

Session 2 – 7 March 2024 – 13:00 – 17:00 UTC+1

Optimum Display Scale in S-101 1.2.0



BACKGROUND

- International Hydrographic Organization
- Optimum Display Scale (ODS) has been introduced in S-101 1.2.0.
- There has been very little testing on this.
- This presentation aims at:
 - ✓ Clarifying ODS as it is in 1.2.0;
 - ✓ Explaining the various arguments in favour or against ODS;
 - $\checkmark~$ Elaborate the way forward towards S-101 Ed. 2.0.0.

<u>NOTE</u>: In order to avoid long discussion at this session of S-101PT12, the Scales Sub-Group held a meeting on 28 February.

A consensus was reached and was applied in the recommendations of this paper.



ODS in S-101 Ed. 1.2.0

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ODS and Dataset scale range

4.6 Display scale range

A scale range of a dataset is used to indicate a range of scales between which a producer considers the data is intended for use. (See clause 4.7 for how datasets are to be loaded and unloaded within a navigation system.) The smallest scale is defined by the **minimum display scale** and the largest scale by the **optimum display scale**. The **maximum display scale** indicates the scale that the Data Producer considers that the "grossly overscaled" warning should be triggered. These scales must be set at one of the scales specified in clause 3 (spatial resolutions).

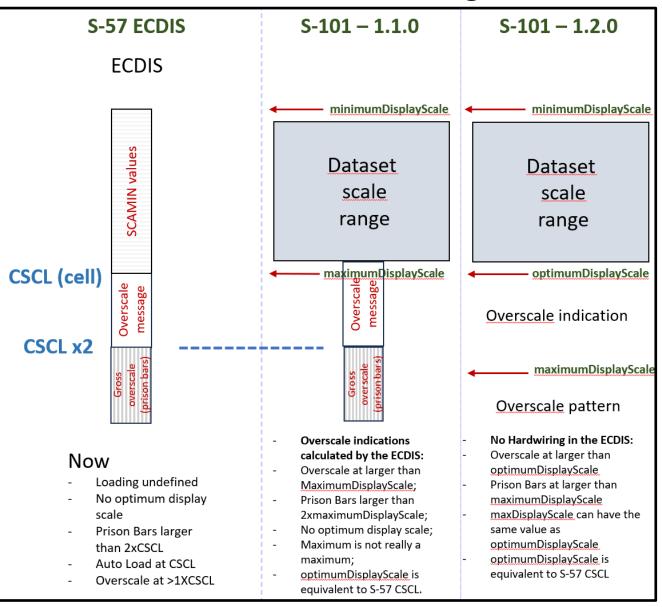
"There must not be overlapping scale ranges (that is, overlaps between values of optimum display scale and minimum display scale) between datasets covering the same geographical area."

ODS, as described in 1.2.0 does not compromise this statement (which is essential for the loading strategy).



ODS in S-101 Ed. 1.2.0

ODS and Dataset scale range



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ODS in S-101 Ed. 1.2.0

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Pros ODS

- ODS brings some flexibility to the data producers as they can determine the scale at which the overscale pattern is shown;

- It is not "natural" to call **Maximum Display Scale**, a scale from which the mariner can still zoom in.

Cons ODS

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- no complete proposal on ODS made to the S-101PT. The decision at S-101PT11 was to introduce ODS for testing purposes. This is not mentioned in Edition 1.2.0;

- Is the "flexibility" really needed/wanted by the HOs?

- radical change from S-57/S-52 and this needs to be made consistent with S-98;
- Possible inconcistency between S-57 and S-101 ENCs in an S-100 ECDIS.



IHO

Way forward: Options

International Hydrographic Organization A – Keep the guidance as it is (with ODS) and elaborate a testing plan in order to reach to an agreement (complete guidance) much in advance of S-101 PT13;

B – Remove ODS from the data model as it is (roll back to 1.1.0 guidance with two scales in the data);

B1 – Roll back to 1.1.0 guidance, but replace **Maximum Display Scale** by **Optimum Display Scale** (terminology change only).



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Scale Sub-Group recommendations

- Apply Option A (keep ODS and test) for S-101 Edition 1.3.0;
- Take an action to find volunteers for:
 - ✓ providing complete sets of test datasets;
 - ✓ testing ODS, as well as the loading strategy and Data Display Algorithm as implemented in NIWC ShoreECDIS_1.6.0.0;
 - ✓ providing feedback to the Sub-Group.
- (Post 28 Feb. meeting): Replace **Optimum Display Scale** by **Maximum Display Scale** in the loading algorithm to be in line with NIWC ShoreECDIS 1.6.0.0;
- AU proposal: Plan an update of the loading strategy so that a dataset is shown up to Minimum Display Scale -1 (this will allow a product to be loaded at Optimum Display Scale;
- Invited S-101PT members to provide comments on Issues #71 and #101 and on the "Documentation and FC Github (<u>https://github.com/iho-ohi/S-101-Documentation-and-FC</u>).

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ANY QUESTIONS?

THANK YOU