



# 14<sup>th</sup> Meeting of the Hydrographic Services and Standards Committee

## **Report of the S-101 Project Team**

S-101 PT Chair Thomas RICHARDSON

**Agenda Item 5.1C**



IHO

## MEETINGS HELD DURING REPORTING PERIOD

International  
Hydrographic  
Organization

The S-101 Project Team has met twice since HSSC13

1. S-101 PT 7 May 2021
2. S-101PT 8 Dec 2021

An additional informal catch up meeting was held 15 Mar 2022

The following sub groups have also met during the period

- DCEG Sub Group
- Portrayal Sub Group
- Scales Sub Group
- S-101 Validation Sub Group
- S-101 Test Datasets Sub Group



IHO

## PROGRESS DURING THE PERIOD

International  
Hydrographic  
Organization

Good progress has been made across 3 supporting sub groups as follows;

- **DCEG** – Following review of the current DCEG and based on inputs from groups including the Portrayal Sub Group a draft 1.0.2 of the DCEG has been prepared and was endorsed at the PT8 meeting as a working baseline. A Feature Catalogue 1.0.2 has now been prepared by KHOA and forms the stable baseline for S-101 1.1.0
- **Portrayal** – The sub group has made significant progress and is now developing the new symbols and rules for S-101 1.1.0
- **Validation Checks** – An initial draft set of checks have been drafted and work to review these based on the DCEG 1.0.2 has begun
- **Scales** – Some important initial decisions have been taken, but quite an amount of work still needed
- **Test Datasets** – Work has commenced on this but there remains much to do, the availability of FC 1.0.2 is a key dependency for test dataset creation

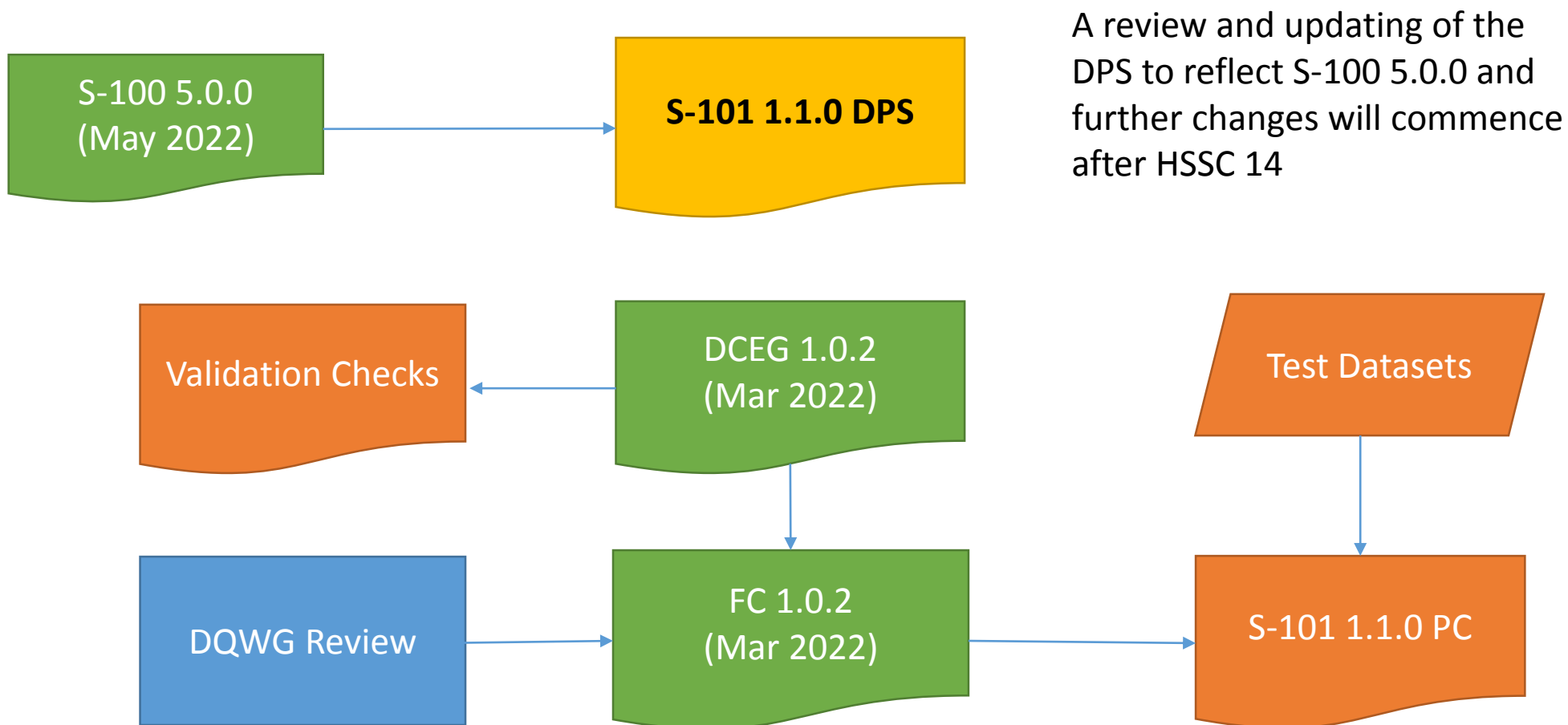


IHO

# S-101 1.1.0 COMPONENT RAG STATUS

RAG – RED AMBER GREEN

International  
Hydrographic  
Organization



Progress on items shown in Orange is constrained by resources and could delay delivery of S-101 1.1.0 as planned. Although a representative set of test datasets and validation checks could be a compromise a complete Portrayal Catalogue is considered to be a critical element of S-101 1.1.0 to support test and development



IHO

## WAY FORWARD

International  
Hydrographic  
Organization

- The PT8 meeting (Dec 21) reviewed progress against the workplan and identified that test datasets are a significant barrier to progress, there are also limited resources to work up symbol designs and contribute to discussions more generally
- It was agreed to establish a Test Dataset sub group and a lead for this group is still sought, initial work has begin to establish the group and a tender for the use of IHO special projects fund has been progressed to support the S-101 part of S-164
- Based on Feature Catalogue 1.0.2 as a baseline work will now focus on working up Portrayal Changes and building a Portrayal Catalogue alongside the work on Validation Checks and Test Datasets
- The PT will continue to work closely with the ISO 9001 cell to track progress and during this critical period for S-101 will meet more regularly, a monthly PT executive meeting is taking place to track progress and conduct “management review” (as per ISO 9001)



IHO

## CHALLENGES 1/2

International  
Hydrographic  
Organization

- S-101 1.1.0 has a major dependency on S-100 5.0.0 but also on the associated registry and other infrastructure that is essential to deliver a stable product specification in a timely manner
- The further definition and elucidation of the dual fuel concept (S-100WG6-06.2) is an important input for the PT and this will dictate the extent to which S-101 modifies existing Portrayal during the transition period
- The time lag between the availability of S-100 5.0.0 as a standard and the availability of updated tools for production of catalogues and datasets may delay the planned delivery of S-101 1.1.0



IHO

## CHALLENGES 2/2

International  
Hydrographic  
Organization

- Although the sub groups are active the Project Team continues to draw on a limited group of active contributors additional contributions will be needed to progress S-101 1.1.0 as planned. There is a lack of leads for sub groups and the PT chair is acting as interim lead for 2 of them to try and support progress
- S-101PT Letter 5/2021 sought indications of contributions to support the PT. Both responses and indications of active contributions have been very limited
- There is a need to begin to prepare for wider stakeholder engagement to support the implementation of S-101 and with the PT resources focussed on delivery of edition 1.1.0 this is yet to start in anger



IHO

WAY AHEAD

International  
Hydrographic  
Organization

- As a stretch target the delivery of S-101 1.1.0 by the end of 2022 is still achievable but early 2023 is more realistic given resources and associated risks
- This may impact the delivery of 2.0.0 in 2024 given the time needed for implementation and sufficient testing activity
- Efforts will be focussed on the delivery of a Portrayal Catalogue that is complete and additional resources will be sought to support this, in liaison with the IHO Secretariat
- Validation checks and Test datasets may not be complete in edition 1.1.0





**IHO**

# **OUTCOMES**

International  
Hydrographic  
Organization

- The HSSC is invited to:
  - a. endorse the work plan presented on the next slide
  - b. encourage IHO member states and wider stakeholders to actively support the development of S-101 1.1.0



**IHO**

# WORKPLAN

International Hydrographic Organization

Ref	Task	Dependencies	Who	Start	End	Status
A1	<b>Develop and Finalize Edition 2.0.0 of S-101 ENC Product Specification</b>					
Intent is to deliver an updated and more complete S-101 1.1.0 aligned to S-100 5.0.0 so that meaningful testing can support development towards 2.0.0. S-100 5.0.0 publication expected Sep 2022 (S-100WG Letter 5/2020).						
A.1.1	Review draft changes to DCEG as prepared by IHO Sec.	None	DCEG SG	01/10/2020	01/03/2021	COMPLETED
A.1.2	Conduct a review cycle of the S-101 Data Product Specification and DCEG. Includes comment review.	None	ALL	01/03/2021	21/07/2021 +22	COMPLETED
A.1.3	Interim FC (1.0.1) to be generated to support testing.	A1.1	KHOA	01/03/2021	22/07/2021 +112	COMPLETED
A.1.4	Process registry changes resulting from review of the DPS and DCEG.	A.1.2	IHO Sec	01/01/2022	07/02/2022+6	COMPLETED
A.1.5	Prepare an updated Feature Catalogue for S-101 1.0.2.	A.1.2/A.1.4	KHOA	01/02/2022	31/03/2022 +21	COMPLETED
A.1.6	Prepare new and updated Portrayal content.	A.1.2	Port SG	01/10/2020	31/05/2022	IN PROGRESS
A.1.7	Process registry changes resulting from Portrayal work.	A.1.6	IHO Sec	01/04/2022	01/07/2022	PLANNED
A.1.8	Prepare a complete PC for S-101 1.1.0.	A.1.5, A.1.7	Port SG	01/04/2022	01/09/2022	PLANNED
A.1.9	Develop and review Portrayal Annex	A.1.5	Port SG	01/09/2021	01/06/2022	PLANNED
A.1.5	Prepare a final Feature Catalogue for S-101 1.1.0.	A.1.5	KHOA	01/06/2022	01/09/2022	PLANNED
A.1.10	Prepare an initial draft set of S-101 Validation Checks. (Critical checks as a minimum)	A.1.2, A.1.5, A.1.8	VC SG	01/04/2020	01/09/2022	IN PROGRESS
A.1.11	Finalise S-101 Test datasets*	A.1.5, A.1.8, A.1.10	TDS SG	01/01/2022	01/10/2022	IN PROGRESS
A.1.12	DQWG to conduct review of S-101 draft components.**	Various	DQWG	01/03/2022	01/10/2022	IN PROGRESS
A.1.13	Prepare content for publication.	Various	IHO Sec	01/07/2022	01/09/2022	PLANNED
A.1.14	Conduct pre-publication quality checks.	A.1.13	ALL	01/09/2022	01/11/2022	PLANNED
A.1.15	Review DPS and other components for S-100 5.0.0 changes and consequential action.	HSSC 13	ALL	01/04/2022	01/07/2022	PLANNED

\* Test Datasets for developmental purposes will be provided earlier to support development this task relates to test datasets for S-164 specifically.

\*\* Individual components will be provided to the DQWG for reiew when ready in order to manage the workload.

**IHO**

# SUB GROUP SUMMARY

International  
Hydrographic  
Organization

Sub-Group Name	Lead	Activities (link to working area)	2022 Focus
DCEG Sub-Group	Jeff Wootton (IHO Sec)	Defining the data model and encoding guidance as provided in the DCEG document. <a href="https://github.com/iho-ohi/S-101-Documentation-and-FC/issues">https://github.com/iho-ohi/S-101-Documentation-and-FC/issues</a>	Preparation of Feature Catalogue 1.0.2 and further review of change proposals.
Portrayal Sub-Group	Alvaro Sanchez (AU)	Defining the symbols and portrayal rules defined in the S-101 Portrayal Catalogue and contributing to the ECDIS functions/requirements. <a href="https://github.com/S-101-Portrayal-subWG/Working-Documents/issues">https://github.com/S-101-Portrayal-subWG/Working-Documents/issues</a>	Develop new symbols and rules. Prepare Portrayal Catalogue to support S-101 1.1.0.
Validation Sub-Group	Tom Richardson (UK) (New lead sought)	Drafting of validation checks for S-101 and more generally defining checks for S-100 to support all product specifications. <a href="https://github.com/iho-ohi/S-101-Documentation-and-FC/issues">https://github.com/iho-ohi/S-101-Documentation-and-FC/issues</a>	Develop and review validation checks for S-101 reflecting S-100 5.0.0 and associated Catalogues.
Scales Sub-Group	Christian Mouden (FR)	<a href="https://github.com/iho-ohi/S-101-Documentation-and-FC/issues">https://github.com/iho-ohi/S-101-Documentation-and-FC/issues</a>	Provide guidance in S-101 documentation for Data Producers, on how to organize their S-101 ENCs schemes.
Dataset Load/Unload Strategy Sub-Group	Christian Mouden (FR)	<a href="https://github.com/iho-ohi/S-101-Documentation-and-FC/issues">https://github.com/iho-ohi/S-101-Documentation-and-FC/issues</a>	Review and refine the loading strategy description in S-101 documentation.
Test Dataset Sub-Group	Lead Sought	To specify and coordinate the production of test datasets to support the development and testing of S-101. <a href="https://github.com/iho-ohi/S-101-Test-Datasets">https://github.com/iho-ohi/S-101-Test-Datasets</a>	Design and prepare test datasets to support Portrayal changes based on current and planned Feature Catalogues.