|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | AU 1 | 6.1.1 |  | ge | * What constitutes the ‘ENC Layer’? * Can we turn off the ‘graphical display’ of S-102? Probably not, as it would turn off its interoperability at the same time (e.g. no more ESC)?? | Recommend ‘ENC Layer’ definition is clearly documented. Does it refer to S-101 and S-57 ***OR*** does it also include S-102 & S-104 ?? Assume the ‘graphical display’ of S-102 cannot be switched Off without removing its interoperability with S-101. NOT SURE HOW THIS WOULD WORK IN THE FUTURE FOR S-122 - IT MAY HAVE SOME INTEROPERABILITY WITH S-101 AND ITS OWN PORTRAYAL AS WELL. Consider adding a generic statement that graphical display and interoperability functions must be switched on/off simultaneously and must not be separated ???? | Yes, there is only one selector to access S-102, which is ESC, no separate control for S-102 display. I think 6.1.1 says this. We’ve been through this with SM. |
|  | AU 2 | 6.1.4 |  | te | When display base or standard display is selected, a combination of S-101, S-102 and S-104 **may be used** to develop the safety contour in accordance with Appendix D.  How is ECDIS going to resolve the ‘may be’?  Are we asking the ECDIS to remember the mariners’ display options (e.g S-104 ON) before the ‘Standard’ display ‘button’ is hit and respect those options for S-102 and S-104? Assume that when an ECDIS is turned ON or re-started, only S-101 and S-102 would be loaded as part of the ‘Standard’ display. | Recommend ECDIS performance is further clarified to above different interpretations by OEMs and that a corresponding Test case is added to S-164. | I think latest version clarifies this. STD display is S-101 but turns other layers off. 102/104 are on if user has ESC/WLA selected.  [*Spell out in Doc that ESC is left switched on].*  *[ensure 164 tests for STD display have 102/104 in the area].*  should base display turn the selectors off? Ask SM. |
|  | AU | 7.1 | 3rd paragraph | te | Interoperability is not something that can be ‘activated’ in isolation. When a dataset is ‘loaded’ both, portrayal (if defined by PC) and interoperability are simultaneously activated. As an example, S-104 datasets must not be automatically loaded by ECDIS. S-104 can only be loaded at mariner’s request. Once loaded, interoperability with S-102 would happen (no further action should be required). | Recommend amending the sentence to read:  “When ~~interoperability is activated and~~ there is an interoperable product loaded to the display, either feature data or drawing instructions ..” | The Paragraph was DELETED BY JP on ED 2.1.0 DRAFT  Check – maybe this has gone as interoperability framework has disappeared. |
|  | AU 3 | 7.2.4 | 1st paragraph – Last sentence | te | Not sure this statement is correct. OEMs are not required to come up with a centred area symbol when the display window is fully enclosed by the extents of an area feature. The use of a centred area symbol is pre-defined in Portrayal Catalogues for a specific feature-attribute-geometry combination. If a decision was in the PC to not to use a centred area symbol for a particular feature type, this should not be changed by OEM’s, even if the display window, at certain MSVS, is fully enclosed by the Area feature. | Consider removing this sentence, as it is not an OEM requirement to handle centred area symbols beyond what is specified in the corresponding PC instructions. | Will check,  *[check Part 9 on how centred symbols are managed? Is there something for the OEM to do. Also check test]* |
|  | AU | 7.2.6 |  | te | This section highlights concerns about the visual impact the rendering of some shared edges can have on the clarity of portrayal in ECDIS **BUT** does not direct OEMs to implement solutions (no specific ECDIS performance requirements are outlined). | Recommend OEMs are directed to implement solutions to resolve these issues and include S-164 tests for 2 scenarios (simple and complex lines). | INPUT SUBMITTED TO IHO – Ed 2.0.0 MS Approval |
|  | AU | 8 |  | ed | S-98 title is incorrect:  S-98 (Data Product Interoperability in S-100 Navigation Systems) | Amend to:  S-98 (S-100 ECDIS and Interoperability  Specification) | INPUT SUBMITTED TO IHO – Ed 2.0.0 MS Approval |
|  | AU | 9.1.1 |  | te | There’s no requirement for ECDIS to specifically highlight the ‘official’ status of S-100 datasets during the installation process and no requirement to seek end-user approval before proceeding. I would also argue that the loading of non-official datasets should happen at end user request only (e.g. ‘auto loading’ ECDIS functions should exclude those datasets). | Consider establishing additional ECDIS requirements for the installation and loading of non-official datasets. Include S-164 test. | Agree, this could be factored into flow diagrams in Appendix.  *Should there be an SSE code message if the user loads an unofficial dataset? Should unofficial datasets be excluded from auto-load? Need to highlight concerns on use of unofficial data. Is there any way unofficial data can get on to the ECDIS….* |
|  | AU 4 | 12.3.1 | 1st paragraph | te | Wording can be misinterpreted and taken as referring to differences in scale between different ENC products.  Prefer the use of the term ‘Data Coverage features’ than’ “ENC data’. | Amend:  “Where the ECDIS simultaneously presents ENC data with different **optimumDisplayScales**, the ‘chart scaleboundaru’ …….”  to  “Where the ECDIS simultaneously presents **Data Coverage** features with different **optimumDisplayScale,** the ‘chart scale boundary’ …….” | Check latest version, I think this has been done. [*check*] |
|  | AU 5 | 12.3.2 | Figure 12.1 | te | Scale values do not match entries in Table 12-1 | Recommend the use of ODS and MSVS values that are listed in Table 12.1, not random values. | Check. Agree – redraw diagram. Ask SM to redraw. |
|  | AU 6 | 12.5.2 | 3rd paragraph | ge | There’s a requirement for ECDIS to display a legend to instruct mariners to ‘*refer to an official chart*’ **but,** contrary to S-52, the wording of these legends is not specified here. | Specify the wording of the legends to be used when non-official data is displayed – Refer to S-52 Main document (2.3.1c[2]) for consistency.  Recommend replacing **RNC or paper chart** with **chart**:   * “Unofficial data displayed; refer to official ~~RNC or paper chart~~ chart” **OR** * “No official data available; refer to official ~~RNC or paper chart~~.chart.” | Already discussed. *Discuss with group*. *Check proposals and check with the group.* |
|  | AU 7 | 12.9.7 |  | te | Different to sections 12.9.6 & 12.9.9, this section does not explain how ‘Areas for which special conditions exist’ are to be graphically represented (use of INDHLT). Refer to Figure 12-2. | Add clarifying paragraph and Figure, as required and in line with related entries in sections 12.9.6 & 12.9.9. As a minimum, refer to Figure 12-2. | *Check wording on this and proposal.* |
|  | AU | 12.9.10 |  | te | The IMO requirement is about allowing mariners to take into account **accuracy information** of relevant hydrographic information.  S-98 is implementing a methodology that only takes into consideration the ‘horizontal’ component of Accuracy and ignoring its ‘vertical’ constituent. | 1. Include a dedicated paragraph highlighting the current limitations in the application of the IMO’s requirements regarding ENC accuracies. 2. Direct OEMs to appropriately name the corresponding ECDIS function/selector so there’s no doubt to mariners that only ‘Horizontal’ accuracy of charted information will be considered. For example: ‘H Accuracy’ over ‘Accuracy’. | INPUT SUBMITTED TO IHO – Ed 2.0.0 MS Approval  More complex now. S-100 may include vertical too under same selector. Name of selector tbd. *Should it also use S-101? Raise in discussion.* |
|  | AU 8 | 12.11.6 |  |  | The title of this section is confusing/misleading. The terms ‘non official’ & ‘non ENC’ are already used in S-98 for other purposes and therefore should not be referred to in this section.  **Non official** – refer to 9.1.1 They can be S-57, S-101 or any other.  **Non ENC** - Products different than S-101 or S-57 (e.g. 12.2 & 12.4.2). In other terms, those datasets that are not part of the ‘ENC layer’ (refer to 6.1.1).  This section seems to refer to data that is not compliant with any product specification and can be loaded onto the ECDIS display screen.  In S-52, ‘non-ENC’ data refers to object classes that are not included in the S-57 PS. The default symbology for them is QUESMRK1. This is probably now handled by S-101 PC for ENCs.  This section is probably trying to cover the use of non-conformant objects in other PS but not sure the proposed symbology (currently used for ‘additions’ done via ‘manual updates’) is the best option. | 1. Review the need for this section and, if required, a new title is extremely recommended to avoid confusion with terminology already in use. 2. Should ECDIS allow the installation of products containing non-conformant object classes/attributes? What are valid use cases for this? 3. If required, consider replacing CHCRID01 with QUESMRK1. This seems more appropriate as it is already in use in S-52 and S-101. | *Review text. Also review requirement for non-IHO data on ECDIS? Check S-57 and S-101 handle data in the same way when it is unrecognised.* |
|  | AU 9 | D-3.1 |  | te | Substitution of S-101 depth values based on overlapping S-102 extents should only happen when MSVS >= minDS of the S-102 dataset and the dataset is loaded. This is to be in agreement with the ‘range of display’ expected for non ENC data layers (refer to 12.2).  If the data producer decide to drop an S-102 at MSVS=45000, the sounding of an S-101 looked at MSVS=90000 shouldn’t be substituted by S-102 data.  Use ESC instead???? | Replace the red part of the statement below:  ‘ … all depth values must be substituted (*or adjusted for WLA*) for all ENC features at all scales which have depth attribution ..’  **With**  ‘ … all depth values must be substituted (*or adjusted for WLA)* for all ENC features which have depth attribution, when viewed at a MSVS that is => **minimuDisplayScale** of an overlapping S-102 dataset...’ | *Will look at wording. I think this is correct and wording is from before scale ranges of S-102 were defined.* |
|  | AU | Annex E |  |  | Ask Ben – What dataset is visible when DS1 minDS=45000 and DS2 ODS=45000 ? Is it clear in the Annex??? | ASK JP | Already done this. Will check conditions.  ***Changed the side of the equality in the selection so it favours small scales at optimum as opposed to large scales at minimum. Ref VTC 23rd Oct.***  Make sure test is in S-164. |