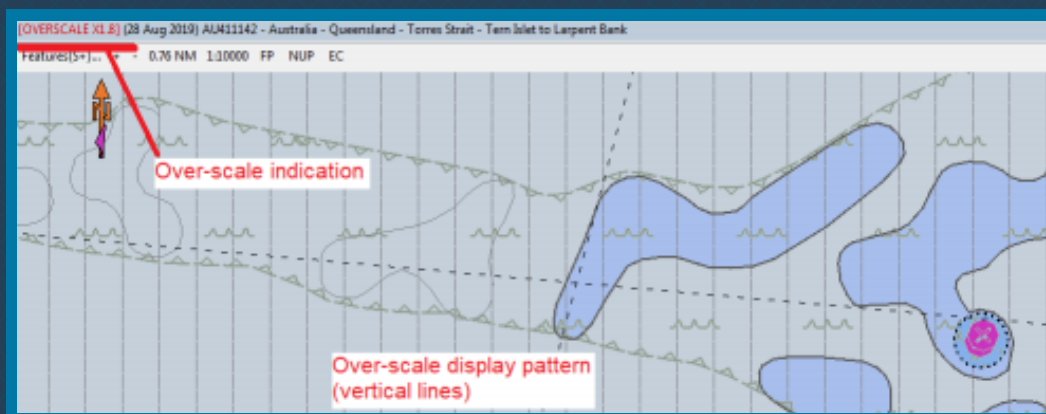


## Human Element Maritime Enhancement Tool (H.EL.M.E.T)



### Dry - BMS Subject Area 21 “Bridge procedures & standards” (Basic & Excellence Level)

- HELMET ELEMENT 6 ‘Navigation’ – Item 1 ‘Safe Navigation Procedures’
- Bridge Procedures Guide 5th Edition – 4.12.3.1 ‘Electronic Navigational Charts’
- MSC.1/Circ.1503/Rev.1 – ‘ECDIS - Guidance for good practice’ – Appendix 1 - Para 14
- STCW.7/Circ.24/Rev.1 – ‘Training requirements for Electronic Chart Display and Information Systems (ECDIS) and provision of the documentation for verification’
- V.I.Q. 7th Edition – Chapter 4. Navigation and Communications - Requirement 4.14

**FINDING:** During a remote Navigational assessment using VDR data, our Assessor noticed that on the ECDIS the overscale alarm was activated and vertical lines were displayed on ENC notifying chart’s inaccuracy.

### IS THIS IMPORTANT?

The ENCs are generally auto loaded at a specific compilation scale. Any deviation from the recommended compilation scale may cause difficulties in navigation, since certain features and critical information can be suppressed. Like in traditional paper Charts, every ENC is intended to be used with a specific compilation scale.

Zooming in/out beyond the intended display scale of ENCs may be misleading and dangerous, particularly for **‘isolated dangers of depth less than the safety depth’**.

Zooming in-to a larger scale introduces the risk that any positional errors that may exist in the ENC data are magnified to a point where the data becomes unsafe to use and this fact will not be immediately apparent as the ECDIS will continue to display the text and symbols at a fixed size.

Zooming out to a smaller scale introduces the risk that the display may become cluttered as the same amount of information is compressed into a smaller area on the screen. Important navigational features may therefore become obscured from view.

### SUGGESTIONS

Bridge team familiarization with the ECDIS specific functions is mandatory as per STCW and essential for safe navigation.

Bridge Officers should develop a sufficient understanding of how and when the ECDIS indicates that ENC data is being displayed at an unsafe scale, so that the display settings can be adjusted accordingly.

Additionally, we suggest the Bridge Officers to consider the following:

- During route planning stage, set **‘SCAMIN’** function to **OFF** and upon completion of route’s Safety Check, switch back to **ON**.
- During execution of Navigation **‘CHART AUTO LOAD’** & **‘CHART AUTO SCALE’** functions must be **ON**.
- Every ENC, depending of its Usage band, determines the ECDIS display scale at which the ENC Cell is intended to be used for navigation purposes.

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