



## S-101PT9 Meeting

### **Update on the Scales and Load/Unload Sub-Group**

**+ validation of the Sub-Group proposals**

### **Agenda Item 6.5**

S-101PT9, Wellington, New-Zealand - Hybrid Event, 23 – 25 November 2022



- <https://github.com/iho-ohi/S-101-Documentation-and-FC>
- VTC meeting 19 October 2022
- Expanded participation (included contributors on the Github)
- Meeting outcomes sent by email + Issues updated

The screenshot shows the GitHub interface for the repository 'iho-ohi / S-101-Documentation-and-FC'. The page is public and has 53 issues, 1 pull request, and 1 action. A search filter 'is:open label:Scales' is applied. The list of issues includes:

- 9 Open, 0 Closed
- Issue #54: 'Scales guidance in the DCEG' (DCEG, Scales) opened on Oct 18 by Christian-Shom
- Issue #52: 'Overlapping scale ranges' (Product Specification, Scales) opened on Oct 13 by Christian-Shom
- Issue #51: 'Complex text vs diagrams' (Product Specification, Scales) opened on Oct 12 by Christian-Shom
- Issue #19: 'Minimum Display Scale and dataset display' (Loading Strategy, Scales) opened on Jul 5 by Christian-Shom



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# **SUB-GROUP PROPOSALS**



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## DEFINITIONS (#11)

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- Maximum Display Scale: "The maximum (largest) display scale with which the data is designed to be displayed."
- Minimum Display Scale: "The minimum (smallest) display scale with which the data is designed to be displayed."

Additional guidance on Max and Min Display Scales needed in the PS for data providers.



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## REFERENCE TO COMPILATION SCALE (#17)

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- Due to lack of consensus, **the Sub-Group agreed on keeping reference to the Compilation Scale** (equivalent to the Maximum display scale)
- For initial dataset display, the Max DS is the one to be used (equivalent to the “Optimum” display scale)
- Scale minimum calculation will start from Max DS.



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## REFERENCE TO OPTIMUM DISPLAY SCALE (#17)

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- Optimum Display Scale exists in S-100, but not mandatory.
- Optimum DS is in the current PS for metadata.
- OEMs feedback is that Opt. DS is not needed for dataset loading strategy.
- Consensus in the sub-group for removing Opt. DS for S-101 Edition 1.1.0
- S-101PT9 to validate the removal.



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## SUB-GROUP PROPOSALS: OVERSCALE INDICATION (#16)

- Overscale indication (text on the border of the screen) and
- Overscale pattern (prison bars on the Data Coverage feature(s) concerned)

must be shown as soon as at least one of the Data Coverage features that participate in the display has a Maximum Display Scale that is smaller than the display scale on the graphics window.

Note: not portrayal but ECDIS functionalities (change from S-52)



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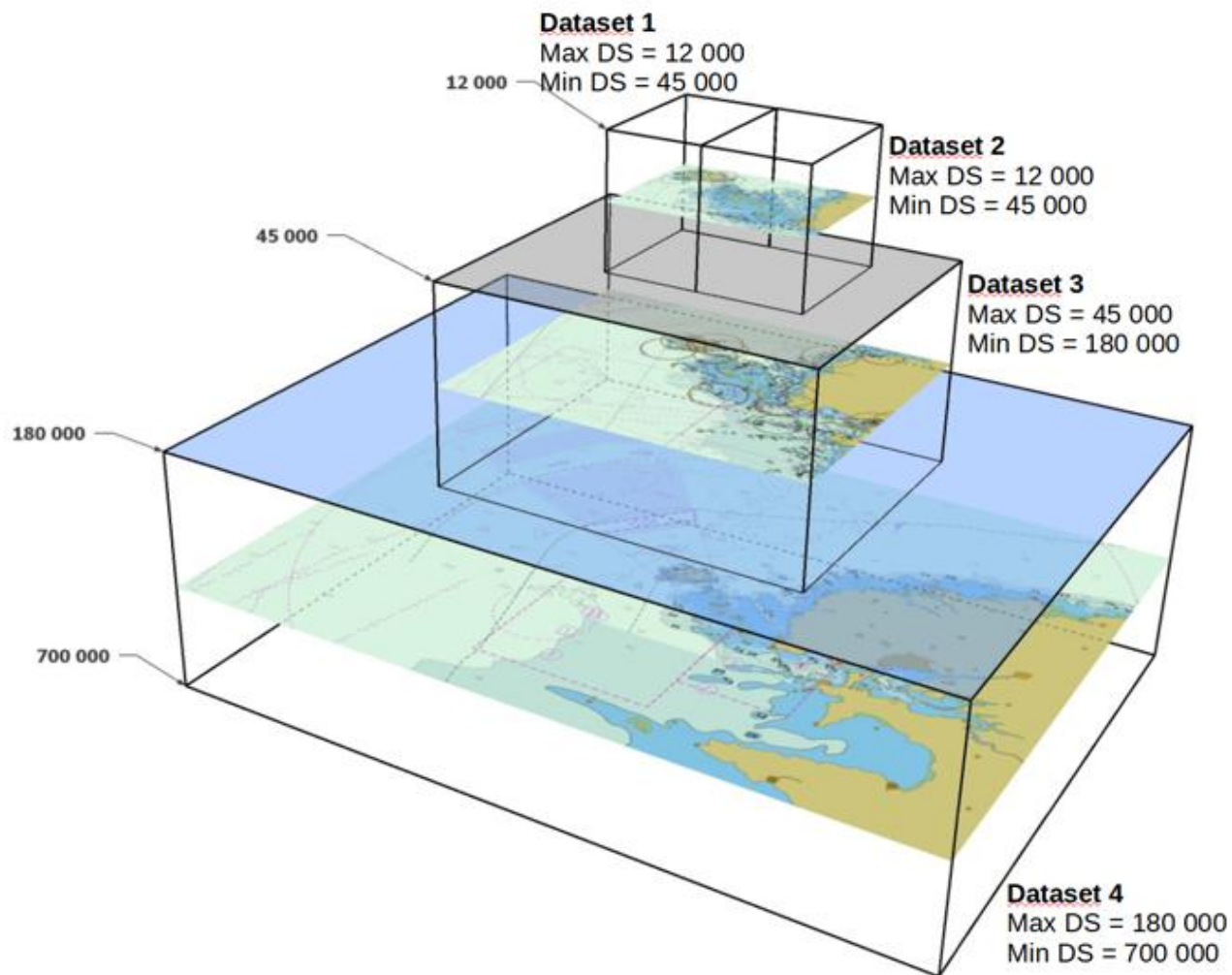
## OVERLAPPING SCALE RANGES (#52)

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- Prohibition of Scale ranges overlap on a same geographical area.

→ The Min DS of a dataset must be larger than (ideally equal to) the Max DS of the next smaller scale dataset.

Note: how can we enforce this rule?  
(no possibility with validation checks).  
Done at the RENC level.







- Inclusion of a “Beta Code” algorithm (provided by Holger – 7Cs and tested / reviewed by Pol + Geomod)

**Algorithm** *GetScaleBandsForCoverage(minDS, maxDS, testOverScale)*

**Input:** *minDS* – The minimum display scale of the coverage

*maxDS* – The maximum display scale of the coverage

**Output:** A set of associated scale band indices *S*

1. Create an empty set *S*
2. **If**  $minDS < maxScale[1]$ 
  - a.  $S = S \cup 1$
3. **For** index = 2 -> 15
  - a. **If** (*testOverScale*)
    - i. **If**  $(maxDS < maxScale[index] \wedge minDS > minScale[index])$ 
      1.  $S = S \cup index$
    - b. **Else If**  $max(minDS, minScale[index]) < min(maxDS, maxScale[index])$ 
      - i.  $S = S \cup index$
4. **Return** *S*



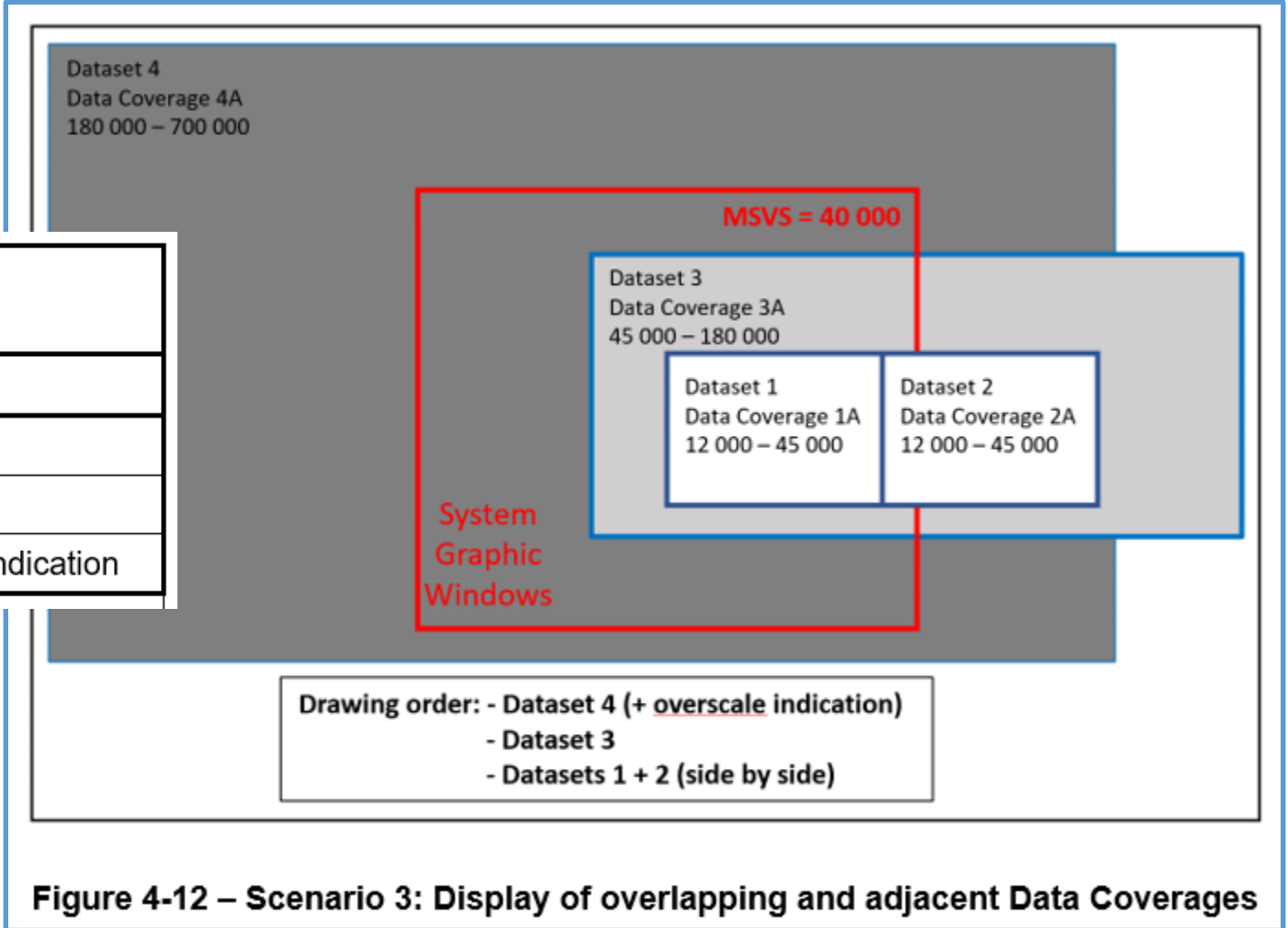
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# SUB-GROUP PROPOSALS: COMPLEX TEXT VS DIAGRAMS (#51)

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- Display diagrams (loading strategy for HO's) with UK and GE proposals

<b>Data Coverage 1 + 2</b> (see Figure 4-8) minimum display scale: 45000; maximum display scale: 8000	
<b>MSVS</b>	<b>Display</b>
Smaller than 90000, for example 180000	no
90000 to 8000, for example 22000	yes
Larger than 4000, for example 3500	yes, with overscale indication





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**THANK YOU**