDiscoveryMetadata block.

Check for support file content:

1. A support file that contains informative text intended for display to end-users must use only one language for all such text.



DavidGrant-NIWC commented on Jul 25

1. Why? I don't understand why this is useful for dataset/catalog discovery.
  - The dataset encodes this information internally.
  - The catalog uses language packs to support this functionality - the catalog itself is always required to be in English.
2. The default value for *defaultLocale* is English, so it should only be required to encode a *defaultLocale* if it is not English.



rmalyankar commented on Jul 25

Author ...

1. Why? I don't understand why this is useful for dataset/catalog discovery.
    - Where in the dataset is this information encoded? What if the dataset is encrypted? Requires a paid license?
    - Where is the requirement that the catalog (which catalog?) is always required to be in English?
    - If locale information is not needed I suggest submitting a proposal to remove those attributes from the respective metadata classes.
- ...it should only be required to encode a defaultLocale if it is not English.

The check ensures that English is not encoded in an *otherLocale* instead of *defaultLocale* when there are multiple languages.

Assignees

No one—assign you

Labels

None yet

Projects

None yet

Milestone

No milestone

Development

Create a branch for:

Notifications

You're receiving notifications from this repository.

2 participants



Lock conversation

Pin issue ⓘ

Transfer issue



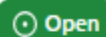


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# ISSUE 12

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## S-101: Require `valueOfSounding` or `defaultClearanceDepth` #12



Open

DavidGrant-NIWC opened this issue last month · 0 comments



DavidGrant-NIWC commented last month

...

Require that one of `valueOfSounding` or `defaultClearanceDepth` must be encoded (can't both be unknown) for:

- `Wreck`
- `Obstruction`
- `UnderwaterAwashRock`

[iho-ohi/S-101-Documentation-and-FC#10](#) (comment)



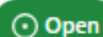
<https://github.com/iho-ohi/S-101-Documentation-and-FC/issues/10#issuecomment-1667844996>

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# ISSUE 7

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## Ability to indicate whether an "unknown" value is allowed for a feature attribute binding. #7

**Open**

FrankHippmann opened this issue on Jul 7 · 5 comments



FrankHippmann commented on Jul 7

...

As a background, the table that is part of S-58 check 2000 indicates whether a feature attribute binding allows for an "unknown" attribute value. From the validation perspective, one aim of the feature catalogue was to remove the need for check 2000. Perhaps the ability to encode "unknown" was overlooked when designing the XML schema for the FC, and I just assumed it was already there.

The benefit of having an "allowsUnknown" attribute in the FC (one of David Grant's suggestions) is that the validation checks for unknown would be implicitly defined, meaning that if the FC is updated, there would be no need to also update the validation checks explicitly. As others have pointed out, in the absence of adding "allowsUnknown" to the FC, there would be the need for product specification specific checks for unknown. Both will work, but my preference is for updating the FC.

For the sake of completeness, I assume that this would not only apply to feature/attribute combinations, but also to other object types for which there are attribute bindings.



Assignees

No one—assign yourself

Labels

None yet

Projects

None yet

Milestone

No milestone

Development

[Create a branch for this issue](#)

Proposal is being submitted to S-100 WG8 for discussion.  
Close issue for now?

Overlap with Issue 4? <https://github.com/iho-ohi/S-100-Validation-Checks/issues/4>

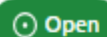


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## Input on proposed checks relating to HDF5-format products #13



rmalyankar opened this issue last week · 0 comments



rmalyankar commented last week • edited ▾

I have circulated the checks related to HDF5 products to the S-102, S-104, and S-111 teams.

Input from the S-102 PT can be seen [here](#).

Input from S-104 and S-111 is in an Excel spreadsheet which I will send to Liz shortly if I can't post it in this repository [Edit: Attached below.]

[S-100\\_Validation\\_Checks-ECDIS\\_HDF5 subset-comments.xlsx](#)



[S-100\\_Validation\\_Checks-ECDIS\\_HDF5 subset-comments.xlsx](#)

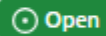


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# ISSUE 6

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## Consistent identifiers for S-100/S-10x validation checks #6



FrankHippmann opened this issue on Jun 27 · 3 comments



LizHaessy commented 37 minutes ago

Collaborator ...

Agreed at VTC 2 to follow the format:  
Check ID, Description, Classification, S-100 Part, S-100 Clause, Introduced version, Modified version

Have separated out the Part number from the Check ID in case information moves Parts in the future. Have also added an Introduced version to know which edition of the standard was being followed at the time it was introduced. Additionally have introduced a Modified version, so if the check is edited due to changes in standard then the associated version can be noted.

For now the Check IDs is for Issue tracking purposes only, the Check IDs will be renumbered in numerical order once the first draft is ready for submission.



LizHaessy commented 36 minutes ago

Collaborator ...

Need to decide on whether we agree on the use of A, B, C etc., for when the checks may get separated later on. This has previously happened with S-58.



Propose close issue for now



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## **NEXT STEPS**

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- Continue producing a set of tests from Parts of S-100 & incorporate other tests (S-101, IIC etc.)
  - Tabulate and place on GitHub
  - Then group to comment and raise issues using Check ID in title
  - 65 tests written from Part1, Part 2, Part 4b, Part 6, Part 17
  - Co-ordination meeting with S-101 Validation 5<sup>th</sup> September
- Categorisation of tests – proposal for Lombok and agree on GitHub?
- Interfaces with DQWG
- Naming conventions across different validation tests
- Document write up with an initial explanation of ‘what is S-100 level validation’



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## **DELIVERABLE – OCT 2023**

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- Initial list of high level checks
  - Can be expanded upon afterwards
- Document write up with an initial explanation of ‘what is S-100 level validation’



# IHO WORK PLAN

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ID	Task	Further Information	Who	Start Date	End date	Status
	1. Collate information an prepare Validation Tests					
1.1	Establish GitHub page		Yong/ Liz			COMPLETE
1.2	Contact Test Bed owners for input	SHOM/UKHO, KHOA & NO contacted. EU InterReg Project due to begin in 2023 - SE are leads (DK are members)	Liz	01-04-2023	06-07-2023	COMPLETE
1.3	Contact DQWG for involvement	Chair contacted and agrees there is cross over between groups. Hopes to attend September VTC	Liz	01-04-2023	06-07-2023	COMPLETE
1.4	Contact relevant PS owners	Contacted S-102, S-104, S-111, S-124, NIPWG generally, S-401 for information.	Liz	01-04-2023	06-07-2023	COMPLETE
1.5	Contact Validation Software Manufacturers	Closing action as the software manufacturers are members of this group. If they have information to share please upload to GitHub or contact Liz & Yong	Liz	01-04-2023	06-07-2023	CLOSED
1.6	Produce Work Plan	Work plan produced and will maintain	Liz	01-04-2023	06-07-2023	COMPLETE
1.7	Raise awareness of this group	Members to raise awareness of this group when attending technical meetings	ALL	01-04-2023	04-09-2023	COMPLETE
1.8	Review S-101 Proposed S-100 level tests	Uploaded to GitHub page. Need review for determing if should be carried forward to S-100 Validation tests and if need rewording. DK have begun an initial review	ALL	01-07-2023		IN PROGRESS
1.9	Review S-129 Validation tests	Uploaded to GitHub page. Need review for determing if should be carried forward to S-100 Validation tests and if need rewording. Discussed at VTC2 that is is not in scope for this group.	ALL	N/A	N/A	ON HOLD
1.10	Review S-124 Validation tests	Contacted chair for access to tests. Discussed at VTC2 that is is not in scope for this group.	ALL	N/A	N/A	ON HOLD
1.11	Review S-104 Validation tests	Contacted chair for access to tests. Checks are on Registry need to contact for permission to post on GitHub page. Discussed at VTC2 that is is not in scope for this group.	Liz/All	N/A	N/A	ON HOLD
1.12	Review S-102 Validation tests	Contacted chair for access to tests. Discussed at VTC2 that is is not in scope for this group.	ALL	N/A	N/A	ON HOLD
1.13	Determine naming convention for tests	Intial proposal submitted - Issue 6 on GitHub. Proposal was amended during VTC2 to S100_xxx . It was questioned what the value of the Part number was and this could cause issues if S-100 changes Parts around as has done previously. Group to review and comment on for agreement by next VTC in September.	ALL	01-07-2023	01-09-2023	IN PROGRESS
1.14	Agree categorisation of Validation tests		ALL	01-07-2023	10-10-2023	PLANNED
1.15	Agree structure of Validation tests	Discussed briefly at VTC 2 and suggestions implemented regarding	ALL	01-07-2023	10-10-2023	IN PROGRESS
1.16	Review relevant DQWG documentation	Identify and review relevant DQWG documentation	Liz initially to identify Group to review	01-04-2023	01-09-2023	PLANNED
1.17	Review S-100 Parts for S-100 level Validation tests	Initial review has begun - Parts 1, 2, 6, 4b, 17 intially reviewed and posted for comment 07/07/23.	ALL	01-04-2023	01-09-2023	IN PROGRESS
1.18	Develop cross check of PS validation tests to S-100 to identify gaps	This was proposed at S-101 PT meeting. Is this something we want to progress. Perhaps activity for after initial delivery at S-100 WG9. Potential collaboration with DQWG? Discussed at VTC 2 that is this not a task for this group.	ALL	N/A	N/A	ON HOLD
1.19	Update Validation Diagram	Diagram initially produced for S-100 WG8. Group questionned relevance of diagram at VTC1, so work is on hold. Will reopen if required.	N/A	N/A	N/A	ON HOLD
1.20	Update table outlining different types of Validation and who is responsible for them	Table initially produced for S-100 WG8. Group questionned relevance of diagram at VTC1, so work is on hold. Will reopen if required. May be needed for Introduction section to S-100 Validation Tests.	N/A	N/A	N/A	ON HOLD
1.21	Produce a data flow diagram showing where valdiation takes place	Deemed not priority at this point due to resources available. Will reopen if required.	N/A	N/A	N/A	ON HOLD
1.22	Produce a timeline	Deemed not priority at this point due to resources available. Will reopen if required.	N/A	N/A	N/A	ON HOLD
	2. Prepare draft delivery to S-100 WG9					
2.1	Produce wording for introduction to document on S-100 Validation				10-10-2023	PLANNED
2.2	Draft Initial S-100 Validation tests focused on first phase S-100 deliveries				10-10-2023	PLANNED



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## **NEXT MEETINGS**

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- S-101PT WG meeting - Lombok, Indonesia 27-29<sup>th</sup> September
  - Planned slot Friday 29<sup>th</sup> for 1 hour, VTC should be possible.
- Monday October 23<sup>rd</sup>? To agree on submission to S-100 WG
- November S-100 WG 8 meeting – Singapore 13-17<sup>th</sup> November





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Any Questions?