

HSSC ISO 9001 cell

Update





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Main Purpose

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- Council 4, agreed to experiment on the application of the ISO 9001 principles on a couple of Strategic Plan targets (one per Committee to be proposed).
- HSSC 13 meeting agreed that the ISO 9001 principles will be experimented on the development of the Product Specification for ENC S-101 ed. 2.0.0.
- An HSSC ISO 9001 Cell has been established with development, monitoring and risk management objectives.
- The “HSSC ISO 9001 cell” **is composed of the DQWG chair, 1-2 experts of ISO 9001**, S-101 Project Control Officer (PCO – S101PT Vice Chair) and HSSC vice chair.



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HSSC ISO 9001 cell

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- Meets 4 times a year
- Met 2 times in 2022 (March & September)
- Next meeting planned for February 2023
- Presented risks and opportunities for the first time at HSSC14 (May 2022)

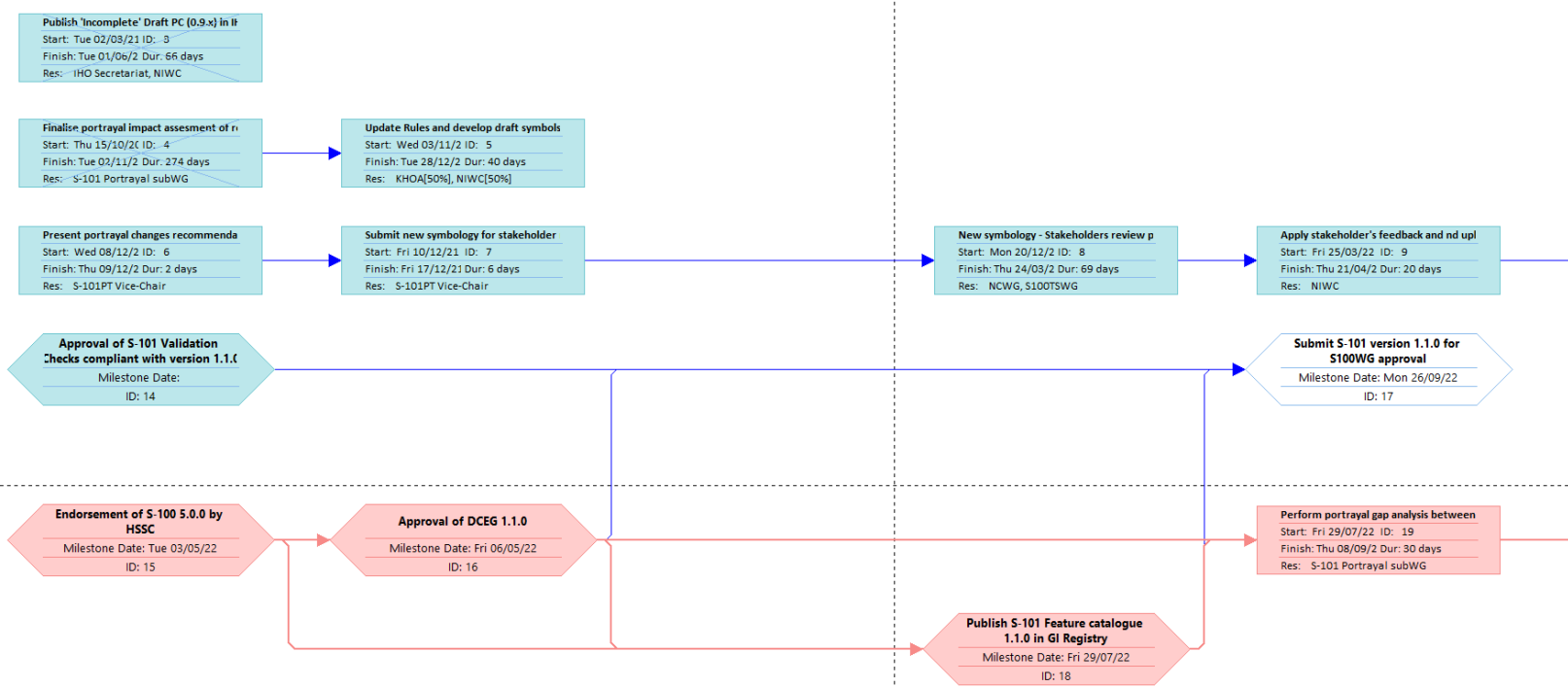


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Gantt Chart

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✦	Apply stakeholder's feedback and no upload S-101 PC 1.0.0 to Github for peer review	20 days	Fri 25/05/22	Tue 21/04/22	8	NIWC	No
✦	S-101 PC 1.0.0 Peer review process in Github	33 days	Fri 22/04/22	Tue 07/06/22	9	ALL	No
✦	Apply peer review corrections and complete final PC 1.0.0 draft	13 days	Wed 08/06/22	Fri 24/06/22	10	NIWC	No
✦	Process Registry changes resulting from the development of new symbology	23 days	Mon 27/06/22	Wed 27/07/22	11	IHO Secretariat	No
📁	Publish S-101 Portrayal Catalogue 1.1.0 in GI Registry	42 days	Thu 28/07/22	Fri 23/09/22	12	IHO Secretariat	Yes
📁	Approval of S-101 Validation Checks compliant with version 1.1.0			Fri 23/09/22		S-101 Project Team	Yes
📁	Endorsement of S-100 5.0.0 by HSSC	3 days	Tue 03/05/22	Thu 05/05/22			Yes
✦	Approval of DCEG 1.1.0	60 days	Fri 06/05/22	Thu 28/07/22	15	S-101 Project Team	Yes
📁	Submit S-101 version 1.1.0 for S100WG approval	66 days	Mon 26/09/22	Mon 26/12/22	18,14,16	S101PT Chair	Yes
✦	Publish S-101 Feature catalogue 1.1.0 in GI Registry	1 day	Fri 29/07/22	Fri 29/07/22	16,15	IHO Secretariat	Yes
✦	Perform portrayal gap analysis between FC/DCEG S-101 1.1.0 & PC 1.0.0	30 days	Fri 29/07/22	Thu 08/09/22	18,16	S-101 Portrayal subWG	No
✦	Follow 'Portrayal changes workflow' to develop and approve new symbology that enables the creation of S-101 PC 1.1.0 Draft	90 days	Fri 09/09/22	Thu 12/01/23	19	IHO Secretariat	No
✦	Upload S-101 PC 1.1.0 Draft to Github for peer review	1 day	Fri 13/01/23				
✦	S-101 PC 1.1.0 Peer review process in Github	15 days	Mon 16/01/23				
✦	Apply Peer review corrections and complete S-101 PC 1.1.0 Draft	13 days	Mon 06/02/23				
✦	Process Registry changes resulting from the development of new symbology	23 days	Thu 23/02/23				
📁	Publish S-101 Portrayal Catalogue 1.1.0 in GI Registry	15 days?	Tue 28/03/23				
✦	S-101 1.2.0 - Exchange Catalogue						
✦	S-101 1.2.0 - Data protection (compression, encryption and digital signatures)						
📁	Publication of S-98 version 1.0.0	3 days	Tue 03/05/22				
📁	Interoperability catalogue	60 days?	Fri 06/05/22				
📁	Publish S-101 Alerts and Indications Catalogue 1.0.0 (??)	60 days?	Fri 06/05/22				





Risks and opportunities

Manage risks and opportunities of S-101 product specification

3. Risks

					If Evaluation = high or medium			
Description	Origin	Impact	Evaluation*	Date of review**	Actions to reduce risk	Resp. For action	Effectiveness of the action	Action taken and date
Lack of available human resources	internal		high	Feb 2022	-Raise awareness among MS on the importance of allocating the necessary resources	HSSC	Targeted communication to MS	<i>e.g. HSSC Chair contacted by email on 28/8/21 and requested to submit HSSC CL</i>
					-Organize regular remote meetings to maintain a good level of participation	S-101 chair /DQWG chair /NCWG chair	Remote meetings organized	
Delay to draft & validate the different components mandatory for TRL 2,3,4	internal			Feb 2022	implement a regular and shared monitoring of actions	S-101 chair	GANTT diagram	
Delay in reviewing S-101 (FC, Encoding Guide, DQ Checks) Ed 1.n.n	internal		medium	Feb 2022	Harmonize timeframe, program reviewing & allocate <u>ressources</u>	DQWG chair	GANTT diagram	
Delay in reviewing	internal			Feb 2022	Harmonize timeframe, program	NCWG chair	GANTT diagram	

5. Performance indicators of S-101 PS process

Progress on milestones from S-101 Ed 1.0.0 to Ed 2.0.0				Is	Actions (to seize opportunities and limit risks)	Responsible	Deadline	Effectiveness of the action	Action taken and date
Goal	Monitor progress to meet deadlines		risks						
Measurement field (KPI)	Milestones	Progress Status		feedback component	Promote Uses cases	HSSC	-	Positive feedback from OEM Meeting deadlines (no extensive re-testing due to late consideration of feedbacks)	
	Submit Edition 1.1.0 for S100WG Approval by December 2022	On Track							
	Submit Edition 2.0.0 for HSSC Endorsement by May 2024	At Risk							
Method and presentation of results	GANTT Diagram			transparent process shared to the favor of S-101 and the S-100	Prepare and establish long term support task with clear workflows and agreed timeframes for reporting findings and recommendations. Action S-101PT8-11 also refers.	IHO Sec.	March 2022 (?)	Request are processed within agreed timeframes.	
Update periodicity	3 months								
Accountable	S101PT Chair & S100WG Chair								
	ECDIS and post S-57 ENC retirement.				ECDIS.				



Risks and opportunities

Manage risks and opportunities of S-101 product specification

3. Risks

					If Evaluation = high or medium			
Description	Origin	Impact	Evaluation*	Date of review**	Actions to reduce risk	Resp. For action	Effectiveness of the action	Action taken and date
Lack of available human resources	internal		High	Sep 2022	-Raise awareness among MS on the importance of allocating the necessary resources	HSSC	Targeted communication to MS	Chair action PLANNED S-101PT Letter 5 of 2021 sought volunteers and indications of capacity. (13012022) Some improvement in contributions but pool of active contributors remains insufficient
Delay to draft & validate the different components mandatory for TRL 2,3,4	internal							
Delay in reviewing S-101 (EC Encoding)	internal	Delay in 101 Ed 2.0.0						

5. Performance indicators of S-101 PS process		
Progress on milestones from S-101 Ed 1.0.0 to Ed 2.0.0		
Goal	Monitor progress to meet deadlines	
Measurement field (KPI)	Milestones	Progress Status
	Submit Edition 1.1.0 for S100WG Approval by December 2022	On Track
	Submit Edition 2.0.0 for HSSC Endorsement by May 2024	At Risk
Method and presentation of results	GANTT Diagram	
Update periodicity	3 months	
Accountable	S101PT Chair & S100WG Chair	

4. Opportu

					Effectiveness of the action	Action taken and date
Participation in the various Uses Cases organised in collaboration with the OEMs	Integrate feedbacks during development	Promote Uses cases	HSSC	-	Positive feedback from OEM Meeting deadlines (no extensive re-testing due to late consideration of feedbacks)	
Establish long term mariners review service agreement with IHO-Singapore Innovation laboratory in support of proposed new S-101 ECDIS portrayal and performance requirements in both, DF-ECDIS and post S-57 ENC retirement.	Objective, transparent and user driven process to accept/discard proposals related to the look and behavior of S-101 ENCs and the performance S-100 ECDIS.	Prepare and stablish long term support task with clear workflows and agreed timeframes for reporting findings and recommendations. Action S-101PT8-11 also refers.	IHO Sec.	March 2022 (?)	Request are processed within agreed timeframes.	



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Audit of the operation and governance of the IHO Registry

International Hydrographic Organization

HSSC noted the concerns raised by the HSSC ISO 9001 Cell on the resilience of the IHO GI Registry... and invited the IHO Secretariat in liaison with KHOA and the HSSC ISO 9001 Cell, to consider the recommendations provided in Appendix 2 of Doc. HSSC14-05.5B for a reliable and more robust situation in the long term.

HSSC Chair mentioned this resilience issue in the report to C-6

- Meeting between Nathalie Lidinger and KHOA/IHO Secretariat representatives occurred in September 2022. Focused on S-99 and KHOA/IHO MOU from 2018.
- The Audit was conducted in order to get a better understanding of the shortfalls and difficulties in the operation of the GI Registry and come up with recommendations.

MATURITY LEVEL ASSESSMENT OF PROCESSES

Process : Development and maintenance of the S-100 GI Registry		Date : 2 September 2022	
	Maturity Level	Evaluation	Rationale / Evidence
Continuous improvement (Level 5)	Each one proposes their needs and resources (including skills and budget) and makes its own periodic assessment	18 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	A report is done for the S-100 WG meeting and the HSSC. A process exists for standards evolutions with evaluation of the impact on the GI registry.
	Periodic objectives proposed by each one who defines and implements his or her personal action plan	17 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Done informally in a reactive way.
	Each one is a major player in monitoring and participating in innovation	16 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	Strong implication and reactivity.
Efficiency (Level 4)	Individual progressive risk culture and self-optimisation of resources in relation to results	15 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	The GI Registry and associated tools is not sufficiently well understood by PS developers and MS representatives in general.
	Establishment and periodic monitoring of the budget in relation to the forecast. Monitoring of the dashboard structured into effectiveness and efficiency indicators.	14 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Done within KHOA annually.
	Knowledge of resource costs	13 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	No answer
Risks and opportunities (Level 4)	Risk analysis of products and projects	12 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	No answer
	Periodic analysis of process risks (in process reviews)	11 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	We don't have yet any op. PS
	Preliminary analysis of process risks: generation of preventive actions	10 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	No answer
Efficiency (Level 3)	Organised analysis of the dashboard and malfunctions (process review) and effective improvement actions	9 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	ISO cell + secretariat have a first meeting in September 2022. ISO cell members would participate to the workshop in December 2022.
	Pilot trained and aware of his role	8 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	GI Registry subgroup is informal, no process review
			Register manager / System manager at secretariat. The roles are



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Final recommendations

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1. Formalize, in a specific annex to the general MOU, the respective obligations of parties as regards the GI Registry. @ for consideration IHO Secretariat and KHOA.
2. Set up and formalize the **GI Registry Project Team**, subsidiary of the S-100WG dedicated to the development and maintenance of the GI Registry and make it active. Record and publicize the activity among WG and Domain Control Body when it is relevant in order to trigger a wider interest in the GI Registry. @ for consideration of S-100WG.
3. Organize regular meeting of DCB representatives and report in order to create a dynamic within this group, make their role visible and promote it, listen to their needs (training, documentation, ...). Establish the ECB as the IHO Secretariat. @ for consideration IHO Secretariat/Registry Manager.
4. Develop communication (including at strategic level) & training tools (“GI Registry for Dummies”, “Quick start for GI Registry”, ...). It will contribute to the necessary collective awareness of the importance of this tool. @ for consideration IHO Secretariat (subcontracting to be considered).



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Thanks !

ISO
9001

Quality
management

Standard

Customer

Certification

Continual