S-101 Project Team

(S-101PT8-19)

Meeting 8 – 6-7 December 2021

“Scales” Sub-Groups Update

SCALES SUB-GROUP BACKGROUND

- **<u>2 sub-groups set-up after the DCEG Sub-Group meeting 1 (21-22 January 2021):</u>**
  - S-101 Loading/Unloading strategy (ECDIS implementation)
  - Max/Min Display scales and scale minimum policy (Data Producers)

- **<u>Documents and Issues on the IHO Github:</u>**
  - https://github.com/iho-ohi/S-101-Documentation-and-FC

- **<u>Common meeting on 26 November 2021.</u>**

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16 NOVEMBER MEETING AGENDA

S101PT_"Scales" subWG Meeting			
Draft Agenda and Logistics Information (16th November 2021)			
Scales in S-101			
14:05 - 14:20		**DCEG + PS**	Part 1: Review definitions for Maximum and Minimum Display Scales
14:20 - 14:30			Part 2: References to compilation scale.
14:30 - 14:50			Part 3: Review of the Product specification
14:50 - 15:10			Part 4: Review of the DCEG
Break (10 min)			
S-101 datasets loading and unloading strategy			
15:20 - 16:20		PS	Review of PS clause 4.7
scale minimum			
16:20 - 16:30		**DCEG**	scale minimum steps and standard scales
16:30 - 16:50			Mandating ECDIS viewing scales?
16:50 - 17:00			Step 1 for dangers in Foul Areas?
17:00	Meeting Closes	N/A	

A - DEFINITIONS OF SCALES IN S-101

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Maximum and minimum display scales

DCEG 1.3.1

- ***maximum display scale:*** *the largest value of the ratio of the linear dimensions of* ***features*** *of a* ***dataset*** *presented in the display and the actual dimensions of the* ***features*** *represented (largest scale) of the scale range of the* ***dataset.***
- ***minimum display scale:*** *the smallest value of the ratio of the linear dimensions of* ***features*** *of a* ***dataset*** *presented in the display and the actual dimensions of the* ***features*** *represented (smallest scale) of the scale range of the* ***dataset.***

Proposal: replace definitions in 1.3.1 by:

Viewing scale: *the value of the ratio of the linear dimensions of* ***features*** *of a* ***dataset*** *presented in the display and the actual dimensions of the* ***features*** *represented of the* ***dataset***.

DGEG 2.5.5

- ***Maximum display scale:*** *IHO Definition: The largest intended viewing scale for the data.*
- ***Minimum display scale:*** *IHO Definition: The smallest intended viewing scale for the data.*

S-100 4a-4.4

Attribute	maximumDisplayScale	The maximum scale with which the data is displayed
Attribute	minimumDisplayScale	The minimum scale with which the data is displayed

Proposal: align definitions throughout S-100 and S-101 documentation

A - DEFINITIONS OF SCALES IN S-101

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Maximum display scale

- Discussions on the correspondance between the S-101 **maximum display scale** (max DS) and the S-57 compilation scale (**CSCL**).

- Ok that the **maximum display scale** should trigger the overscale indication, but:
  - When the MSVS is larger than the **maximum display scale** , or
  - at a larger scale value? (do we allow a zoom in factor from the **maximum display scale** ?).

Needs to be further discussed (through testing)

Minimum display scale

- General concensus on the fact that a dataset should not be displayed when MSVS = **minimum display scale**

B – S-101 DATASET SCALE RANGES

- S-101 documentation show examples of overlapping scale ranges.
- This is propably not the base rule to be followed…
- Datasets with multiple Data Coverage to be considered in the documentation.
- Lack of general guidance for Data producers on how they should set their S-101 ENC scales (whether based on grids or not)…
- … and how this is supposed to be displayed.

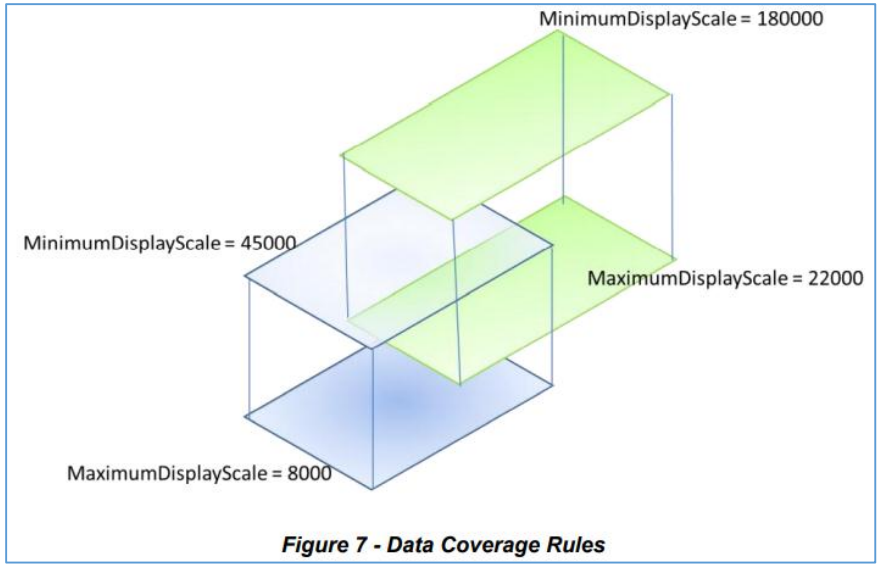

Figure 7 - Data Coverage Rules

Action: review the S-101 documentation to provide extended guidance for Data Producers on how to organize their S-101 ENCs schemes, taking into considerations the use / non-use of multiple data coverages datasets. Volunteers to be identified within the Sub-Group.

Volunteers to participate are asked to contact Christian and Jeff.

Note: This action includes a complete review of PS §4.5 (Dataset), §4.6 (Display Scale Range) and DCEG §2.5.5 (Seamless ENC coverage), §2.5.9 (Sample scale minimum policy).

C : DATASET LOADING/UNLOADING STRATEGY

- S-101 Scale ranges VS S-57 Usage Bands
- S-101 Navigational Purposes: for cataloguing only
- Drawing « side-by-side » VS « one on top of the other » → Scale conditions to be established
- Possible obscuring of data to be considered
- Need for test data to review the documentation and better define the loading strategy

Actions: - Data Producers to provide test datasets.
- "Loading Strategy" Sub-Group (lead NIWC) to review the loading strategy.

Volunteers to participate are asked to contact Christian and Jeff.

D : MANDATING ECDIS VIEWING SCALES

- Scale minimum is the only cartographic attribute that allows the Data Producer to control the display od data on the ECDIS.
- Scale minimum policy does not work if there is no correspondance between the scale minimum values and the ECDIS viewing scales.
- S-101 standard may not be the place where mandated viewing scales should be (IEC 61174 or S-98 ?).
- The idea is not to mandate all ECDIS viewing scales, but a minimum list (based on scale minimum values).

Actions: - S-101PT to liaise with S-100WG and/or CIRM to try to come to an agreement on a minimum list of mandated viewing scales in ECDIS systems, so that the scale minimum policy as described in the DCEG is efficiently displayed.

RECOMMENDATIONS

It is recommended that the S-101PT8 approve the following actions:

- "Scales" Sub-Group to review the S-101 documentation to provide extended guidance for HOs on how to organize their S-101 ENCs schemes, taking into considerations the use / non-use of multiple data coverages datasets. Volunteers are welcome to participate.

- "load/unload" Sub-Group to review (lead: NIWC) the loading strategy. Data Producers to provide test data for the loading strategy. Volunteers are welcome to participate.

- S-101PT to liaise with the S-100WG to align the scales definitions throughout the S-100 and S-101 documentation.

- S-101PT to liaise withS-100WG and/or CIRM to try to come to an agreement on a minimum list of mandated viewing scales in ECDIS systems, so that the scale minimum policy as described in the DCEG is efficiently displayed.

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THANK YOU!