|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | DE |  | Contents | ed | Headings are inconsistent in using capitalisation of first letters |  | **Applied.** Headings checked throughout and amended to be consistent with other IHO Publications. |
|  | PRIMAR | throughout document |  | ge | Make figure text more discrete by reducing font size/drop bold. |  | **Applied.** Figure and Table headings amended throughout to be consistent with other IHO Publications (9 pt Bold text). |
|  | PRIMAR | Introduction | 1 | ed | Editorial proposal to define better the plug and Play functionality than “...without braking system…” | …updateable as PlugAndPlay… | **Applied.** Amended to “…as “Plug and Play” system implementations.”. |
|  | PRIMAR | 1.2 | S-52 | ed | S-52 latest updates are Dec 2020 | … with Clarifications up to December 2020 | **Not applied.** S-52 Edition 6.1(,1) is updated with Clarifications to June 2015. It is the PL (4.0(.3)) that is updated to December 2020.  **S-101PT9: Approved.** |
|  | GB | 1.2 | References |  | Conversion of S-57 to S-101 is a major (initial) consideration for HO when implementing S-101 coverage. | Add to references:  S-65 Annex B S-57 ENC to S-101 Conversion Guidance | **Not applied.** The References section is intended to list the references that have been utilized in developing the document, not additional references relevant to S-101. Perhaps there should be a sub-clause somewhere in S-101 (DCEG)?  **S-101PT9: Approved.** |
|  | NIWC | 1.3.2 | Coordinate Tuple | te | The order is defined by the CRS. | Add “…**coordinates** where the number and order of coordinates is identical to the axes of the **coordinate reference system**” | **Applied.** |
|  | NIWC | 1.3.2 | Display Priority | te | * Applies to drawing instructions, not features * A feature can have multiple drawing instructions, each with different priorities. * The hierarchy only applies within a display plane – the display planes form their own hierarchy. | Recommend remove (or update). | **To be discussed.** Suggest that the definition should be updated.  **S-101PT9: JP to supply definition. 23/11/22: Definition supplied – sourced from S-100 Part 9, clause 9-11.1.6.** |
|  | NIWC | 1.3.2 | ECDIS | te | I believe term “SENC” has been proposed to be dropped. See IMO NCSR 9/WP.6 See page 4. |  | **To be discussed.**  **S-101PT: Replace throughout with “System Database” throughout.** |
|  | PRIMAR | 1.3.2 | ECDIS  Radar Priority  SENC  And throughout document | ed |  | Replace SENC with System database?  Or considered too early for 1.1.0 version? | **To be discussed.**  **S-101PT: See above** |
|  | DE | 1.3.2 | Geometric Primitive | ed |  | Non-decomposed -> non-decomposable | **Not applied.** I think this definition and the Note Has been taken directly from ISO. TBC.  **S-101PT: Approved.** |
|  | GB | 1.3.3 | Terms and definitions |  | The ownness is on the data producer to determine the MaxDS | **Maximum Display Scale**  The maximum display scale with which the data producer had intended the data to be displayed | **Not applied.** Consider that this has been covered by the added “intended” phrase. |
|  | AU | 1.3.2 |  | te | Definition of Maximum and Minimum Display scale needs more work. | Some suggestions for discussion:  **maxDScale** – Optimum ratio between the level of detail and the accuracy of the information provided. It is the recommended maximum MSVS for the data coverage.  **minDScale** – Recommended smallest MSVS for the data coverage due to an elevated possibility of data cluttering and reduced data clarity and readability. | **Not applied.** To be addressed in conjunction with ENC Scales and Data Load/Unload Sub-Group discussions.  **S-101PT: Agreed to go with the revised definitions as supplied by the Sub-Group.** |
|  | NIWC | 1.3.2 | Overscale | te | See S-52 PresLib 10.1.10.1 Overscale Indication: *This overscale indication is required by IMO PS [3] whenever the display scale exceeds the compilation scale.* | “the ~~largest~~ intended (~~maximum~~ optimum) display scale for the data” | **Not applied.** To be addressed in conjunction with ENC Scales and Data Load/Unload Sub-Group discussions.  **S-101PT: No change required – Sub-Group as confirmed by PT.** |
|  | NIWC | 1.3.2 | Radar Priority | ed |  | Recommends deleting this entry. | **Not applied.** What is the justification for this proposal?  **S-101PT: Not used anywhere in the document. Delete.** |
|  | NIWC | 1.3.2 | Radar Transparency | ed |  | Recommends deleting this entry. | **Not applied.** What is the justification for this proposal?  **S-101PT: Not used anywhere in the document. Delete.** |
|  | NIWC | 1.3.2 | SENC | te | See comment above regarding SENC. | Amend “SENC” to “System Electronic Navigational Chart”. | **To be discussed.**  **S-101PT: Replaced by “System Database”** |
|  | DE | 1.3.2 | Skin of the Earth | te |  | …primitive surface, completely covering… | **Applied.** |
|  | NIWC | 1.3.2 | Symbol Size | ed |  | Recommends deleting this entry. | **Not applied.** What is the justification for this proposal?  **S-101PT: Not used anywhere in the document. Delete.** |
|  | NIWC | 1.3.2 | Text Label | ed |  | Recommends deleting this entry. | **Not applied.** What is the justification for this proposal?  **S-101PT: Not used anywhere in the document. Delete.** |
|  | NIWC | 1.3.2 | Transparent Fill | ed |  | Recommends deleting this entry. | **Not applied.** What is the justification for this proposal?  **S-101PT: Not used anywhere in the document. Delete.** |
|  | NIWC | 1.3.2 | Viewing Scale | te | Viewing scale is not solely related to features or dataset content. | “… linear dimensions ~~of~~ **~~features~~** ~~of a~~ **~~dataset~~** presented on ~~in~~ the display and the actual dimensions ~~of the~~ **~~features~~** represented ~~of the~~ **~~dataset~~**.” | **Not applied.** To be addressed in conjunction with ENC Scales and Data Load/Unload Sub-Group discussions.  **S-101PT: No further change required – Sub-Group as confirmed by PT.** |
|  | NIWC | 1.3.3 | SENC | te | See comment above regarding SENC. |  | **To be discussed.**  **S-101PT: Applied. See above – SENC removed from list.** |
|  | PRIMAR | 1.6.3 | 1st para  Last sentence | ed | All cumulative clarifications must be included with the release of approved corrections revisions.  Do not see the need for “corrections” in the sentence. |  | **Applied.** |
|  | PRIMAR | 3 | Alternate Tilte | Ed | Add S-101 to ENC to avoid confusion with S-57 ENC (which normally is referred to as ENC). |  | **To be discussed.** Not sure about this – and also if the alternate title is going to have S-101 added shouldn’t this also be added to the title?  **S-101PT: Not applied. “S-101” removed from start of Abstract.** |
|  | PRIMAR | 3 | Abstract | ed | S-101 could be used both for human and machine readable purposes.  This could be emphasised in the abstract by replacing the word “efficiently” with “both, human and machine readable” |  | **To be discussed.** If this change is to be made suggest that the text read “… use that data efficiently within both human and machine-readable navigation systems”. Am a little concerned though that this may be interpreted that S-101 will be “locked in” for use in MASS when it may need to be a separate PS.  **S-101PT: Word “efficiently” removed.** |
|  | NIWC | 3 | Spatial Resolution | te |  | There are numerous proposed changes to this section that are based on the re-introduction of Optimum Display Scale – refer to NIWC track-changed document. | **Not applied.** To be addressed in conjunction with ENC Scales and Data Load/Unload Sub-Group discussions.  **S-101PT: Agreed to apply amendments as proposed by the Data Load/Unload and ENC Scales Sub-Group for Edition 1.1.0.** |
|  | NIWC | 4.3.2 | Feature types | ed | Given that this is described in the DCEG, recommend removal of subsections. If the subsections are retained, they should agree with the descriptions provided in the DCEG. |  | **To be discussed.** Agree that the detailed descriptions should be only in one document.  **S-101PT: Agreed to reference corresponding clauses in Annex A (DCEG) only.** |
|  | NIWC | 4.3.2.1.1 | Skin of the Earth | te |  | Recommend this information is moved to the DCEG and referenced from here if desired. These are classification/encoding requirements. | **To be discussed.**  **S-101PT: Specification moved to DCEG (new clause 2.5.1.1) and replaced with reference to this clause.** |
|  | GB | 4.3.2.1.1 | Skin of the Earth |  | S-101 model better represents the real world, e.g., Pontoon’s float on depth areas, so pontoons should not be Skin of the Earth. This presents problems (time to correct) Conversion of S-57 to S-100 SoE features, however methods for removing Pontoons as SoE using CARIS are well advanced, and we do consider this a major problem. | No proposed change to SOE features | Not sure what this means (to be clarified). Is this suggesting that no change is proposed, or no change from S-57?  **S-101PT: Further discussion required. Possibly revert to S-57 SoE features until the dual-fuel transition is completed?** |
|  | DE | 4.3.2.1.1 | Skin of the Earth | ge | Answer to comment from Thomas Richardson: Changes in skin of the earth features are an additional difficulty in conversion. Especially in the dual fuel period the data will not represent reality optimally. However, with the UNSARE/Unsurveyed Area workaround it can be automated and should not cause problems once dual fuel is gone. Then the data should be reviewed and Unsurveyed Area features replaced where necessary.  This highlights the fundamental problem during dual fuel, that the best (easiest) way to deal with constant conversion from S-57 to S-101 or vice versa is to avoid feature classes and attributes that do not exist in one of the two standards. But this limits the data to the least common denominator and prevents S-101 data from using its full potential. |  | **No change proposed** (tend to agree with this comment).  **S-101PT: See above related comment – possible further action required.** |
|  | NIWC | 4.3.2.2 | Metadata features | te | This concept is directly carried forward from S-57 and is inconsistent with S-100. Recommend replacing with information associations. |  | Proposal required? **To be discussed.**  **S-101PT: See related comment below.** |
|  | NIWC | 4.3.2.2 | 1st sentence | te | This describes an information type… |  | Agree, however what is the intention behind this comment?  **S-101PT: See related comment below.** |
|  | NIWC | 4.3.2.2 | Metadata features | te | Although metadata features are described in the FC, the FC does not (currently) describe the relationships between meta features and the features to which the meta features apply.  It should be mentioned here that the DCEG describes these implied/spatial relationships.  Our opinion is that it would be better to define an explicit information association for each relationship. This has the added benefit of eliminating the need to encode the geometry of the meta feature (although the geometry could be retained for purposes of the pick report and/or the legend). |  | Proposal required? **To be discussed.**  **S-101PT: NFA at this time. NIWC to submit a proposal to the S-100WG (S-100WG7 – December 2022).** |
|  | PRIMAR | 4.3.2.2 |  | ed | The following non-descriptive information (rules) is included in this chapter:  “Information defined by meta features override the default metadata values defined by the dataset descriptive records. Meta attribution on individual features overrides attribution on meta features”.  Establishing these rules at this location does not seem logical.  For the other feature types in chapter 4.3.2 there are only descriptive information provided.  Suggest that the non-descriptive information (rules) om Meta feature is either:   1. Moved to another destination within this document or 2. Captured by the DCEG | Suggest that the non-descriptive information (rules) om Meta feature is either:   1. Moved to another destination within this document or 2. Captured by the DCEG | Tend to agree. **To be discussed.**  **S-101PT: Agreed to reference corresponding clauses in Annex A (DCEG) only.** |
|  | NIWC | 4.3.2.2 | 1st para, last sentence | te | Rather than overriding attributes of the feature, it would be more in line with S-100 principles to use an association to the appropriate information object. |  | Proposal required? **To be discussed.**  **S-101PT: See above related NIWC comment.** |
|  | NIWC | 4.3.3 | 2nd sentence |  | An information association is not a feature relationship. | There are three types of defined feature relationships in S-101 … | Agree. **Applied.** |
|  | NIWC | (Former) 4.3.3.1 | Entire | te | Refer to the above. An information association is not a feature relationship. | Move to new clause 4.3.5.1. | **Applied. To be confirmed.**  **S-101PT: Approved.** |
|  | DE | 4.3.4 | Information types | ge |  | All different kinds of information types should at least be mentioned. -> Contact Details, Service Hours, Non-Standard Working Day, Nautical Information, Spatial quality (see DCEG 24.1 – 24.5) | Have chosen to only include references to the relevant clauses of the DCEG (as for earlier types). Perhaps there is an argument if this is accepted to remove clause 4.3.4.1? **To be discussed.**  **S-101PT: Agreed to reference corresponding clauses in Annex A (DCEG) only.** |
|  | NIWC | 4.3.4.1 | 1st para |  |  | Delete everything after 1st sentence in this paragraph. | **To be discussed in association with other comments for this clause.**  **S-101PT: Agreed to reference corresponding clauses in Annex A (DCEG) only. Figure removed.** |
|  | DE | 4.3.4.1 | Figure 4-5 | te | See DCEG 24.5 | qualityOfHorizontalMeasurement: only values 4 and 5 are allowed | Agree – needs to be updated. However, as for above comment, does this need to be in 2 places? Suggest remove this clause altogether. **To be discussed.**  **S-101PT: Figure removed. See above.** |
|  | NIWC | 4.3.4.1 | Figure 4-5 | te | This is inaccurate:   * The modelling of SpatialQuality has changed:   1. add *spatialAccuracy* * QoBD may have an association to SpatialQuality through QoBDComposition * The relationships shown here are simplifications of those described in S-100 5.0.0 Figure 7-3 Geometry: | A close up of a map  Description automatically generated | IHO Sec: **To be discussed in association with other comments for this clause.** However, if this revised UML diagram is correct, suggest that it replace the current DCEG Figure 2.1.  **S-101PT: Figure removed. See above.** |
|  | NIWC | (New) 4.3.5 |  | te | See comments above for clause 4.3.3 and (former) 4.3.3.1. | Suggested new clause “Information relationships”. | **Applied. To be confirmed.**  **S-101PT: Approved.** |
|  | NIWC | (New) 4.3.5.2 |  | te |  | Suggested new clause “Information relationships”. | **Applied. To be confirmed.**  **S-101PT: Approved.** |
|  | NIWC | 4.3.6.1 |  | te | NIWC: Recommend remove existing description and refer to S-100:  As written:   * precludes use of URI/URL/URN, dateTime, and code list   Is simplistic – doesn’t describe UOM, constraints, etc. | Replace entire clause with: S-101 defines each simple attribute type within the feature catalogue. Each type is defined as an instance of an S-100 Table 5-A-13 S100\_FC\_SimpleAttribute. | Tend to agree,. However am not sure that Table 5-A-13 is the best reference. Attribute types are also described in clause 2.4.2 of the DCEG. Perhaps this should be referenced? **To be discussed.**  **S-101PT: Agreed to replace with reference to DCEG clause 2.4.2.** |
|  | DE | 4.3.(6).2 | Figure 4-6 | ge | A side by side comparison of two ways to represent complex attributes is only useful if they both represent the same feature and its complex attributes. Otherwise the figure is just confusing. Differences in notation could well be caused by the different nature of the features and not by the way of representing the connections. Figure 4-6 feels like comparing apples to oranges. | Figure 4-6 should show different notations for the same feature and its complex attributes, not different features (even if they are similar). | Tend to agree. **Raphael to supply updated UML?**  **S-101PT: Agreed to replace with reference to S-100 and DCEG. Figure to be removed.** |
|  | NIWC | 4.4 |  | te | This is only available via the S-100 10a encoding and will be "hidden" within the SENC. It is not part of the S-100 GFM and will not be available to portrayal or through the pick report. | Recommend this is provided as an attribute. | Needs a proposal. **To be discussed.**  **S-101PT: NFA at this time. Proposal required.** |
|  | NIWC | 4.4 | 3rd para, last sentence | te |  | Recommend ECDIS support for multiple geometries is tested in S-164. | No action here for this document? **Needs to be discussed by the S-164 Sub-Group.**  **S-101PT: NFA for S-101. To be discussed by the S-164 Sub-Group.** |
|  | NIWC | 4.4 | 4th para, 1st sentence | te | Requirement can’t be applied to features associated with MultiPoint geometries (Sounding and DepthNoBottomFound). |  | Do not think this is an issue as sounding groups are simply a method of “compressing” the data and have no relationship to the “real world”. **Suggest no action required.**  **S-101PT: NFA at this time.** |
|  | NIWC | 4.5 – 4.7 |  |  |  | Fundamental changes suggested, including the re-introduction of optimumDisplayScale. Refer to NIWC track-changed version of the document for the full suggested range of changes and associated comments. | **To be discussed.**  **S-101PT: Agreed to apply amendments as proposed by the Data Load/Unload and ENC Scales Sub-Group for Edition 1.1.0. Re-introduction of optimumDisplayScale rejected. Full testing required.** |
|  | GB | 4.5 to 4.7 |  |  | Please see attached .ppt (this is still a work in progress and not been peer reviewed) I think it uses a more familiar (port approach) when considering complexities of 4.5 to 4.7 in the PS.  Clauses 4.5-4.7 are very hard to visualise and interpret, so I hope more diagrams, like those in the .ppt may be considered.  The scope of this document should also include its use as an aid to training, and its relationship to S-57 (particularly compilation scale) should not be removed, as this is a starting point in the understanding of conversion to DataCoverage.  I can’t see a problem with including a .ppt as an index when describing complex scenarios. | Consider a .ppt to demonstrate 4.5 – 4.7 to PT9 and as an eventual annex in PS 1.1 | Refer to associated GB .ppt presentation. **To be discussed.**  **S-101PT: Agreed to apply amendments as proposed by the Data Load/Unload and ENC Scales Sub-Group for Edition 1.1.0. Re-introduction of optimumDisplayScale rejected. Full testing required.** |
|  | NIWC | 4.5.2 | 2nd para | te |  | Suggests removing this paragraph. | Justification? Is there any harm in keeping this? **To be discussed.**  **S-101PT: NFA at this time. Proposal required.** |
|  | FR | 4.5.2 | Last para | te |  | Further tests required to try and solve this issue in S-101. | **S-101PT: NFA at this time. Full testing required.** |
|  | NIWC | 4.5.3 | 1st bullet | te |  | Suggests removing this bullet. | Justification? Is there any harm in keeping this? **To be discussed.**  **S-101PT: NFA at this time. Proposal required.** |
|  | GB | 4.5.3 | Data Coverage Rules | te | Third Bullet point   * **Data Coverage** features from different datasets may overlap if they have differing maximum display scales.   Fourth Bullet point   * Datasets may overlap, however there must be no overlapping **Data Coverage** features of the same **maximum display scale**   Bullet points 3 and 4 are describing the same scenario.  Fig 4.7 demonstrates that it’s not only the MaxDS that shouldn’t overlap, but the Display Scale Ranges should not overlap, with no gaps or overlaps between. | Amend Third Bullet point   * **Data Coverage** features from different datasets covering the same geographical area, must have non overlapping, continuous Display Scale Ranges (see fig 4.7)   Exception: In areas of agreed National Data Limits, where, if it is difficult to achieve a perfect join, an overlapping buffer zone of up to 5 metres may be used. For this situation. There must be no gaps in data between the adjoining datasets.  Delete Fourth Bullet Point  Amend diagram 4.7 to show the largest scale at the bottom, in agreement Table 3-1 – ENC Minimum Display and Maximum Display Scales.  Dataset 1&2 MinDS 44,999  Dataset 3 MinDS 179,999  Dataset 4 MinDS 699,999  Otherwise, they overlap with corresponding MaxDS. | Changes **applied** in general as suggested. **To be discussed.**  **S-101PT: Changes tentatively approved. TBD further with Sub-Group lead (S-100WG7).**  **S-101PT: Figure to be updated (Sub-Group Lead).** |
|  | NIWC | 4.5.3 | 3rd bullet | te | Datasets will always be loaded/displayed in their entirety. A dataset primarily at 1:45,000 with a channel at 1:12,000 should not obscure, be obscured, or be drawn “side-by-side” with a dataset at 1:22,000. |  | To be discussed in association with the above GB comment.  **S-101PT: Changes tentatively approved. TBD further with Sub-Group lead (S-100WG7).** |
|  | NIWC | 4.5.3 | Figure 4-7 | te | Add optimum display scale. |  | **To be discussed.**  **S-101PT: Re-introduction of optimumDisplayScale rejected. Full testing required.** |
|  | NIWC | 4.5.3 | 4th bullet | te | Reflects the fact that the dataset must be shown in its entirety.  [optimumDisplayScale] Indicates the best scale within the dataset, particularly for auto-scaling in route monitoring. | * When a dataset has multiple **Data Coverage** features:   1. The **minimum display scale**s must all be the same;   2. The **maximum display scale**s must all be the same; and   3. The **optimum display scale**s may be different. | This is predicated on the re-introduction of optimumDisplayScale. **To be discussed.**  **S-101PT: Re-introduction of optimumDisplayScale rejected. Full testing required.** |
|  | NIWC | 4.5.3 | 5th bullet | te |  | Regardless of the outcome of optimumDisplayScale discussions, think there still should be s statement as to what the maximum display scale for the dataset should be. | **To be discussed.**  **S-101PT: NFA at this time. Proposal required.** |
|  | NIWC | 4.5.3 | Figure 4-8 | te |  | * NIWC: Add optimum display scale (1:12k, 1:12k, and 1:22k) * Remove dataset scale attributes * All data coverage min/max scales should match (1:8k and 1:45k) | **To be discussed.**  **S-101PT: Re-introduction of optimumDisplayScale rejected. Full testing required.** |
|  | NIWC | 4.5.4 |  | te | These two requirements beg the question of why? It should be explained here. “In order to meet/minimize/limit/etc. …”  Note that the exchange set can contain an arbitrary number of datasets / catalogues / support files, and it’s the exchange set size which determines the burden placed on the transfer mechanism.  If the goal is to limit the transfer size, then the size of the exchange set should be limited. |  | Tend to agree. Proposal required. **To be discussed.**  **S-101PT: NFA at this time. Proposal required.** |
|  | DE | 4.6 |  | ed | Examples would be helpful to understand this part of the document better. | Add proposed additional figure/table:  Alternative\_Figures\_DEproposal.docx (follows this Table) | Have added an edited version of the Table as a placeholder. **To be discussed**.  **S-101PT: Change tentatively approved. TBD further with Sub-Group lead (S-100WG7).** |
|  | GB | 4.6 | Display Scale Range |  | **The first paragraph** should be moved to Data Coverage Rules, because the Display Scale Range is fundamental to the Data Coverage Rules. | Move to 4.5.3 after bullet point in italics   * *The data boundary of the base dataset is defined by the extent of the* ***Data Coverage*** *features and must be contained within the bounding box.* * A scale range of a dataset is used to indicate a range of scales between which a producer considers the data is intended for use. (See clause 4.7 for how datasets are to be loaded and unloaded within a navigation system.) The smallest scale is defined by the **minimum display scale** and the largest scale by the **maximum display scale**. These scales must be set at one of the scales specified in clause 3 (spatial resolutions). | Perhaps clause 4.6 should be a sub clause of 4.5? Then perhaps there could be some re-shuffling to better order the specification. **To be discussed.**  **S-101PT: Reference to clause 4.6 added to 3rd bullet. TBD further with Sub-Group lead (S-100WG7).** |
|  | NIWC | 4.6 | 1st para | te |  | Added optimum display scale. | To be considered as part of optimumDisplayScale discussion. **Not yet applied.**  **S-101PT: Re-introduction of optimumDisplayScale rejected. Full testing required.** |
|  | NIWC | 4.6 | 1st para | te |  | Suggests replacing “clause 3 (spatial resolutions.” At end of paragraph with:  Table 3-1, and their relationship to one another must be:  maximum display scale <= optimum display scale <= minimum display scale; where **maximum display scale** <> **minimum display scale** | All these comments related to clause 4.6 need to be considered holistically as part of deliberations, including in this case the reference to optimumDisplayScale. **Not yet applied.**  **S-101PT: Re-introduction of optimumDisplayScale rejected. Full testing required.** |
|  | AU | 4.6 | 2nd paragraph | te | Loading/Unloading behaviour when zooming out not supported.  When gaps between **minimum display scale** and **maximum display scale** exist between overlapping datasets, the preference should be to retain the larger scale dataset for longer instead of over scale the smaller scale dataset to ‘fill the screen’. | ***Amend from:***  When the mariner’s selected viewing scale (MSVS) is smaller than the value indicated by **minimum display scale**, features within the **Data Coverage** feature are not displayed, except where the SENC does not contain a dataset covering the area at a smaller scale, in which case the dataset will be displayed as long as the MSVS is larger than twice the **minimum display scale**.  ***To***  When the mariner’s selected viewing scale (MSVS) is smaller than the value indicated by **minimum display scale**, features within the **Data Coverage** feature must be displayed until a smaller scale overlapping **Data Coverage** can be loaded without triggering the over scale pattern/Indication (MSVS =< 2 x **maximum display scale**). Where the SENC does not contain a dataset covering the area at a smaller scale, the dataset will continue to display in order to ‘fill’ the ECDIS window.  The use of **scale** **minimum** attribute values on features is critical to facilitate clarity and readability of data, particularly when displayed at scales < **minimum display scale**. | All these comments related to clause 4.6 need to be considered holistically as part of deliberations.  **S-101PT: Change not applied. TBD further with Sub-Group lead (S-100WG7).** |
|  | NIWC | 4.6 | 2nd para | te |  | Reword paragraph as follows:  When the MSVS is larger than the value indicated by **optimum display scale**, the overscale indication, in the form of an overscale factor and pattern covering the area that is overscale, must be shown. When at own ship’s position a **Data Coverage** with a larger **optimum display scale** is available, an indication is required and must be shown on the same screen as the chart display. | All these comments and suggested changes related to clause 4.6 need to be considered holistically as part of deliberations.  **S-101PT: Re-introduction of optimumDisplayScale rejected. Full testing required.** |
|  | NIWC | 4.6 | 2nd para | te | “When the MSVS is larger than twice the value indicated by **maximum display scale**, the overscale indication, in the form of an overscale factor *and pattern covering the area that is overscale,* must be shown.”  Doesn’t match S-52 requirement – the pattern should only be shown on areas used to “fill-in” the display. The pattern should not be shown on areas the mariner intentionally overscales. |  | Is this really the intent in S-52?  **S-101PT: NFA at this time. Full testing required.** |
|  | DE | 4.6 | 2nd paragraph | ed | This part of the document is quite complex and contains lots of similar terms like ‘minimum display scale’ and ‘maximum display scale’ along with ‘small’ and ‘large’, which is already confusing (small scale = big scale number). The paragraph refers to three distinct points without properly setting them apart.  1. part: user zoomed out too much (smaller than min. displ. sc. but not as far as more than twice min. displ. sc.) -> In this case no notification is needed because it is obvious to the user, that the data is not meant to be displayed at this scale (everything is lumped together and way too small). (If the user zooms out more than twice min. displ. sc. nothing will be shown?)  2. part: user zoomed in too much (larger than twice max. displ. sc.) -> In this case a warning is needed because it is not obvious for the user that the data does not contain enough information to be viewed at this scale.  3. part: an index frame to indicate there is data available with more detailed information (comparable to index frames in paper charts) | There are three distinct points mixed together in one paragraph. For a better understanding please separate the paragraph as follows:  1. part: When the mariner’s selected viewing scale (MSVS) is smaller than the value indicated by **minimum display scale**, features within the **Data Coverage** feature are not displayed, except where the SENC does not contain a dataset covering the area at a smaller scale, in which case the dataset will be displayed as long as the MSVS is larger than twice the **minimum display scale**.  2. part: When the MSVS is larger than twice the value indicated by **maximum display scale**, the overscale indication, in the form of an overscale factor and pattern covering the area that is overscale, must be shown.  3. part: When at own ship’s position a dataset with a larger **maximum display scale** than the MSVS is available, an indication is required and must be shown on the same screen as the chart display. | All these comments related to clause 4.6 need to be considered holistically as part of deliberations.  **S-101PT: Change not applied. TBD further with Sub-Group lead (S-100WG7).** |
|  | GB | 4.6 | Display Scale Range |  | **This second large paragraph** needs to be separated, there is too much information for one paragraph.  It is also referring to when data is becomes visible to the mariner (MSVS) and is better placed at 4.7.  When the mariner’s selected viewing scale (MSVS) is smaller than the value indicated by **minimum display scale**, features within the **Data Coverage** feature are not displayed, except where the SENC does not contain a dataset covering the area at a smaller scale, in which case the dataset will be displayed as long as the MSVS is larger than twice the **minimum display scale**. When the MSVS is larger than twice the value indicated by **maximum display scale**, the overscale indication, in the form of an overscale factor and pattern covering the area that is overscale, must be shown. When at own ship’s position a dataset with a larger **maximum display scale** than the MSVS is available, an indication is required and must be shown on the same screen as the chart display. | ***Place at 4.7***  **When the MSVS is smaller than the minDS** features are not displayed (and indicate ‘larger minDS is available’)  Unless the SENC does not contain a dataset at a smaller scale, in which case the dataset will remain displayed (if the MSVS is larger than twice the minDS)  **When the MSVS is larger than twice the maxDS** an Overscale indication should be displayed  If a larger minDS than MSVS (in ships own position) is available an indication ‘larger minDS is available’.  *In ships own position? if vessel is advancing towards a cell that is larger, it will not be shown until the ship is upon it*?  *Suggest* ***in SENC*** *rather than ships own position*  If a larger minDS than MSVS **(in the SENC)** is available an indication ‘larger minDS is available’. | All these comments related to clause 4.6 need to be considered holistically as part of deliberations.  **S-101PT: Change not applied. TBD further with Sub-Group lead (S-100WG7).** |
|  | NIWC | 4.7 | 1st sentence | ed |  | Suggests removing text “based on producer defined dataset display scales (minimum and maximum)” from the 1st sentence of the clause. | **Applied.** **To be discussed.**  **S-101PT: Approved.** |
|  | NIWC | 4.7 |  | te |  | New paragraph added. Best scale dataset(s) should always be loaded for safety checking of the route plan and OS. | **Applied.** **To be discussed.**  **S-101PT: Approved.** |
|  | NIWC | 4.7 |  | te |  | New paragraph added. S-52 ed 6.1.1 clause 3.3.1.2. | **Applied.** **To be discussed.**  **S-101PT: Approved.** |
|  | NIWC | 4.7.1 |  | te |  | Remove or move 4.7.1 to Annex D. New alternate text for this clause proposed – refer to NIWC track-changed version. | **To be discussed.**  **S-101PT: Change not yet applied. TBD further with Sub-Group lead (S-100WG7).** |
|  | DE | 4.7.1 | 1st bullet point | ge | The following scenario is most obvious for areas where data sets with identical max ds may overlap (adjoining national data limits), but it also applies to all scenarios of data set overlap. The described method of creating a display order will prioritize data with a smaller min ds in the display order (covering data with larger min ds, because it is drawn later). Is that intended? Should not data with potentially more information/details (larger min ds) be displayed when possible (drawn later and therefore covering data with smaller min ds)? |  | **To be discussed.**  **S-101PT: NFA at this time. Full testing required.** |
|  | DE | 4.7.1 | 3rd bullet point | ge | How does this list (LIST\_DC\_S) account for MSVS that are outside of the originally intended display scale of a data coverage feature? In some cases those will need to be displayed for lack of other (more appropriate) data.  Is there a second list, that contains all entries from LIST\_DC minus the ones that formed LIST\_DC\_S, that match the conditions (for scale numbers) “MSVS < max ds <= 2\*MSVS” and “MSVS < min ds <= 2\*MSVS” for filling gaps in the display where no MSVS appropriate data sets are available? |  | **To be discussed.**  **S-101PT: Change not yet applied. TBD further with Sub-Group lead (S-100WG7).** |
|  | 7Cs | 4.7.1 | 3rd bullet | te | maximum display scale > MSVS < minimum display scale | maximum display scale > MSVS > minimum display scale | **Applied.** To be confirmed.  **S-101PT: Approved** |
|  | DE | 4.7.1 | 3rd bullet point | te | If referring to the scale itself then it should be: max ds > MSVS > min ds. If it refers to the scale number, then it should be: max ds < MSVS < min ds. To avoid confusion maybe the wording could be amended to clarify which numbers are referred to. | Either “max ds > MSVS > min ds” or “max ds < MSVS < min ds” +  Clarification which numbers are referred to (scale or scale number) | See above. Agree that this needs to be better clarified.  **S-101PT: Change not applied. TBD further with Sub-Group lead (S-100WG7).** |
|  | NIWC | 4.7.2 | Entire | te |  | Significant changes suggested. | Needs to be considered holistically as part of deliberations. **No changes applied as yet.**  **S-101PT: Agreed to apply amendments as proposed by the Data Load/Unload and ENC Scales Sub-Group for Edition 1.1.0. Re-introduction of optimumDisplayScale rejected. Full testing required.** |
|  | DE | 4.7.2 | 1st bullet point | ed | If MSVS is considered for dataset display order the text should be changed as proposed. | LIST\_DC -> LIST\_DC\_S | Tend to agree, however **to be confirmed**.  **S-101PT: Approved** |
|  | IHO Sec | 4.7.2 | Figure 4-9 | ed | Clause 4.5.3 states that where a dataset has multiple DataCoverage features the minimumDisplayScale in each DataCoverage must be the same (assuming the Figure is associated with the bullet immediately preceding?). | Amend minimumDisplayScale values for each data coverage at the top of the Figure to the same value (350000). | I find this Figure to be confusing. There needs to be a better relationship established between the Figures and the associated text in the clause (references to Figure numbers in the text); then the Figures rationalised. **To be discussed.**  **S-101PT: NFA at this time.** |
|  | 7Cs | 4.7.2 | Figure 4-9 | te | Condition: maximumDisplayScale <= MSVS <= minimumDisplayScale | In clause 4.6: Twice maxDS, twice min.DS | Agree. **To be discussed.**  **-101PT: Change not yet applied. TBD further with Sub-Group lead (S-100WG7).** |
|  | 7Cs | 4.7.2 | Figure 4-9 | ed | Minimum displayScale | minimumDisplayScale | Agree: **To be applied.**  **S-101PT: Change not yet applied. TBD further with Sub-Group lead (S-100WG7).** |
|  | DE | 4.7.2 | Fig. 4-9 | ed | The original Fig. 4-9 is very confusing as it does not match the methods described in 4.7.1 and 4.7.2 (maybe due to the above mentioned issues). | Replace Fig. 4-9 with proposed alternative figure/table:  Alternative\_Figures\_DEproposal.docx (follows this Table) | See proposed replacement Figure (table) below. **To be discussed. S-101PT: Change not yet applied. TBD further with Sub-Group lead (S-100WG7).** |
|  | 7Cs | 4.7.2 | Figure 4-10 | ed |  | - Why X, Y, Z and 1, 2, 3?  - Use always same size for numbers | Consider all Figures in this clause need review so as to establish a better relationship. **To be discussed.**  **S-101PT: Change not yet applied. TBD further with Sub-Group lead (S-100WG7).** |
|  | LR | 5 | ? | te | In S-57 there were both a sounding datum and a vertical datum. When reading clause 5 it only refers to Vertical CRS for Soundings. Why is there no reference to Vertical CRS for Heights? Why does not S-101 dataset imply the encoding to the Vertical CRS for heights? It would be logical to have them both in one place. We know we have this value in meta data .xml file, however, it will be logical to have description of all CRS in one place.  Below you can see how we imagine the encoding: | Add a clause 5.4 Vertical Datum for heights.  Describe the encoding of CRSH, CSAX and VDAT fields with corresponding sub-fields:  CRSH-CRST =5: Vertical CRSH-CSTY =3: Vertical  CSAX-AXTY =11: Gravity Related Height  VDAT-DTNM and DTID values of the corresponding default datum  They must define a default vertical datum of the dataset which should correspond to a value of  S100\_DatasetDiscoveryMetadata/verticalDatum  And be applied to “altitude of spot heights, height contours, landmarks” | Tend to agree. There should be something in here about encoding vertical datum. **To be discussed.**  **S-101PT: No change required. The only features in S-101 that have a vertical CRS are soundings and DepthNoBottomFound. All other vertical datums are defined by attribution. Applies to all below comments for which it was decided NFA.** |
|  | 7Cs | 5.2 | First line | ed | EPSG: 4326 | EPSG:4326 | **Applied.** |
|  | NIWC | 5.3 | Entire | te |  | This should probably be a sub-section under a more general section applying to all vertical CRS’s (soundings and heights). | **To be discussed** in relation to the above comment from Lloyds Register.  **S-101PT: No change required.** |
|  | NIWC | 5.3 | Para 1, 1st sentence | te | This requirement should apply to all vertical CRS, but is in a section specific to soundings. |  | **Agree.** This tends to support the above comment that there should be a holistic clause addressing all CRS (sounding and vertical). **To be discussed.**  **S-101PT: No change required.** |
|  | NIWC | 5.3 | Para 1, 2nd sentence | te | Technically, this depends on the value of AXTY in the CSAX component. There should be a requirement that AXTY corresponding to Vertical CRS’s for soundings must be 12 (gravity related depth – positive down), while AXTY corresponding to Vertical CRS’s not for soundings must be 11 (gravity related height – positive up). |  | **Agree.** However no suggested change included. **To be discussed.** [Note additional NIWC comments for Tables 5-1 and 5-2.]  **S-101PT: No change required.** |
|  | DE | 5.3 |  | ge |  | Add reference to where the general encoding of CRS is presented. -> B-5.1.9 - B-5.1.12 | **Agree.** Draft changes included for discussion.  **S-101PT: Approved** |
|  | 7Cs | 5.3 | Table 5-1  First row CSID | ed | Record Name (15 = Coordinate Reference System Identifier) | Record Name (15 = Coordinate Reference System Identifier)  (remove space) | **Applied.** |
|  | NIWC | 5.3 | Table 5-1  Row AXTY |  | This is ok for soundings, but heights should use 11. |  | **Agree.** To be discussed with previous NIWC comment.  **S-101PT: 7Cs (Holger) to check.** |
|  | NIWC | 5.3 | Table 5-2  Row AXTY |  | This is ok for soundings, but heights should use 11. |  | **Agree.** To be discussed with previous NIWC comment.  **S-101PT: 7Cs (Holger) to check. Tom R to provide diagram?** |
|  | 7Cs | 7 | Second line | ed | S-101 Feature Catalogue. This Guide is | S-101 Feature Catalogue. This Guide is  (remove space) | **Applied.** |
|  | DE | 8.5 |  | ge | Has a decision been made of how many different versions will be supported at once? |  | Not sure about this one. Is there something about this in S-98?  **S-101PT: Replace existing text with reference to S-98.** |
|  | NIWC | 8.5 | Entire | te | Does this information add value? | Recommend delete. If retained, it could use more detail – new versions of the FC and/or PC may be released independent of changes to the PS – for example, in the case of corrections. | **To be discussed.**  **S-101PT: Replace existing text with reference to S-98.** |
|  | 7Cs | 9.1 | Second to last paragraph | ed | defined in S-100. This model reflects | defined in S-100. This model reflects  (remove space) | **Applied.** |
|  | 7Cs | 9.1 | Second to last paragraph | ed | marine navigation systems. The Portrayal Catalogue | marine navigation systems. The Portrayal Catalogue  (remove space) | **Applied.** |
|  | NIWC | 9.2 | Portrayal Catalogue structure | te | This is out of date wrt S-100, and we just said it’s defined in S-100. | Delete. | **Agree.** Have amended the clause to include more specific references in S-100 Part 9 – for consideration.  **S-101PT: Approved.** |
|  | LR | 10.1.2  And B-5.1.2 | 1st paragraph | te | The values of the DSSI-CMFZ sub-field in prod Spec and in DCEG the clauses 11.3.1 and 11.8.1 must match. Now Spec indicates value {10} but the latest version DCEG uses value 100 | Set identical value for both documents. | Refer Paper S-101PT8-22 and Action S-101PT8/33. DCEG value amended to {10}. |
|  | RM | 11.1 | Figure 11-1 | te |  | Add a sentence about what it means **in the context of S-101**.  Refer to it and/or at least some of its components in clause 11.2, again in the context of S-101. | **S-101PT: Remove Figure 11-1 and add reference to S-100 Part 17.** |
|  | PRIMAR | 11.2  11.2.1 | 2nd sentence |  | “Each Exchange Set consists of one or more ENC datasets with an associated XML metadata file…”  Does this mean that an associated XML metadata file must be created for all dataset files? | If yes – It should be added to 11.2.1 as a mandatory element for clarification.  One could argue that it is already covered by 11.2.1 bullet 1: “ENC datasets – ISO/IEC 8211 encoding of features/attributes and **their associated** geometry and **metadata**”.  However, a clarification of the associated XML metadata file as mandatory would be helpful.  If no – change sentence to: Each Exchange Set consists of one or more ENC datasets, optionally with an associated XML metadata file,…” | **To be discussed.**  **S-101PT: Amended to state that the associated XML metadata file is optional. Additional changes agreed (Primar, IC-ENC, IHO Sec) at S-100WG7.** |
|  | PRIMAR | 11.2 |  |  | Following up from the comment above related to the associated XML Metadata file:  Should this file have a defined naming convention? | If yes – refer to S-100 5.0.0 Part 10c-12 for HDF5 encoding where the naming convention for associated Metadata files are:  MD\_<data file base name>.XML | **To be discussed.**  **S-101PT: Amended to state that the associated XML metadata file is optional. Additional changes agreed (Primar, IC-ENC, IHO Sec) at S-100WG7. See new clause 11.5.** |
|  | NIWC | 11.2 | Other Delivery Information – 1st para | te |  | Delete – delivery of files on physical media is not required. | Does this specifically infer physical media? Am not sure. **To be discussed.**  **S-101PT: See below.** |
|  | IC-ENC | 11.2, 11.2.1, 11.2.2 | Last 7 para’s and entire sub-clauses | te |  | Propose simplify by referring to S-100 Part 17 directly and not repeating these rules here. | **S-101PT: Refer to S-100 Part 17. Update the section. Applied.** |
|  | 7Cs | 11.3.1 | 4th bullet | ed | deleted from the system. The encoding structure | deleted from the system. The encoding structure  (remove space) | **Applied.** |
|  | LR | 11.3.1 | Add paragraph | te | The information about name and geographic area consistency base dataset and its updates are missing. The S-57 prod Spec contains the following sentence: “*Update cell files have the same name as the original base cell file, with an extension number greater than or equal to 001.* *They cover the same geographical area as the base cell file to which they apply”.* Will S-101 exchange set support update dataset with different names? Can they extend Data Coverage area of Base cell? | Add the following sentences to the end of clause:  *Update dataset files have the same name as the Base dataset file, with an extension number greater than or equal to 001.* *They are covered by the geographical area of the Base dataset to which they apply.* | Original comment was to insert this new guidance at clause 11.3.2. Have chosen to add here to be consistent with guidance for New Edition above. **To be discussed.**  **S-101PT: Approved, however clarification to be added for the extension. This will be enough for Edition 1.1.0.** |
|  | AU | 11.3.2; 11.4.1 |  | te | The use of 4 characters (CCCC) to express the country code of a producer country, when it is currently defined in S-62 as a two-character combination, does not make a lot of sense.  It is true that ISO has a three-letter code to uniquely identify countries (and many members use it to number their paper products) but the IHO did never recommend their use in the charting specs. | Consider interpreting S-100 guidance on the use of a country code (characters YYYY in S-100) as any number of characters as registered in the IHO Registry. Therefore, as the IHO Registry has 2-letter country/private organisations codes, S-101 datasets would have 2 characters allocated for this purpose, not four (CC instead of CCCC).  For example:  **101AU\_P\_SYD01** instead of  *101AU00\_P\_SYD01*  Another (controversial we think) option is to establish, from scratch, a new dedicated list of country codes for S-100 products and allow countries and organisations to register a code using 2-4 characters. Once created, any S-100 related file name, etc. that requires a country code populated, must use one from that list and there should not be any additional requirement to encode ‘extra’ zeros to get to 4 characters. | It has been determined that the list of 2-character codes that can be assigned will not satisfy future requirements. **Suggest retain as is.**  **S-101PT: No change required for Editi9on 1.1.0.** |
|  | IHO Sec | 11.3.2 | 2nd bullet | te | Needs to be discussed (S-100WG) as what is described here may not necessarily be the way that this should work. May need to be a look-up table generated from the GI Registry? |  | **To be discussed.**  **S-101PT: Amended “must” to “may”. Needs to be discussed by S-100WG.** |
|  | 7Cs | 11.3.2 | 3rd bullet | ed | unique file name. The following characters | unique file name. The following characters  (remove space) | **Applied.** |
|  | PRIMAR | 11.3.2 |  |  | Dataset file naming is expressed with numbers and upper case letters:  101CCCCØØØØØØØØØØ.EEE  Does this mean that only upper case letters are allowed in the dataset filename? | If yes – add following sentence to 3rd bullet: Characters must be upper case.  If no: - add following sentence to 3rd bullet: Characters may be lower or upper case. | Have chosen to go with upper case only, and have simply added some bracketed text to resolve this comment. **To be confirmed.**  **S-101PT: Approved.** |
|  | LR | 11.3.2 | 3rd bullet | te | If the use of characters eight through seventeen is optional, does this mean that these characters may not exist at all? For example: Is the dataset name 101GB00.000 valid? | Add clarification about name length. How many characters must a name have? | This was originally the intention behind the phrase “to the maximum”. However, is this is not clear enough have added an additional sentence for consideration. **To be discussed.**  **S-101PT: Approved.** |
|  | PRIMAR | 11.3.3 | Update comment |  | 11.3.3 describes a number of parameters encoded in the data and how they are used.  The parameter “Update comment” indicates the possibility to encode a description of the change introduced by the update.  Where is the Update comment encoded? | Propose to remove if Update comment cannot be encoded.  Would also assume that the Update Information feature and specifically the update description attribute would cover such information. | **To be discussed.**  **S-101PT: Agreed to remove.**  **Additional action: Review the need for Update Number in the ISO 8211 encoding (for Edition 1.2.0?).** |
|  | DE | 11.3.3 | 7th paragraph | ed |  | message = method? | The word “message” is not used anywhere in the document. Have therefore applied this change. **To be confirmed.**  **S-101PT: Approved.** |
|  | AU | 11.4 |  | Ed | Unnecessary use of brackets. | Remove brackets from last sentence of the first bullet point:  (Extensible mark-up language (XML) supports UTF-8 character encoding.) | **Applied.** However not sure why the brackets were included in the first place. **To be confirmed.**  **S-101PT: Approved.** |
|  | 7Cs | 11.4 | 1st bullet |  | UTF-8 character encoding.) (TXT), (XML), **(HTM)**. | UTF-8 character encoding.) **(TXT)**, **(XML)**, **(HTM)**.  (remove space) | **Applied.** |
|  | 7Cs | 11.4 | 2nd bullet | ed | TIFF (6.0 specification) (TIFF). | TIFF (6.0 specification) **(TIFF)**.  (remove space) | **Applied.** |
|  | IHO Sec | 11.4.1 | 2nd bullet | te | Needs to be discussed (S-100WG) as what is described here may not necessarily be the way that this should work. May need to be a look-up table generated from the GI Registry? |  | **To be discussed.**  **S-101PT: Amended “must” to “may”. Needs to be discussed by S-100WG.** |
|  | PRIMAR | 11.4.1 |  |  | Support file naming is expressed with numbers and upper case letters:  101CCCCØØØØØØØØØØ.EEE  Does this mean that only upper case letters are allowed in the support filename? | If yes – add following sentence to 3rd bullet: Characters must be upper case.  If no: - add following sentence to 3rd bullet: Characters may be lower or upper case. | Have chosen to go with upper case only, and have simply added some bracketed text to resolve this comment. **To be confirmed.**  **S-101PT: Approved.** |
|  | 7Cs | 11.4.2 |  | ed | Figure 11-2, 11-3, 11-4, 11-5 | Keep always introductory text and figure together | **Applied.** |
|  | LR | 11.4.2 | 2nd paragraph | te | The mechanism of replacement of a support file is not clear. What should be included in updating Exchange set if a support file is just replaced?  We should include new support file and Exchange Catalogue with discovery metadata for the support file.  However, no dataset update has been created since features that refer to the support file were not changed. It contains a file named according to DCEG but not MRN. We just replaced the support file while its name was not changed. Consequently, there is no update dataset in the Exchange set. This contradicts the 11.2.1 clause.  Should we reflect changes of support file substance by updating features in dataset? If so, we probably, need to create fake update records of attributes changes that refer to the support file. Or we need to add Update information meta feature linked with features that refer to support file. | Add a clarification about how to create Update dataset to reflect replacement of the support file. | This needs a fully worked scenario that describes the requirement. **To be discussed.**  **S-101PT: No change for Edition 1.1.0. Lloyd’s Register to submit proposal to TSM (March 2023) for consideration for Edition 1.2.0.** |
|  | NIWC | 12.1 | Fig. 12-3 | te |  | Recommend delete and reference S-100 5.0 Figure 17-7. Note S-101 specifics in the UML tables below. | Even though it will require additional maintenance and alignment, consider that it is better to have all this information in the PS as it is important and will save readers from having to go and interpret another Figure in another document and then work out the different multiplicities from the Tables below. **To be discussed.**  **S-101PT: Agreed to remove for Edition 1.1.0.** |
|  | DE | 12.1 | Fig. 12-3 | ed |  | Replace Fig. 12-3 proposed alternative figure/table (follows this Table) | **To be discussed.**  **S-101PT: Agreed to remove for Edition 1.1.0.** |
|  | NIWC | 12.2 | Last para | te | It’s hard to see how these tables differ from those provided in S-100 without doing a side-by-side comparison. | Recommend the UML tables either:   * Highlight the changes from S-100 using a different background color, italic text, or some other method * Only show entries that are different then S-100 | Have included a statement that the restricted multiplicities are noted in the Remarks column of the tables. **To be discussed.**  **S-101PT: Not for Edition 1.1.0. Perhaps for Edition 1.2.0 if still considered useful.** |
|  | NIWC | 12.1.1 | 1st sentence | te | The file is XML, the structure is defined in XML Schema Definition Language. Don’t think either is worth mentioning here. | Recommend remove. | **Applied. To be confirmed.**  **S-101PT: Approved.** |
|  | 7Cs | 12.1.1 | 1st paragraph | ed | XML Schema language. The Exchange Catalogue | XML Schema language. The Exchange Catalogue  (remove space) | **Applied.** |
|  | DE | 12.1.1 | Table rows 2,3 and 5 | ed | in accordance with other tables on later pages + on basis of Fig. 12-3 | Add “0..1 multiplicity in S-100 restricted to 1 in S-101” in column “Remarks” | **Applied.** |
|  | 7Cs | 12.1.1 | Table, row 3 | ed | S100\_CataloguePointofContact | S100\_CataloguePointOfContact | **Applied.** |
|  | DE | 12.1.1.2 | Row 3 | ed |  | Description:  edition number = phone number | **Applied.** |
|  | LR | 12.1.1.2 | Attr. Phone | ed | Looks like there is a misprint in Description of cell. | Replace: “The edition number of this Exchange Catalogue”  With:” The phone number of the organization” | **Applied.** |
|  | 7Cs | 12.1.2 | Table, row 3 | ed | two named locations etc | two named locations etc. (add '.' after etc) | **Not applied**. IHO convention is to not include a period at the end of an abbreviation. |
|  | 7Cs | 12.1.2 | Table, row 10 |  | False Indicates the resource is not copyrighted | False indicates the resource is not copyrighted  (lower case 'i') | **Applied.** |
|  | DE | 12.1.2 | Rows “classification” + “purpose” | ed | in accordance with other tables on other pages + on basis of Fig. 12-3 | Add “0..1 multiplicity in S-100 restricted to 1 in S-101” in column “Remarks” | **Applied.** |
|  | AU | 12.1.2 | Table, row 13 | ge | The use of the metadata attribute **notForNavigation** is somehow controversial.   * If we are to accept TRUE values, then this should interact with the navigation systems and trigger a pop up message when loading the dataset and an indication on the screen when the product is displayed.   Message example  *Product 101AU\_SYDNEY\_ has been identified as ‘NOT FOR NAVIGATION” by the data producer and therefore it can only be used for other purposes (i.e training, planning*).   * If we are not going to accept TRUE values then the question is – what’s the point of having this attribute in the first place?? | Consider different use cases and discuss the possibility of issuing Warnings when loading and using the dataset in an ECS/ECDIS. | I struggle to reconcile notForNavigation with the PS name Electronic Navigational Chart Product Specification. **To be discussed.**  **S-101PT: No change required. Some ENC datasets such as the ECDIS Chart 1 will be not for navigation.** |
|  | AU | 12.1.2; 12.1.2.2 |  | te | A dataset can have more than one DataCoverage feature.  In the **S100\_DatasetDiscoveryMetadata** section (12.1.2) there’s an entry for the attribute **dataCoverage**, which is mandatory to populate and it has been restricted to only one instance. Does this mean that only one **S100\_DataCoverage** metadata entry can be completed? What happens with the other **dataCoverage** features the dataset may have encoded?  What’s the practical use (if any) of this metadata in S-101??? | Review multiplicity of **dataCoverage.**  Explain practical use of DataCoverage metadata in general. | Change was incorrectly applied. **Has been reverted back to 1..\*.** |
|  | TC | 12.1.2 S100\_DatasetDiscoveryMetadata | dataCoverage | te | The multiplicity in this table was changed to 1 from 1..\*. The UML diagram Figure 12-3 still shows this as 1..\*. Also there does not appear to be guidance on this restriction.  Section 4.5.2 states that “The discovery metadata of a dataset must list all the **Data Coverage** features contained within that dataset and their assigned scale attributions.”  Perhaps this change was made as per feedback from NIWC that disjoint coverages or coverages with different scale should be separate ENCs to facilitate loading and unloading, if this is the intention then the other parts of the spec and encoding guidance would need to describe what is intended. What about if different DataCoverage features are needed due to different ‘information’ or file references. | Improve clarity and consistency by either reverting to 1..\* or update the descriptions and guidance for DataCoverages to support this. | Change was incorrectly applied. **Has been reverted back to 1..\*.** |
|  | DE | 12.1.2 | Row “replacedData” | ed | In accordance with other table entries of type boolean | Add “*True* indicates that data is replaced.  *False* indicates that data is not replaced.” in column “Remarks” | **Applied.** |
|  | AU | 12.1.2.2 | “optimumDisplayScale” | te | Is the use of **optimumDisplayScale** necessary? We thought it was discontinued. Is it expected to be used somehow by ECDIS??? | Review the need for **optimumDisplayScale.**  We only found references (2) to this term in DCEG 1.0.2 when it talks of **spanOpen** and **spanClosed** (not sure it should be referenced at all though). | ENC Scales and dataset load/unload Sub-Group discussions: Retain as optional for testing purposes in Edition 1.1.0. **To be discussed.**  **S-101PT: Agreed to retain as optional for Edition 1.1.0 to enable testing.** |
|  | NIWC | 12.1.2.2 | “optimumDisplayScale” | te | Example should use a valid scale.  Should restrict the value domain of optimumDisplayScale to match min/max display scale. |  | **Applied.** |
|  | DE | 12.1.2.2 | Row “optimumDisplayScale” | ed | in accordance with other tables on other pages + on basis of Fig. 12-3 | Add “0..1 multiplicity in S-100 restricted to 1 in S-101” in column “Remarks” | Has bee reverted to optional (0..1). **NFA at this time.** |
|  | TC | 12.1.2.2 S100\_DataCoverage | optimumDisplayScale | te | If it is decided that more than one dataCoverage may exist in a dataset then it could be possible to assign a different optimumDisplayScale to each one unless this is restrained in some way. | Restrict one dataCoverage per dataset or move optimumDisplayScale up a level to be a property of S100\_DatasetDiscoveryMetadata with a multiplicity of 1. | Will be addressed as part of the optimumDisplayScale discussions within the Scales and DatasetLoad/Unload Sub-Group. **NFA at this time.**  **S-101PT: Agreed NFA for Edition 1.1.0.** |
|  | NIWC | 12.1.2.2 | minimumDisplayScale | te | Disagrees with table 1-3 where 1,000 is included. |  | **Agree.** Suggest that Table 1-3 is amended to have 1000 prohibited as a value for minimumDisplayScale (do not think it is appropriate to have a datatset that has both scales set to 1000?). **To be discussed.**  **S-101PT: Table 1-3 amended.** |
|  | NIWC | 2.1.2.5 | verticalAndSoundingDatum | te | This is not used by the 8211 encoding and is unreferenced. See S-100 5.0 10a-5.2.2.6:  A screenshot of a cell phone  Description automatically generated |  | **To be discussed.**  **S-101PT: To be removed for Edition 1.2.0 (ref S-100WG decision).** |
|  | DE | 12.1.2.7 | Rows 2,3 and 4 | ed | in accordance with other tables on other pages + on basis of Fig. 12-3 | Add “0..1 multiplicity in S-100 restricted to 1 in S-101” in column “Remarks” | **Applied.** |
|  | 7Cs | 12.1.2.7 | Table, row 4 |  |  | What will be the version date of the ENC Product Spec 1.1.0? Could be added here. | 1.1.0 is included in the Remarks column. **Consider NFA.** |
|  | 7Cs | 12.1.2.7 | Table, row 6 | ed |  | If always '2', why not enter it here as default value? | This is still under discussion in the GI Registry development team and will likely need to be confirmed within the S-100WG (for example, does a New Edition of a PS get a new unique ID?). **To be discussed.**  **S-101PT: No change for Edition 1.1.0.** |
|  | LR | 12.1.2.7 | New Attribute | te | According to the clause 4.3.1 FC can downloaded from IHO GI register site. The we need to know the version. Each FC has own version number, for example <S100FC:versionNumber>1.0.2</S100FC:versionNumber>. For Prod.Spec. S-101 ver.1.0.0 we have had FC versions 1.0.0, 1.0.1 and 1.0.2 .  To avoid conflict during data loading, we have to indicate the applied FC version for each dataset in the S100\_ProductSpecification type. Otherwise, we are forced to include to exchange set a new standard revision(clarification) FC.  We suppose it doesn't make sense to include a new standard FC revision(clarification) to each exchange set. It is enough if a supplier of data indicates which standard version of FC must be applied with delivered dataset. We suggest to add a new attribute featureCatalogueVersion to the S100\_ProductSpecification type. | Add a new row with attribute featureCatalogueVersion, see suggested new attribute at end of Table: | **To be discussed.** A new version of a FC should result in a NE of the PS (perhaps needs to be discussed in regards to very minor corrections?) so consider probably not required.  **S-101PT: No change for Edition 1.1.0.** |
|  | 7Cs | 12.1.2.8 | Heading | ed | S100\_CompiancyCategory | S100\_CompliancyCategory | **Applied.** |
|  | AU | 12.1.2.8 |  | ed | Typo | Amend **from** S100\_CompiancyCategory  **to** S100\_CompliancyCategory | **Applied.** |
|  | DE | 12.1.2.8 |  | ed |  | CompiancyCategory -> CompliancyCategory | **Applied.** |
|  | 7Cs | 12.1.3 | Table, row 3 |  | For example new, replacement, etc | For example new, replacement, etc.  Add '.' after etc. | **Not applied**. IHO convention is to not include a period at the end of an abbreviation. |
|  | 7Cs | 12.1.3.3 |  | ge |  | If the support file specification is S-101, this could be added here as default values. This applies also to other items throughout the document. | **To be discussed.**  **S-101PT: No change for Edition 1.1.0.** |
|  | 7Cs | 12.1.4 | Table, row 2 | ed | See S0-100 Part1, clause 1-4.6 | See S-100 Part1, clause 1-4.6 | **Applied.** |
|  | LR | 12.1.4 | The attribute ‘purpose’ | te | If the attribute ‘purpose’ is equal to ‘cancellation’, what then? Must the Exchange Set include the cancelled FC or PC? If so, it contradicts the first sentence which indicates that S100\_CatalogueDiscoveryMetadata is used for a delivered catalogue within the Exchange Set. Why do we need to deliver a Catalogue if it is cancelled?  Can an Exchange Set only contain a catalog, but no dataset? If so, it contradicts the statement of mandatory elements of exchange set, see 11.2.1 clause.  A clarification of the cancellation process of Feature or Portrayal Catalogue is needed. It should be here or in the next to the last paragraph of the clause 11.3.3. Another option is to remove value "cancellation" from the allowable values for the attribute 'purpose' of the S100\_CatalogueDiscoveryMetadata type. | Add clarification on how to use ‘cancellation’ value. | **To be discussed.**  **S-101PT: This needs to be discussed at the S-100 level. Proposal should be made to the S-100WG.** |
|  | LR | B-1 | Last paragraph | te | According to the spatial model a composite curve can refer to other composite curves. Does it mean that the order of composite curves records must correspond to the statement of the last paragraph of the clause, i.e. child records are before a parent record? | If so, it should be indicated for composite curve records | Not sure what is intended here (one for Holger?). **To be discussed.**  **S-101PT: No change for Edition 1.1.0. Requires input from Holger.** |
|  | NIWC | B-5.1.1 | Encoding specification | te | A() format syntax is not consistently applied and is also wrong in S-100 which now shows up wrong in a product spec. I believe this is the proper syntax for variable character array in 8211. But see table on next page, B-4.1.3, where it is just A vs A() |  | **To be discussed (Holger?).**  **S-101PT: Requires input from Holger.** |
|  | NIWC | B-5.1.3 | Attribute Code | te | Matching of array indicator from S-100 spec (throughout). |  | **To be discussed (Holger?).**  **S-101PT: Requires input from Holger.** |
|  | 7Cs | B-5.1.10 | Table, row 5 | ed | CRS Identifier | CRS Identifier  (remove space) | **Applied.** |
|  | NIWC | B-5.1.11 | Axis Type | te | Need to also allow {11} for vertical datum ({12} only applies to sounding datum) |  | Have added information related to a new entry for {11} to facilitate discussion. **To be discussed.**  **S-101PT: Requires input from Holger.** |
|  | LR | B-5.1.11 | Axis Type | te | See comment above. to fix the B5.1.11 table where the value of Axis Type (AXTY) sub-field can be equal to {11} or {12} for vertical datum or sounding datum correspondingly. | Replace the cell “Value” with: {11} or {12}  Insert to the cell “Comment”: {11} - Gravity Related Height | Have added information related to a new entry for {11} to facilitate discussion. **To be discussed.**  **S-101PT: Requires input from Holger.** |
|  | DE | B-5.1.15 | Row 4 | ed | See B-6.1.11 | Add “b12” in column “Format” |  |
|  | LR | B-5.1.33  (B-6.1.xx) | Mask Indicator | te  ed | The value {1} is defined as “Truncated by the dataset limit” in the Comment cell. We think it will be more correct to consider data coverage limits of the dataset. The current definition could be interpreted as limits of the bounding box of the dataset. The current document does not contain any specification to the rule of encoding Truncated limits of the areas in the clause 4.8.2. Masking.  The clause 2.5.10 of DCEG mention masking of the edges where they share “the geometry of the boundary in each ENC”. We think it would be better to use data coverage boundary/limit.  The value {2}: Fix spelling of supress | Replace: “Truncated by the dataset limit”  With: “Truncated by the data coverage limit”  Remark DCEG the clause 2.5.10 that the truncated indicator should be assigned to a curve shared by the data coverage feature.  IF: It tells that this might be done manually  {2} : Supress 🡪 suppress  (The same fixes must be done in B-6.1.xx) | **Applied.** However am a little concerned that this change opens the door on adjoining data coverage limits within the same dataset. **To be discussed.**  **S-101PT: Requires input from Holger.** |
|  | DE | B-6 |  | ed | See B-5 | Information record -> Information Type record | **Applied.** |
|  | DE | B-6.1.27 | Row 1 | ed | See B-5.1.28 | Composite -> Composite Curve | **Applied.** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute | featureCatalogueVersion | The version of feature Catalogue which should be applied with the dataset | 0-1 | CharacterString | 1.0.2 |

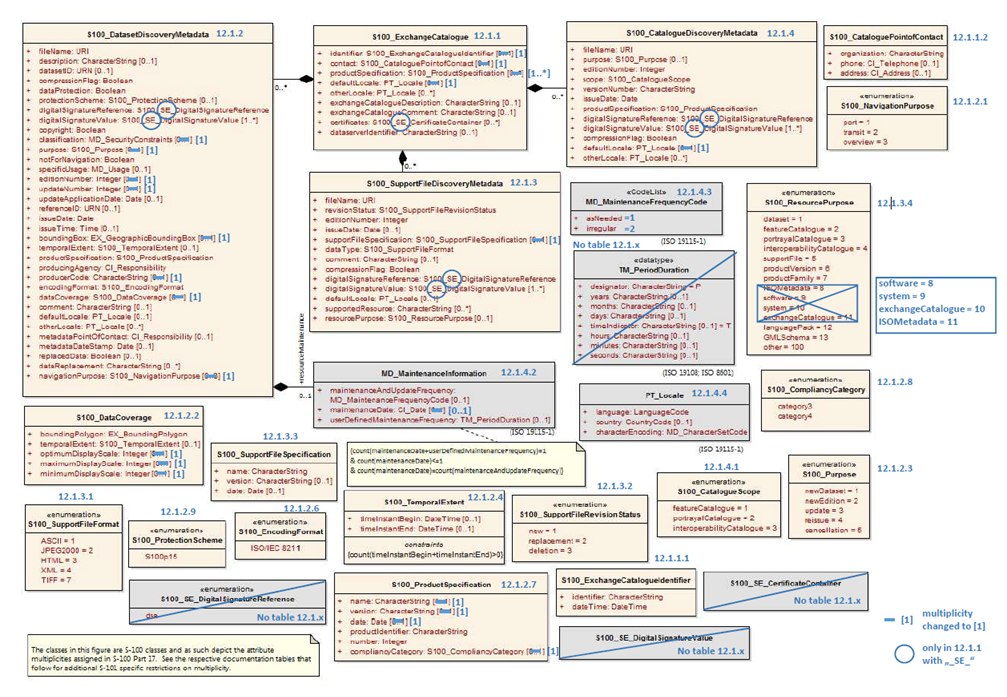
**Suggested new attribute – see LR comment for clause 12.1.2.7.**

|  |  |
| --- | --- |
| **Data Coverage 1 + 2** (see Fig. 4-8)  Min. display scale: 45 000; Max. display scale: 8 000 | |
| ***MSVS*** | ***Display*** |
| Smaller than 90 000, e.g. 100 000 | no |
| 90 000 to 4 000, e.g. 8 000 | yes |
| Larger than 4 000, e.g. 3500 | yes, with overscale indication |
|  | |
| **Data Coverage 3** (see Fig. 4-8)  Min. display scale: 45 000; Max. display scale: 22 000 | |
| ***MSVS*** | ***Display*** |
| Smaller than 90 000, e.g. 100 000 | no |
| 90 000 to 11 000, e.g. 50 000 | yes |
| Larger than 11 000, e.g. 8 000 | yes, with overscale indication |

**Figure to accompany clause 4.6 (DE Comment)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Display order examples** (1 = lowest priority)  Gaps: only data *outside* of max ds – min ds range available  Appropriate: data *within* max ds – min ds range available -> LIST\_DC\_S  System Graphics Window contains all four Data Sets from Fig. 4-7; overscale indication = OSI | | | | |
|  | Data Set 1  Max ds 12 000  Min ds 45 000 | Data Set 2  Max ds 12 000  Min ds 45 000 | Data Set 3  Max ds 45 000  Min ds 180 000 | Data Set 4  Max ds 180 000  Min ds 700 000 |
| MSVS 6 000 |  |  |  |  |
| Gaps: | 1 (+ OSI) | 1 (+ OSI) | - | - |
| Appropriate: | - | - | - | - |
| MSVS 22 500 |  |  |  |  |
| Gaps: | - | - | 1 (+ OSI) | - |
| Appropriate: | 2 | 2 | - | - |
| MSVS 90 000 |  |  |  |  |
| Gaps: | 2 | 2 | - | 1 (+ OSI) |
| Appropriate: | - | - | 3 | - |

**Alternative to Fig. 4-9, clause 4.7.2 (DE Comment)**



**Alternative to Fig. 12-3, clause 12.1 (DE Comment)**