



11th Meeting of the WENDWG

Differences between S-57 and S-101 for consideration



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WEND UNDER S-57

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- S-57 uses the concept of navigation purpose to organize data at various scales
- S-57 states that data cannot overlap at the same navigational purpose
 - This rule has been used to guide WEND and MS in order to resolve data overlaps

Suggested assignment of Navigational Purposes to scale ranges

Navigational Purpose	Name	Scale Range
1	Overview	<1:1 499 999
2	General	1:350 000 – 1:1 499 999
3	Coastal	1:90 000 – 1:349 999
4	Approach	1:22 000 – 1:89 999
5	Harbour	1:4 000 – 1:21 999
6	Berthing	> 1:4 000



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WEND100 AND S-101

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- In S-101 it is mandatory that each dataset be assigned one of the scale values defined within the specification
 - Based on Radar Ranges
 - First proposed and accepted in 2008 – Cape Town
- Elimination of usage bands within S-101
 - Still three for cataloging purposes in the metadata



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S-101 RULES – CLAUSE 4.5.3

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- The **Data Coverage** features within a dataset **must not** overlap, however **Data Coverage** features from different datasets may overlap if they have differing maximum display scales.
- Datasets may overlap, however there **must** be no overlapping **Data Coverage** features of the same **maximum display scale**, except at the agreed adjoining national data limits, where, if its difficult to achieve a perfect join, a 5 metre overlapping buffer zone may be used; and for this situation, there **must** be no gaps in data.
- The **maximum display scale** is considered to be the equivalent of the compilation scale of the data.

Spatial Resolution:

An ENC dataset and **Data Coverage** features must carry a value for maximum display scale. Each **Data Coverage** feature must also carry a value for minimum display scale. Values must be taken from the following table:

Scale
NULL (only allowed on minimum display scale where the maximum display scale = 10,000,000)
1:10,000,000
1:3,500,000
1:1,500,000
1:700,000
1:350,000
1:180,000
1:90,000
1:45,000
1:22,000
1:12,000
1:8,000
1:4,000
1:3,000
1:2,000
1:1,000

Table 1- ENC Minimum Display and Maximum Display Scales



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WHAT DOES THIS MEAN

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- The rules have changed for how data can overlap
- May result in a new set of overlaps to resolve
- May resolve existing overlaps
- WEND will have to produce guidance on how to manage this issue – especially for small and medium scale coverage