S-101PT5 VTC
(15 - 16 September 2020)

RECORD OF MEETING; DECISIONS AND ACTIONS

All Papers for the S-101PT5 meeting, including presentations, have been posted on the S-101PT5 meeting page at https://iho.int/en/s-101pt5-2020.

Abbreviations:

Chair	Tom Richardson
Vice-Chair	Alvaro Sanchez
CM	Christian Mouden
DG	David Grant
HA	Hugh Astle
HP	Hannu Peiponen
IHO Sec	IHO Secretariat
IK	Iji Kim
JP	Jonathan Pritchard
JW	Jeff Wootton
MH	Mikko Hovi
RF	Richard Fowl
RM	Raphael Malyankar

Tuesday 15 September 2020:

Welcome/Logistics

The meeting commenced at 1200 CEST. The S-101PT Chair, Tom Richardson, thanked the outgoing Chair, Al Armstrong for his efforts over the past 3 years. He welcomed attendees to the meeting and, while noting the short timeframe for preparation for the meeting, stressed the importance of this meeting in regard to finalizing a Work Plan for the completion of S-101 to an operational Specification. He also noted that the substantial attendance at this meeting and the papers submitted were an encouraging sign that S-101 development was considered by HOs and industry to be a priority.

Introductory remarks were then made by IHO Director Abri Kampfer. He thanked Tom and Alvaro Sanchez for stepping up as Chair and Vice-Chair of the Project Team. He stressed the importance of

establishing a Work Plan for completion of S-101. He noted the number of attendees and thanked all for attending.

S-101PT5-01 – Meeting Participants

The Chair was pleased to acknowledge 56 attendees at the meeting. Unfortunately the VTC format for the meeting precluded an "around the table" individual introduction of attendees.

S-101PT5-02 – Agenda

No comments on the Agenda. The Chair noted Agenda items 13 and 16 will be taken together.

S-101PT5-03 – S-101PT4 Actions   [Chair]

[Docs: S-101PT Actions @ 20200907 (.xls)]

Unless reported below, the actions from S-101PT4 have been completed.

S-101PT4-01: S-57 to S-101 Conversion – **(Ongoing (JP))**.

S-101PT4-02: S-101 ENC Portrayal – paper submitted for this meeting; refer to **Agenda item 4.3**. This action to be **closed** and carried over to outcomes from discussion on Agenda item 4.3.

S-101PT4-03: Validation Checks – the action to investigation of incorporating the checks into a database and developing a GUI was considered to be **closed**. Refer to **Agenda item 4.4** for this meeting.

S-101PT4-06: NCWG activities affecting S-101 development – the seagrass component of this action is **complete**. The flood lighting component of this action remains **ongoing (JW)**.

S-101PT4-07: NCWG activities affecting S-101 development – **(Ongoing (Chair/IHO Sec))**.

S-101PT4-11: DCEG Changes for S-101 Edition 2.0.0 – **(Ongoing (JW/Vice-Chair/MH/RF))**.

S-101PT4-13: Quality of Horizontal Measurement – CM reported that a paper had been submitted to the DQWG15 meeting (January 2020), and there had been no feedback from DQWG. However he indicated that he is happy to continue this work. It was agreed to **close** this Action and create a new Action accordingly.

S-101PT4-14: Sector Extension Portrayal attribute – **(Ongoing (NIWC/JW))**.

S-101PT4-15: Sector Extension Portrayal attribute – **(Ongoing (HA/HP/JW))**.

S-100TSM7-01: Alerts and Indications – paper related to this Action submitted for this meeting; refer to **Agenda item 4.3**. This action to be **closed** and carried over to outcomes from discussion on Agenda item 4.3.

S-100TSM7-02: Alerts and Indications – paper related to this Action submitted for this meeting; refer to **Agenda item 4.3**. This action to be closed and carried over to outcomes from discussion on Agenda item 4.3.

S-100TSM7-04: Visualization of Quality of Bathymetric Data – The DQWG Chair reported that the investigation of improved portrayal of Quality of Bathymetric Data information has been completed and recommendations have been included in Papers submitted to S-100WG5 and HSSC12. This action to be **closed** and new actions created for the S-101PT to investigate the implications of these recommendations on S-101 data modelling and portrayal.

Comment from the IHO Secretariat: Please try to add a target timeframe for all these actions.

Decisions/Actions:

Action S-101PT5-01: Quality of Horizontal Measurement - Develop proposal for quality of horizontal measurement based on S-101PT4-5.4 discussion. **(CM)**

Action S-101PT5-02: Visualization of Quality of Bathymetric Data - Develop proposal for S-101PT consideration on possible amendments to S-101 modelling of the Quality of Bathymetric Data feature based on the outcome of the DQWG investigation of improved portrayal of this information in ECDIS (for TSM8). **(JW)**

Action S-101PT5-03: Visualization of Quality of Bathymetric Data – Consider the implementation of DQWG recommendations on improved indication of Quality of Bathymetric Data information in ECDIS (for S-101PT6). **(S-101 Portrayal Sub-Group)**

S-101PT5-04 – S-101 Status Update [Chair]

The Chair introduced this Agenda item 4. See sub-items below for reports.

S-101PT5-04.01 – Data Product Specification and DCEG [Chair]

S-101PT5-04.01.1 – Changes Introduced in S-101 Edition 1.1.0 Main Document [IHO Sec]

JW reported that there had been little change to the main document since Edition 1.0.0 was published. The principle work to be done was to update the S-101 metadata to align with S-100 Edition 5.0.0; enhance the Portrayal and Data Integrity and Encryption sections; and include a new section for Alarms and Indications (if this was not to be developed as a separate document).

S-101PT5-04.01.2 – Changes Introduced in S-101 Edition 1.1.0 DCEG [IHO Sec]
[Docs: Changes Introduced in S-101 Edition 1.1.0 DCEG
Draft S-101 Edition 1.0.0 DCEG [Redline] [Clean]
DCEG Draft Edition 1.1.0 Change Control Log (.xls)]

JW reported that there had been numerous changes to the S-101 DCEG since the publication of Edition 1.0.0. These changes had mostly been as a result of the work to make the contents of the IHO GI Registry consistent; and aligning the S-101 DCEG with this content. Changes had also been applied in response to S-101PT actions. There was some discussion as to what constitutes an "editorial" change in the draft document

The S-101PT approved the (re)creation of the S-101 DCEG Sub-Group, lead to be the IHO Sec (JW). Any PT members interested in joining the Sub-Group to notify JW by email.

Decisions/Actions:

Decision: It was agreed to "reactivate" the S-101 DCEG Sub-Group.

Action S-101PT5-04: PT members interested in participating in the S-101 DCEG Sub-Group to notify JW by email (jeff.wootton@iho.int) at the earliest opportunity. **(S-101PT)**

Action S-101PT5-05: Redline version of the S-101 DCEG to be sent to S-101 DCEG Sub-Group members for review (before end of September 2020). **(JW)**

Action S-101PT5-06: The definition as to what constitutes and "editorial" change to the S-101 DCEG is to be determined, in consultation with the S-101PT Executive (September 2020). **(JW/Chair/Vice-Chair/YB)**

S-101PT5-04.02 – Feature Catalogue [KHOA]
[Docs: Status of the S-101 Feature Catalogue]

IK reported on the status of the S-101 Feature Catalogue (FC), the latest (draft) version of which has been created from the 3rd generation (Beta) IHO Geospatial Information (GI) Registry. She reported that this version of the FC provided greater consistency with the GI Registry; and included an implementation of the Text Placement feature. KHOA intends to release this new version (1.0.1) of the S-101 FC by the end of October 2020.

It was suggested that there may be issues of non-conformance of the format of the S-101 FC with the S-100 FC Schema. It was agreed that this would be discussed further by a small group via correspondence.

[NOTE: See also the summary of discussions on Agenda item S-101PT5-05 for additional discussion that may impact on S-101 FC development.]

Decisions/Actions:

Action S-101PT5-07: KHOA, Portolan Sciences (and any other interested parties) to review changes to the FC to ensure validity with S-100 FC schemas (As new versions of the FC are created). **(KHOA/RM/HA/YB/NIWC)**

S-101PT5-04.03 – Portrayal   [Vice Chair]

[Docs: S-101 Portrayal ([Presentation](#))]

The Vice Chair presented a report on S-101 Portrayal, noting the activities that have taken place so far; pending issues; and proposals and recommendations for moving forward. It was suggested that an S-101 Portrayal Sub-Group is stood up to advance S-101 Portrayal and address ECDIS performance issues related to S-101 implementation.

It was noted that some of the pending issues relating to S-52 are being addressed by the S-52 successor document for S-100, which is currently under development in the S-100WG. This work will need to feed into the work of the Sub-Group, noting that future ECDIS performance and portrayal will need to deal with other S-100 based Product Specifications than S-101. In particular, it was noted that discussion at S100WG5 was that ENC would always form the mandated basis for navigation under ECDIS, but that S-102 could form an extra layer and administrations can mandate it nationally if they wish; therefore an ENC foundation may have been given for ECDIS operation.

The DQWG Chair noted that the DQWG has discussed the portrayal of data quality / data uncertainty for many years. He referenced Paper HSSC12-05.5C, which provides a methodology and includes some portrayal suggestions.

The NCWG Chair reported on progress with the work that is being done within the NCWG (principally advanced within the Finnish Transport and Communication Agency) to address the large list of potentially missing symbols in S-101; and supported the formation of a Sub-Group into which the work of the NCWG/FI can be fed.

IHO Sec stated that the focus of the Sub-Group has to be the development of the S-101 Portrayal Catalogue as a priority – other components can be addressed later.

Decisions/Actions:

Decision: It was agreed to establish an S-101 Portrayal Sub-Group.

Action S-101PT5-08: PT members interested in participating in the S-101 Portrayal Sub-Group to notify the Vice Chair and JW by email (alvaro.sanchez@defence.gov.au and jeff.wootton@iho.int) at the earliest opportunity. **(S-101PT)**

Action S-101PT5-09: Engage with the S-100WG in regard to work required on S-101 portrayal, ECDIS performance, etc. (TSM8). **(Vice-Chair)**

S-101PT5-04.04 – Validation Checks   [Chair]

The Chair presented a report on the status of the development of S-100/S-101 validation checks. It was noted that a Sub-Group had been formed by the S-100WG to develop the generic S-100 validation checks, and proposed that members of the S-101PT may be added to this Sub-Group with the aim of contributing to the development of specific S-101 validation checks. The Chair proposed a way forward for the inclusion of validation checks in S-101 Edition 1.1.0, focussed on initially including only those checks categorized in S-58 as Critical checks (for Edition 1.1.0); and moving on from there to inclusion of checks categorized in S-58 as Errors and Warnings. He also proposed in the longer term the development of test datasets leveraging the S-58 test datasets.

Decisions/Actions:

Decision: It was agreed that the initial goal for S-101 Edition 1.1.0 was to include those validation checks that are categorized as Critical in S-58. Checks categorized as Errors or Warnings will be included subsequently, at the first available opportunity.

Action S-101PT5-10: PT members interested in participating in the S-100 Data Validation Sub-Group to notify the Chair and JW by email (thomas.richardson@ic-enc.org and jeff.wootton@iho.int) at the earliest opportunity. **(S-101PT)**

S-101PT5-04.05 – Test Datasets   [IIC]

JP Reported on work done with the S-64 unencrypted test data sets (converting to S-101). Also reported on some issues with the S-101 Feature Catalogue (mainly with "generic" associations). Data has been produced and has been made available on GitHub, which is live – the link is https://github.com/iic-tech/S-164. This repository will be kept up to date and issues relating to the datasets can be posted there.

S-101PT5-05 – S-101PT Work Plan   [Chair]

The Chair presented an initial draft of the S-101 Work Plan for consideration of the PT. The draft Work Plan was further refined based on discussions on Day 1 of the meeting, and a revised draft discussed on Day 2 of the meeting.

After some discussion, it was agreed that S-101 Edition 1.1.0 would be aligned to Edition 5.0.0 of S-100. The principle reason for this decision was that much of the development, implementation and testing work that has been done has been done based on the draft Edition 5.0.0 of S-100. However, given that the S-100WG will be requesting to the HSSC a delay in the publication of S-100 Edition 5.0.0 (principally to ensure that all the components required to support S-101 have been included), it was agreed that interim versions of the S-101 DCEG and Feature Catalogue (as Edition 1.0.1, 1.0.2, …) may be produced in order to facilitate implementation and testing.

The Chair further recommended that an activity to design an engagement plan to ensure S-101 meets end user needs and to support S-101 implementation through engagement with producers and industry is commenced. He further recommended that an Issues and Risks Log to support the delivery of the S-101PT Work Plan is established; and requested that PT members indicate their availability to support these activities.

Decisions/Actions:

Decision: S-101 Edition 1.1.0 is to be aligned to Edition 5.0.0 of S-100.

Decision: Interim (1.0.1, 1.0.2, …) versions of the S-101 DCEG and Feature Catalogue may be published to facilitate S-101 implementation and testing, on approval of the S-100WG.

Decision: It was agreed to establish an Issues and Risks Log to support the delivery of the S-101PT Work Plan.

Decision: It was agreed that to design an S-101 Engagement Plan to support S-101 implementation through engagement with producers, end users and industry.

Action S-101PT5-11: The draft S-101 Work Plan to be forwarded to the S-100WG Chair for S-100WG endorsement and inclusion in the S-100WG report to HSSC12; and to the IHO Secretariat for posting on the S-101PT page of the IHO web site (September 2020). **(Chair)**

Action S-101PT5-12: Establish an Issues and Risk Log and design an S-101 Engagement Plan (S-101PT6). **(Chair)**

Wednesday 16 September 2020:

S-101PT5-06 – S-101PT UML Model   [Chair/RM]

[Docs: S-101 – Draft UML Model (Presentation)]

RM gave a presentation on the draft S-101 UML model that he has prepared, which is based on S-101 Edition 1.0.0. He reported on the principle issues with the development of the model, which included the inclusion of the spatial primitives and the representation of associations. Once the model has been reviewed, a link to the model will be provided for public access.

The Chair noted that maintenance of the model will be an issue, in terms of both procedure and resources. He postulated that future versions of the model will likely be sourced from new versions of the S-101 Feature Catalogue.

S-101PT5-10 – Datum Issues   [NIWC]

[Docs: Issues Regarding Vertical Datum]

DG gave a presentation on this issue, which principally questions how to distinguish sounding from vertical datum. The meeting conceded that this is a complex issue, and it was decided that this would be best further discussed out of session by a small, dedicated group. Outcomes of these discussions are to be provided to the S-100 Test Strategy Meeting, as this will likely impact on the Feature Catalogue model, S-100 portrayal and S100 metadata.

Decisions/Actions:

Action S-101PT5-13: A small group, led by NIWC, to discuss the issues raised in the Paper S-101PT5-10. Possible feedback required to TSM8. **(NIWC (Lead))**

S-101PT5-11 – Navigational Purposes   [NIWC]

[Docs: Navigational Purposes]

DG gave a presentation on this issue, stating that the current structure of S-101 in regards to the use of Maximum/Minimum Display Scale to facilitate dataset loading/unloading in ECDIS does not work.

The meeting agreed that the issues raised in the paper are valid, and it was decided that, because the issues are varied, very complex and require test implementation (test bed), a dedicated discussion on this subject was required. It was further suggested that the outcomes of these discussions may have implications on S-100 (for example in metadata and portrayal), in which case this would need to be reported to the S-100WG.

Decisions/Actions:

Action S-101PT5-14: A dedicated meeting of a small group to be convened to discuss the issues raised in Paper S-101PT5-11 (October 2020). Possible feedback required to TSM8. **(NIWC (lead)/Chair/IHO Sec)**

S-101PT5-12 – VALSOU Decimal Places   [IC-ENC]
                                        [Docs: VALSOU Decimal Places (Presentation)]

Due to time restriction, this paper was not presented. As it impacts the existing S-57 ENC data it will be submitted to ENCWG for consideration.

Decisions/Actions:

Action S-101PT5-15: Paper S-101PT5-12 to be considered by the DCEG Sub-Group (November 2020). **(DCEG Sub-Group)**

Action S-101PT5-16: Paper S-101PT5-12 to be submitted to the ENCWG for consideration. **(IC-ENC)**

S-101PT5-13 – DQWG Paper   [Chair]
                                        [Docs: Data Quality Working Group Report]

RB (DQWG Chair) gave a presentation on the activities of the DQWG since S-101PT4. The emphasis of the report was on the quality checking of S-101 based Product Specifications and the improvement of the performance/portrayal of Quality of Bathymetric Data indicators in ECDIS.

NOTE: See related Action Items S-100TSM7-04 and S-101PT5-02.

S-101PT5-14 – Fairway Portrayal   [NO]
                                        [Docs: Portrayal of Fairways]

Due to time restriction, this paper was not presented.

Decisions/Actions:

Action S-101PT5-17: Paper S-101PT5-14 to be considered by the Portrayal Sub-Group (November 2020). **(Portrayal Sub-Group)**

S-101PT5-15 – Light Sector Portrayal   [NO]
              [Docs: Portrayal of Light Sectors Based on New Attributes Added to DCEG and FC]
                            [Docs: Follow-Up on the Paper about Light Sector Portrayal]

Due to time restriction, this paper was not presented.

Decisions/Actions:

Action S-101PT5-18: Paper S-101PT5-15 to be considered by the Portrayal Sub-Group (November 2020). **(Portrayal Sub-Group)**

S-101PT5-16 – Quality of Bathymetric Data and ECDIS Performance   [Vice-Chair]
                            [Docs: Quality of Bathymetric Data (QoBD) and ECDIS Performance]

Due to time restriction, this paper was not presented.

Decisions/Actions:

Action S-101PT5-19: Paper S-101PT5-16 to be considered by the Portrayal Sub-Group (November 2020). **(Portrayal Sub-Group)**

S-101PT5-17 – Grouping of Soundings   [Vice-Chair]

[Docs: Grouping of Soundings in ENC Updates]

Due to time restriction, this paper was not presented.

Decisions/Actions:

Action S-101PT5-20: Paper S-101PT5-176 to be considered by the Portrayal Sub-Group (November 2020). **(Portrayal Sub-Group)**

S-101PT5-18 – Compendium of AHO Proposals   [Vice-Chair]

[Docs: Compendium of AHO Proposals]

Due to time restriction, this paper was not presented.

Decisions/Actions:

Action S-101PT5-21: Paper S-101PT5-18 to be considered by the DCEG Sub-Group (November 2020). **(DCEG Sub-Group)**

S-101PT5-20 – S-57 to S-101 Encoding   [Chair/IIC]

[Docs: S-57 to S-101 Differences Table (.xls)]

Due to time restriction, this paper was not presented.

Decisions/Actions:

Action S-101PT5-22: Liaise with the S-100WG lead on S-57 to S-101 conversion (Jonathan Pritchard) on strategies that may be adopted for S-57 datasets to facilitate S-57 to S-101 conversion. **(DCEG Sub-Group)**

S-101PT5-21 – Testbed Update   [NIWC]

[Docs: S-100 NIWC Testbed Report for S-101PT5]

DG gave a presentation on NIWC S-100 Testbed. There were a number of issues raised in the report that require to be addressed by the DCEG and Portrayal Sub-Groups. There were also a number of issues raised that relate to S-100; in particular, there were several items related to the structure and functionality of the ECDIS Pick Report; it was agreed that, with the exception of the implementation of the units of measure for weights and measures (slide 29 of the presentation), resolution of Pick Report issues was a lower priority task.

NOTE: The issues raised in slides 19 and 24 of the Presentation will be actioned in associations with Action S-101PT5-14 (Agenda Item S-101PT5-11).

NOTE: The issue raised in slide 23 (related to Feature Catalogue) may be progressed out of session by PT members, but will likely be overtaken by events. It was agreed that national language support would not be included in S-101 Edition 1.1.0.

NOTE (post-meeting): The issue of the handling of Null/missing attribute values raised in slide 36 is covered in clause 2.4.4 of the S-101 DCEG. However, this may be an issue that needs to be addressed at the S-100 level.

Decisions/Actions:

Action S-101PT5-23: DCEG Sub-Group to discuss the following issues raised in the NIWC Testbed Update report (S-101PT5-21 – listed by the associated Presentation slides): Slides 15, 21, 27. **(DCEG Sub-Group)**

Action S-101PT5-24: Portrayal Sub-Group to discuss the following issues raised in the NIWC Testbed Update report (S-101PT5-21 – listed by the associated Presentation slides): Slides 4, 12, 16, 17, 22, 25, 26, 28, 32, 33, 34, 35, 37. **(Portrayal Sub-Group)**

Action S-101PT5-25: NIWC to report to the S-100WG (TSM8) the following issues raised in the NIWC Testbed Update report (S-101PT5-21 – listed by the associated Presentation slides): Slides 15, 21, 27, 36. **(NIWC)**

Action S-101PT5-26: Paper to be developed to describe the implementation of units of measurement for weights and measures (in conformance to S-52 clause 10.8) (for S-101PT6). **(Chair/RM)**

Action S-101PT5-27: National language support and ECDIS Pick Report issues (including those identified in slides 30 and 31 of the S-101PT5-21 agenda item presentation) to be addressed as a lower priority task (for S-101 Edition 1.x or 2.0). **(S-101PT)**

S-101PT5-22 – Testbed Update　　　　[KHOA]

[Docs: KHOA S-100 Testbed Report]

IK provided an update on the KHOA S-100 Testbed. There have been significant improvements made to the S-100 viewer in regard to implementation of Lua rules and scripting references; and the application of text placement functionality. Of particular note from the report is that KHOA are in the process of considering a release date for their S-100 viewer for HOs and stakeholders.

S-101PT5-23 – FCB and PCB　　　　[KHOA]

[Docs: Status of FCB/PCB Development]

Covered as part of Agenda Item 4.2.

AOB　　　　[Chair]

[Docs:]

Next meeting: The Chair suggested that, given the abbreviated time frame for the meeting due to the VTC format, more regular meetings (perhaps quarterly) of the Project Team should be conducted until a full face-to-face meeting could be held. It was proposed and accepted by the meeting that the next meeting will be held via VTC during late November / early December 2020 (date TBD).

In the interim, it is expected that the Sub-Groups will meet via VTC as required.

Decisions/Actions:

Decision: S-101PT6 to be held late November / early December 2020 (date TBD).

Appendices:

A:　　　S-101PT5 Agenda.

B:　　　S-101PT5 Consolidated List of Decisions and Actions.

C:　　　S-101PT5 Participants.

	Agenda		
Time	**Topics**	**Document**	**Issues for discussion and required outcomes**
15/09/2020 (12:00 to 15:00 - CEST)			
	Participants	S-101PT5-1	List of registered participants **[Chair]**
12:00	Agenda	S-101PT5-2	Meeting starts - duration - 3 hours
12:00 - 12:05	Welcome /Logistics		Welcome and Logistics **[Chair]** / **[IHO Sec AK]**
12:05 - 13:00	S101PT5 Actions	S-101PT5-3	Review actions and agree work items **[Chair]**
13:00	S-101 Status Updates	S-101PT5-4	S-101PT approval of clarifications for publication **[Chair]**
	DPS and DCEG	S-101PT5-4.1	[JW]
	Feature Catalogue	S-101PT5-4.2	Update on the Status of the S-101 FC [KHOA]
	Portrayal	S-101PT5-4.3	[Vice Chair]
	Validation Checks	S-101PT5-4.4	[Chair]
	Test Datasets	S-101PT5-4.5	[JP]
14:00	S-101 PT Work Plan	S-101PT5-5	[Chair]
15:00	Meeting Closes	N/A	
16/09/2020 (12:00 to 15:00 - CEST)			
12:00	Meeting Opens		Duration of meeting 3 hours
	S-101 UML Model	S-101PT5-6	[Chair/RM]
	Datum Issues	S-101PT5-10	[NIWC]
	Navigational Purposes	S-101PT5-11	[NIWC]
	VALSOU decimal places	S-101PT5-12	[IC-ENC]
	DQWG Paper	S-101PT5-13	[Chair]
	Farway Portrayal	S-101PT5-14	[NO]
	Light Sector Portrayal	S-101PT5-15	[NO]
	Quality of Bathymetric Data and ECDIS Performance	S-101PT5-16	[Vice Chair]
	Grouping of Soundings	S-101PT5-17	[Vice Chair]
	Compendium of AHO Proposals	S-101PT5-18	[Vice Chair]

		S-57 to S-101 encoding	S-101PT5-20	?
		Testbed Update	S-101PT5-21	[NIWC]
		Testbed Update	S-101PT5-22	KHOA Test Bed Report [KHOA]
		FCB and PCB	S-101PT5-23	Status of FCB and PCB Development [KHOA]
15:00		AOB		Any Other Business

Appendix B – S-101PT5 Consolidated List of Decisions and Actions

No.	Agenda	Action	Who
S-101PT5-01	Quality of Horizontal Measurement	Develop proposal for quality of horizontal measurement based on S-101PT4-5.4 discussion.	CM
S-101PT5-02	Visualization of Quality of Bathymetric Data	Develop proposal for S-101PT consideration on possible amendments to S-101 modelling of the Quality of Bathymetric Data feature based on the outcome of the DQWG investigation of improved portrayal of this information in ECDIS (for TSM8).	JW
S-101PT5-03	Visualization of Quality of Bathymetric Data	Consider the implementation of DQWG recommendations on improved portrayal of Quality of Bathymetric Data information in ECDIS (for S-101PT6).	S-101 Portrayal Sub-Group
Decision	Changes Intoduced in S-101 Edition 1.1.0 DCEG	It was agreed to "reactivate" the S-101 DCEG Sub-Group.	
S-101PT5-04	Changes Intoduced in S-101 Edition 1.1.0 DCEG	PT members interested in participating in the S-101 DCEG Sub-Group to notify JW by email (jeff.wootton@iho.int) at the earliest opportunity.	S-101PT
S-101PT5-05	Changes Intoduced in S-101 Edition 1.1.0 DCEG	Redline version of the S-101 DCEG to be sent to S-101 DCEG Sub-Group members for review (before end of September 2020).	JW
S-101PT5-06	Changes Intoduced in S-101 Edition 1.1.0 DCEG	The definition as to what constitutes and "editorial" change to the S-101 DCEG is to be determined, in consultation with the S-101PT Executive (September 2020).	JW/Chair/Vice-Chair/YB
S-101PT5-07	Feature Catalogue	KHOA, Portolan Sciences (and any other interested parties) to review changes to the FC to ensure validitiy with S-100 FC schemas (As new versions of the FC are created).	KHOA/RM/HA/YB/NIWC
Decision	Portrayal	It was agreed to establish an S-101 Portrayal Sub-Group.	
S-101PT5-08	Portrayal	PT members interested in participating in the S-101 Portrayal Sub-Group to notify the Vice Chair and JW by email (alvaro.sanchez@defence.gov.au and jeff.wootton@iho.int) at the earliest opportunity.	S-101PT
S-101PT5-09	Portrayal	Engage with the S-100WG in regard to work required on S-101 portrayal, ECDIS performance, etc. (TSM8).	Vice-Chair
Decision	Validation Checks	It was agreed that the initial goal for S-101 Edition 1.1.0 was to include those validation checks that are categorized as Critical in S-58. Checks categorized as Errors or Warnings will be included subsequently, at the first available opportunity.	
S-101PT5-10	Validation Checks	PT members interested in participating in the S-100 Data Validatione Sub-Group to notify the Chair and JW by email (thomas.richardson@ic-enc.org and jeff.wootton@iho.int) at the earliest opportunity.	S-101PT
Decision	S-101PT Work Plan	S-101 Edition 1.1.0 is to be aligned to Edition 5.0.0 of S-100.	
Decision	S-101PT Work Plan	Interim (1.0.1, 1.0.2, …) versions of the S-101 DCEG and Feature Catalogue may be published to facilitate S-101 implementation and testing, on approval of the S-100WG.	

S-101PT5-11	S-101PT Work Plan	The draft S-101 Work Plan to be forwarded to the S-100WG Chair for S-100WG endorsement and inclusion in the S-100WG report to HSSC12; and to the IHO Secretariat for posting on the S-101PT page of the IHO web site (September 2020).	Chair
Decision	S-101PT Work Plan	It was agreed to establish an Issues and Risks Log to support the delivery of the S-101PT Work Plan.	
Decision	S-101PT Work Plan	It was agreed that to design an S-101 Engagement Plan to support S-101 implementation through engagement with producers, end users and industry.	
S-101PT5-12	S-101PT Work Plan	Establish an Issues and Risk Log and design an S-101 Engagement Plan (S-101PT6).	Chair
S-101PT5-13	Datum Issues	A small group, led by NIWC, to discuss the issues raised in the Paper S-101PT5-10. Possible feedback required to TSM8.	NIWC (Lead)
S-101PT5-14	Navigational Purposes	A dedicated meeting of a small group to be convened to discuss the issues raised in Paper S-101PT5-11 (October 2020). Possible feedback required to TSM8.	NIWC (lead)/Chair/IHO Sec
S-101PT5-15	VALSOU Decimal Places	Paper S-101PT5-12 to be considered by the DCEG Sub-group (November 2020).	S-101 DCEG Sub-Group
S-101PT5-16	VALSOU Decimal Places	Paper S-101PT5-12 to be submitted to the ENCWG for consideration.	IC-ENC
S-101PT5-17	Fairway Portrayal	Paper S-101PT5-14 to be considered by the Portrayal Sub-Group (November 2020).	S-101 Portrayal Sub-Group
S-101PT5-18	Light Sector Portrayal	Paper S-101PT5-15 to be considered by the Portrayal Sub-Group (November 2020).	S-101 Portrayal Sub-Group
S-101PT5-19	Quality of Bathymetric data and ECDIS Performance	Paper S-101PT5-16 to be considered by the Portrayal Sub-Group (November 2020).	S-101 Portrayal Sub-Group
S-101PT5-20	Grouping of Soundings	Paper S-101PT5-17 to be considered by the Portrayal Sub-Group (November 2020).	S-101 Portrayal Sub-Group
S-101PT5-21	Compendium of AHO Proposals	Paper S-101PT5-18 to be considered by the DCEG Sub-group (November 2020).	S-101 DCEG Sub-Group/S-101 Portrayal Sub-Group
S-101PT5-22	S-57 to S-101 Encoding	Liaise with the S-100WG lead on S-57 to S-101 conversion (Jonathan Pritchard) on strategies that may be adopted for S-57 datasets to facilitate S-57 to S-101 conversion	S-101 DCEG Sub-Group
S-101PT5-23	NIWC Testbed Update	DCEG Sub-Group to discuss the following issues raised in the NIWC Testbed Update report (S-101PT5-21 – listed by the associated Presentation slides): Slides 15, 21, 27.	S-101 DCEG Sub-Group
S-101PT5-24	NIWC Testbed Update	Portrayal Sub-Group to discuss the following issues raised in the NIWC Testbed Update report (S-101PT5-21 – listed by the associated Presentation slides): Slides 4, 12, 16, 17, 22, 25, 26, 28, 32, 33, 34, 35, 36, 37.	S-101 Portrayal Sub-Group
S-101PT5-25	NIWC Testbed Update	NIWC to report to the S-100WG (TSM8) the following issues raised in the NIWC Testbed Update report (S-101PT5-21 – listed by the associated Presentation slides): Slides 15, 21, 27.	NIWC

S-101PT5-26	NIWC Testbed Update	Paper to be developed to describe the implementation of units of measurement for weights and measures (in conformance to S-52 clause 10.8) (for S-101PT6).	Chair/RM
S-101PT5-27	NIWC Testbed Update	National language support and ECDIS Pick Report issues (including those identified in slides 30 and 31 of the S-101PT5-21 agenda item presentation) to be addressed as a lower priority task (for S-101 Edition 1.x or 2.0).	S-101PT

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15 -16 September 2020		
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