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|  | NIPWG | All Pub |  | ge | Although seeing the necessity to provide such information to the mariner, NIPWG considers it unnecessary to create a new standard. The information would be better placed within S-66 (Facts about Electronic Charts and Carriage Requirements), to avoid readers having to refer to two different documents. |  |  |
|  | NIPWG | All Pub |  | ge | Fundamentally, before issuing guidance to mariners, ENC producers should be provided with guidance, or clarification about the requirements of the standard relating to CATZOC, such that CATZOC are consistently encoded. |  |  |
|  | NIPWG | All Pub |  | ge | Fundamentally, S-66 (and S-67 if approved and not being implemented into S-66 as proposed above) are not standards. NIPWG supports the principle of creating a new group of “G” documents to provide guidance (as tasked by HSSC9). |  |  |
|  | NIPWG | All Pub |  | ge | Fundamentally, despite claiming to be simpler than national publications, S-67 (as drafted) contains extensive and unnecessary discussion of surveying techniques (e.g. section 4.2 position accuracy – ‘with surveyors ‘angling’ for hours at a time’). The current draft includes too much discussion of surveying techniques. |  |  |
|  | NIPWG | All Pub |  | ge | Whatever is decided regarding S-67, a fundamental problem with CATZOC is that there is no direct translation between S-44 and CATZOC. E.g. a special order survey gets the same CATZOC as an order 1a survey. An Order 2 survey just misses out on being able to make CATZOC B due to the depth accuracy being out by 0.3% and thus gets dropped to a CATZOC C. This all stems from the two standards being developed separately when they are both talking about the same thing. There is added confusion caused by the same letters and numbers being used for both standards, but in a different order (1A, A1). This issue needs to be addressed. |  |  |
|  | NIPWG | All Pub | All Pub | Ge | To assess the quality (ZOC) of an Unsurveyed Area is meaningless (when and where an area is encoded as “UNSARE” and no data are available at all). The best option would be not to encode the M\_QUAL where unsurveyed areas exist. Moreover, in the S-58 “ENC validaton checks” edition 6.0.0 May 2017 there is no requirement for covering UNSARE with M\_QUAL values, unless UNSARE objects contain (or cross/overlap) bathymetric features (i.e. DEPCNT, OBSTRN, SOUNDG, UWTROC or WRECKES).  When UNSAREs contain bathymetric features, it is mandatory to cover them completely with M\_QUAL (ZOC “D” should be the right option).  Please consider that in the case of approaching an unsurveyed area (encoded as UNSARE), ECDIS equipment will trigger an alarm.  In addition, there is the case of minimal depiction areas which is an extreme case of generalization where most features are omitted (see S-4 B-404). In this case the area should be encoded as Depth Area and ZOC value D should be assigned.  Last but not least, the table in Annex A in Section 7 of the publication (Source: IHO S-57 Ed3.1 Supp 3 – Jun 2014) does not refer to UNSARE. |  |  |
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|  | NIPWG |  |  | ed |  | The name of the Guideline (if not become part of S-66) should be: “Mariners’ Guide to CATZOC in Electronic Navigational Charts” |  |
|  | NIPWG |  |  | ge |  | There should be a general introduction of the document. What is the purpose of the Guideline and who is the intended reader. |  |
|  | NIPWG | Chapter 2 | Para 2 | te | Does this apply to pipelines and cables lying on the sea bed (not buried) extending above the sea floor? |  |  |
|  | NIPWG | Chapter 2 | Para 3 | Te | See the introductory general comment. | Modify as follow: The categories range from ‘very high confidence’ to ‘unsurveyed very poor quality’ . There is an additional category for ‘Unassessed’. |  |
|  | NIPWG | Chapter 2 | Table 1 | Te | See the introductory general comment. | Modify as follow: Poor quality data or unsurveyed |  |
|  | NIPWG | Chapter 2 | Table 1 | te |  | Differential GNSS should be used instead of DGPS |  |
|  | NIPWG | Chapter 4 | Para 5 | ge | Regarding the suggestion of downgrading CATZOC in areas of mobile seabed (page 7), NIPWG members believe that knowing the date of the survey and the nature of the seabed is vital to the interpretation of CATZOC values and the impact on UKC. It is better to give the facts to the mariner, together with advice on how to interpret the facts, rather than change what is provided. This is a case where this guidance document is more directed to, and has an impact on, the data producer (see line 2 above (fundamental statements)). It is vital to separate guidance to producers from guidance to mariners. Care must also be taken not to modify the existing principles of CATZOC. Any changes to the way CATZOC are encoded must be a revision to S-57 or wait for S-101. |  |  |
|  | NIPWG | Chapter 4 | Criteria 2 | te |  | Coverage should not be used. S-44 uses the term seafloor search. (Ref to the statement made on CATZOC and S-44 further above) |  |
|  | NIPWG | Chapter 4 | Paragraph 3 | ed |  | Seafloor coverage should be removed. |  |
|  | NIPWG | Chapter 4 | Paragraph 4 and 5 | ed |  | Replace undetected ‘surprises’ by “undetected objects.” |  |
|  | NIPWG | Chapter 4 | Para 6 |  | How can you note these areas? Would it be possible to use an Exclamation Point (!) after the Star (\*) to indicate a caution (example: \*!)? The Exclamation Point is already used in the yellow triangle to indicate a Precautionary Area in a TSS. |  |  |
|  | NIPWG | Chapter 4.1 | Para 1 | ed |  | Replace ‘nasty surprises’ by ‘undetected objects’. |  |
|  | NIPWG | Chapter 4.1 | Para 1 | ed |  | Replace “it only…” by “ it is only…”  or another option is to replace  “accuracy of the survey – it only once there is” by  " accuracy of the survey -- only once there is" |  |
|  | NIPWG | Chapter 4.1 |  | ed |  | “off the chart…” should read “uncharted…” |  |
|  | NIPWG | Chapter 4.1 | Paragraph 3 | te |  | ”…full seafloor detection…” should read “…full seafloor search…” |  |
|  | NIPWG | Chapter 4.1 | Paragraph 4 | ed | “2 cubic metres “is wrong dimension | “2 cubic meters” should be “a cube with the size of 2x2x2 metres” |  |
|  | NIPWG | Chapter 4.1 | Para 6 | Te | The quality assessment is based upon objective information and should be valid without any relation with the size of vessels using the area. Also taking into consideration that ENC quality assessment can have multiple uses and purposes. | Modify as follow:  The hydrographic office responsible for the chart will have (or should have) made their assessment based upon the quality of the survey and the depth of water and the size of vessels using the area. |  |
|  | NIPWG | Chapter 4.1 | Para 8 | Te | See the introductory general comment | Modify as follow: As these areas either have no systematic survey, or are very poor surveyed completely unsurveyed, these features may well be as large as an entire submerged reef rising to just below the surface. |  |
|  | NIPWG | Chapter 4.2 | Para 2 |  | The statement that ‘Most ships using modern satellite based navigation systems can be navigated with much greater accuracy than the charts they are using’, clearly misunderstands what navigation is.  Navigation can only be conducted in relation to positional information, usually on a chart.  The author, presumably means, ‘most ships can fix position to greater accuracy than the chart’. | Replace  “Most ships using modern satellite based navigation systems can be navigated with much greater accuracy than the charts they are using’  by  , ‘most ships can fix position to greater accuracy than the chart’. |  |
|  | NIPWG | Chapter 4.2 | Last Paragraph | ed |  | “Total offset” should read “Minimum offset” |  |
|  | NIPWG | Chapter 4.3 | Paragraph 2 | ed |  | “The three biggest factors…” should read “The three main factors…” |  |
|  |  | Chapter 5 | Para | ed | This Chapter gives advice on appropriate levels of UKC, including specific clearance values. This information would be expected to be specified by each shipping company’s Safety Management System (SMS) and local maritime/port authorities. It would be dangerous for IHO to imply any liability by suggesting values. |  |  |
|  | NIPWG | Chapter 5 | Table | ed |  | Remove table and related text. The table contains historical information and will not be relevant in a guideline. |  |
|  | NIPWG | Chapter 5.1 | Paragraph 2 | ed |  | Remove any references to hotels. |  |
|  | NIPWG | Chapter 5.2, 5.3, 5.4 |  | te |  | Remove specific values for UKC. |  |
|  | NIPWG | Chapter 5.2 / Summary |  | ed |  | “Relevant Authority” should be used, not “Harbour Master” |  |
|  | NIPWG | Chapter 5 |  | ge |  | The whole chapter should be re-written. |  |
|  | NIPWG | Chapter 5.6 | Para 3 | Te | See the introductory general comment. | Modify as follow: Although many ZOC D areas will appear blank (unsurveyed), some may show a few broken depth contours (insufficient information to estimate where they lie), or a few depths enclosed by a circle (approximate). |  |
|  | NIPWG | Chapter 5.7 | Para 3 and 5 | Ge | It is not clear the difference between the two sentences:  “the area depicted is on a small scale ENC, (smaller than 1:500,000) where the same area is also covered at a larger scale, and the larger scale contains the ZOC assessment;” and  “depiction at small scale, particularly when it is already provided on larger scale ENC, may be so visually complex as to make the differing areas indistinguishable when viewed on screen. In these cases mariners should refer to the larger scale ENC for precise detail.” |  |  |
|  | NIPWG | Chapter 5.7 | Bullet point 2 and 4 | ge |  | NCWG should advice on how CATZOC-areas should be generalized, and this advice incorporated in S-57 UOC. |  |
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|  | NIPWG | Chapter 6 | Para 1 | ed |  | “…classifications.” Add “…given that proper margins for tide, ship motion and other ship influenced parameters is applied.” |  |
|  | NIPWG | Chapter 6 | Para 2 | ge |  | What are the possible legal consequences of such a statement?  “Within ports, the Pilot or Harbour Master may advise that higher accuracy surveys have been conducted that allow for smaller under-keel clearances (subject to tides, speed, weather and manoeuvring margins). In the absence of this advice, smaller under-keel safety margins should not be assumed.” |  |
|  | NIPWG | Chapter 6 | Para 3 | ed |  | Remove the Bullet points. |  |
|  | NIPWG | Chapter 7 | Note 2 | te |  | Replace “(2.45 sigma)” by “(2 sigma)” |  |
|  | NIPWG | Chapter 7 | Note 3 | te |  | Replace “(2.00 sigma)” by “(2 sigma)” |  |