|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| PS | FR |  |  | ge | The draft FC and the DCEG are not completed so it is difficult to understand the model and all the aspects of the PS in general . A human readable FC is needed. FC and DCEG haven’t been commented in details by France. Validation checks hasn’t been read. |  |  |
| PS | NGA | Page 4—Line 4 | Revision history | ed | Should “(revised 2010)” read “(revised 2019)”? |  | Changed as “revised 2019” following “CL46\_2019” |
| PS | FR | Page 6 | Table of content | ed | To be updated: chapters 13 and 14 exist. |  | Applied |
| PS | NGA | Page 6 | Table of Contents | ed | Should “Appendix X. Data Classification and Encoding Guide)be added after Line 33? |  | Applied |
| PS | FR | 1.1 | Introduction | te | Catalogue of Nautical Products (CNP) datasets describe the availability and reliability of paper chart, ENC, S-100 based nautical products, application for navigational purpose, online service and e-Navigation service. This includes their issue date, publication status, producing agency, source indication. CNP is intended to exchange status of nautical products and to be a supplement to ENC, and therefore does not describe the geographic information in detail equal to ENC, rather it is shown as a coverage of nautical products. | Catalogue of Nautical Products (CNP) datasets describe the availability of paper chart, ENC and other nautical products, application for navigational purpose, online service and e-Navigation service. This includes their issue date, status, producing agency, coverage. | Applied |
| PS | FR | 1.1 | Introduction | ed | … as a Nautical Publication Overlay (NPIO)… | … as a Nautical Publication Information Overlay (NPIO)… | Applied |
| PS | NGA | Page 7, Clause 1.1 | Line 4 | ed |  | Change “Publication Overlay” to read “Publication Information Overlay” | Applied |
| PS | FR | 1.1 | Introduction | ed | encoding the status and extent of Catalogue of Nautical Products | encoding the content of Catalogues of Nautical Products | Applied |
| PS | IT | Page 7  Clause 1.1 | Line 9 | ed |  | Change “e-Navigation service” to read “e-Navigation services” (see page 11 and 16) | Applied |
| PS | rmm | 1.1 | 2nd para., 1st sentence | ed | Since there is more than one paper chart, ENC, etc., the plural should be used. | “…paper charts, ENCs, S-100 based nautical products, applications for navigational purposes, online services and e-Navigation services.” | Applied |
| PS | rmm | 1.1 | 2nd para., 2nd sentence | ed | Missing “and”. | “… producing agency~~,~~ and source indication” | Applied |
| PS | rmm | 2.1 | 1st reference | te | S-100 4.0.0 was published a year ago, this specification should be based on 4.0.0. Also, clause 4.2 says the S-100 version is 4.0.0. | Update references to S-100 3.0.0 to mention S-100 4.0.0 instead. | Applied |
| PS | ntou | 2.1 | 1st ref. | ed | IHO S-100 …Edition 4.0.0 (December 2018) | Already updated (NIPWG7-10.1) | Applied |
| PS | NGA | Page 7, Clause 2.1 | Line 7 | ed |  | Delete the period after 1997 | Applied |
| PS | NGA | Page 7, Clause 2.1 | Line 14 | ed |  | Change font and type size to match the rest of the list | Applied |
| PS | rmm | 2.1 | 10th reference | te | Use ISO 19115-1 instead of ISO 19115:2003 | ISO 19115-1:2014, Geographic information – Metadata. Amended by Amendment 1, 2018. | Applied |
| PS | NGA | Page 8,  Clause 2.1 | Line 2 | ed |  | Delete the comma after 2015 and the period after Language | Applied |
| PS | NGA | Page 8, Clause 2.1 | Line 3 | ed |  | Delete the comma after 19139 and the period after implementation | Applied |
| PS | NGA | Page 8, Clause 2.1 | Lines 2-3 | ed |  | Change font and type size to match the rest of the list | Applied |
| PS | ntou | 2.2 | heading | ed | Should be “Informative” not “ Normative” | Change to “Informative” | Applied |
| PS | FR | 2.2 | Normative | ed | 2.1 is also normative | Change Normative into Informative | Applied |
| PS | NGA | Page 8, Clause 2.2 | Line 4 | ed |  | Delete the comma after 19757-3 | Applied |
| PS | NGA | Page 8, Clause 2.2 | Line 5 | ed |  | Delete the colon after Part 3 and the period after Schematron | Applied |
| PS | NGA | Page 8, Clause 2.2 | Line 6 | ed |  | Delete the period after “…TBD)” | Applied |
| PS | NGA | Page 8,  Clause 2.2 | Lines 4-6 | ed |  | Change font and type size to match the list in Clause 2.1 | Applied |
| PS | NGA | Page 9,  Clause 2.3 | Line 2 | ed |  | Add a comma after “supplied to” | Applied |
| PS | NGA | Page 9, Clause 2.3 | Line 5 | ed |  | Add a comma after “end-use” | Applied |
| PS | NGA | Page 11, Clause 3.4 | Line 5 | ed |  | Change “…defined. Since the IHO…: to read “defined. The IHO…” | Applied |
| PS | PRIMAR | 3.4 UML Notations | 4th sentence | ed | Replace period with comma to get correct sentence. | Since the IHO standards and this product specification make use of classes derived directly from ISO standards~~.~~, this convention is also followed in this document. | Applied |
| PS | NGA | Page 11, Clause 3.4 | Line 10 and Line 11 | ed |  | Change “instantiating” to “representing.  Change “instantiated” to “represented” | Applied |
| PS | rmm | 4.1 | Abstract | ed | Use the plural. Also, missing “and”. (See similar comments for clause 1.1.) | paper charts, ENCs, S-100 based nautical products, applications for navigational purposes, online services and e-Navigation services. This includes their issue date, publication status, producing agency~~,~~ and source indication. | Applied |
| PS | FR | 4.1 | Abstract | te | See the second French comment on 1.1 |  | Applied |
| PS | NGA | Page 11, Clause 4.1 | Abstract—Line 5 | ed |  | Change “…agency, source indication.” to read “…agency, and source indication.” | Applied |
| PS | rmm | 4.1 | Content | ed | Number mismatch. | Either “contain a catalogue”, or “contain catalogues" | Applied as contain catalogues |
| PS | NGA | Page 11, Clause 4.1 | Specific Purpose—Lines 1-3 | ed |  | Change font and type size to match rest of the list. | Applied |
| PS | NGA | Page 12, Clause 4.2 | Lines 2-3 | ed |  | Change “…metadata see the metadata clause.” to read “…metadata, see Clause 14.” | Applied following metadata clause 14 |
| PS | IT | Page 12, Clause 4.2 | Title | ed |  | Change “Catalogue of Nautical Product” to read “Catalogue of Nautical Products” | Applied |
| PS | rmm | 4.2 | Contact | ed | IHB in Contact should be updated to IHO or IHO Secretariat | Update Contact | Applied |
| PS | NGA | Page 12, Clause 4.2 | IHO URL | ed |  | Change the URL to read:  https://iho.int | Applied |
| PS | NGA | Page 12, Clause 4.3.3 | Line 2 | ed |  | Change “…errors; introduce…” to read “…errors or to introduce…” | Applied |
| PS | ntou | 4.3.3 | Para.2 & 3 | ed | duplications |  | ?? |
| PS | NGA | Page 13,  Clause 4.3.3 | Line 2 | ed |  | Change “…users this…” to read “…users of this…” | Applied |
| PS | NGA | Page 13, Clause 4.3.4 | Line 2 | ed |  | Add the word “or” after the word “references:” | Applied |
| PS | NGA | Page 13, Clause 4.3.4 | Line 3 | ed |  | Add a comma after the word “punctuation” | Applied |
| PS | IT | Page 13  Clause 4.3.4 | Line 10 | ed |  | Add a full stop after the word “versions” | Applied |
| PS | IT | Page 13, Clause 4.4 | Scope ID | ed |  | Change “Catalogue of Nautical Product” to read “Catalogue of Nautical Products” | Applied |
| PS | FR | 5 | abstract | te | “Catalogue of Nautical Product (CNP) is a vector dataset containing all relevant information regarding catalogue of nautical products like nautical chart and nautical publication within a defined geographical area.” | Catalogue of Nautical Product (CNP) is a vector dataset containing all relevant information regarding catalogue of nautical products like nautical chart and nautical publication. | Applied |
| PS | FR | 5 | content | te | “Catalogue of Nautical Products information, such as coverage, producing agency, source indication and issue date that apply” | Catalogue of Nautical Products information, such as type of products, coverage, producing agency, and issue date. | Applied |
| PS | rmm | 5 | 1st para | ed | Use S-100 4.0.0 instead of 3.0.0 | Replace S-100 3.0.0 with S-100 4.0.0 | Applied |
| PS | NGA | Page 14, Clause 5 | Lines 5-6 | ed |  | Change the word “Product” to read “Products” | Applied |
| PS | IT | Page 14  Clause 5 | abstract | ed |  | Change the word “chart” to read “charts” and “publication” to read “publications” | Applied |
| PS | NGA | Page 14, Clause 5 | Content—Line 2 | ed |  | Add a comma after the word …”indication” | Ditto with upper France’s comments |
| PS | NGA | Page 14, Clause 6.1 | Line 2 | ed | The is no Figure 1 in this document. Should it be Figure 6-1? |  |  |
| PS | rmm | 6.1 | 1st para | ed | Second sentence refers to a “Figure 1” but there is no Figure 1. | Change to Figure 6-1. | Applied |
| PS | NGA | Page 14, Clause 6.1 | Line 12 | ed |  | Change the word “…segments…” to read “…segment…” | Applied |
| PS | FR | 6.1 | 3rd bullet | te | “Linear geometry is defined by curves which are made of curve segments. Each curve segments contains the geographic coordinates as control points and defines an interpolation method between them. The distance between two consecutive control points must not exceed 0.3 mm at a ~~display scale of 1:10000.~~” | “Linear geometry is defined by curves which are made of curve segments. Each curve segments contains the geographic coordinates as control points and defines an interpolation method between them. The distance between two consecutive control points must not exceed 0.3 mm at a permitted display scale. | Applied |
| PS | ntou | 6.1 | Page 14,  the last sentence | te/ed | 0.3mm is the minimum distance not the maximum distance | “The distance between two consecutive control points must exceed 0.3 mm at a display scale of 1:10000.”  Or use similar wording of the S-101 (ENC) product spec:“The distance between two consecutive control points must not be less than 0.3 mm at a display scale of 1:10000.” | Applied (upper case) |
| PS | IT | Page 15 | Line 8 | ed |  | Remove space after “Catalogue.” | Applied |
| PS | NGA | Page 15, Clause 6.1 | Line 9 | ed |  | Add a comma after the word …”attribute values…” | Applied |
| PS | FI | Page 15,  pt. 6.1 | Introduction | ed | text “can therefore can” | remove dual word “can” | Applied |
| PS | PRIMAR | 6 Data Content and Structure | 4th paragraph, 2nd sentence | ed | Removed "can" to correct sentence. | Geographic features in all three packages use the spatial types from S-100 Part 7, which are imported as-is into the S-128 spatial type package and therefore can be used as types for S-128 spatial attributes. | Applied |
| PS | PRIMAR | Page 15,  6 Data Content and Structure | 4th paragraph, 3rd sentence | ed | Insert "allow" to get correct sentence. | The spatial types package also contains definitions of "union types" (combinations of the S-100 spatial types), since S-100 allows features to have different kinds of geometry but UML does not allow an attribute of a class to have multiple types. | Applied |
| PS | rmm | 6.1 | Figure 6-1 | te | Figure references S-100 3.0.0 packages | Update figure to use S-100 4.0.0. | Updated. |
| PS | rmm | 6.2 | 5th bullet | ed | Does S-128 use association classes? There are no association classes in the application schema diagrams in Figures 6-2, 6-3, and 6-4. | If association classes are not used, delete the bullet mentioning association classes.  Note: If association classes are not used, similar changes may be needed in other components, such as the DCEG. | S-128 uses association classes |
| PS | FR | 6.2 | Page 16 |  | “The CNP data products have a CatalogueOfNauticalProduct feature type. Attributes like issueDate and editionNumber in CatalogueOfNauticalProduct are mandatory, but others are optional” | The CNP data products have a CatalogueOfNauticalProduct feature type. Attributes like featureName, issueDate and editionNumber in CatalogueOfNauticalProduct are mandatory, but others are optional | Applied |
| PS | FR | 6.2 | Page 16 | te, ed | “CatalogueElements has common attributes for all nautical products. AbstractChartProducts has common attributes for chart typed products. The attributes defined in CatalogueElements are inherited by all S-128 geographic feature types. All the attributes in CatalogueElements area optional. A derived class may impose additional constraints, which will be described in the definition of the derived class or the S-129 DCEG.”  The fact that most of the attributes are optional is questioning. | CatalogueElements has common attributes for all nautical products. AbstractChartProducts has common attributes for chart typed products. The attributes defined in CatalogueElements are inherited by all S-128 geographic feature types. All the attributes in CatalogueElements are optional. A derived class may impose additional constraints, which will be described in the definition of the derived class or the S-128 DCEG. | Applied |
| PS | PRIMAR | 6.2 Applications Schema | 2nd paragraph | ed | The colour explanation listed in the bullet points does not align with the colours used in the application schema figure. | Align colour explanation with colours used. | Applied |
| PS | NGA | Page 16, Clause 6.2 | Line 25 | ed |  | Change ‘…two classes which is feature…” to read “…two classes: feature…” | Applied |
| PS | IT | Page 16 | Line 28 | ed |  | Insert space after CNP | Applied |
| PS | NGA | Page 16, Clause 6.2 | Lines 28-29 | ed |  | Capitalize Nautical Products, Electronic Charts, and Paper Charts  Add a comma after words “…Electronic Charts” | Applied |
| PS | NGA | Page 16, Clause 6.2 | Lines 30-31 | ed |  | Change “S-101 ENC and digital chart for special purpose” to read: “S-101 ENC, and digital charts for special purposes.” | Applied |
| PS | NGA | Page 16, Clause 6.2 | Line 32 | ed |  | Change entire line to read:  “Paper Chart: nautical paper charts and special purpose charts published in paper format.” | Applied |
| PS | NGA | Page 16, Clause 6.2 | Lines 33-34 | ed |  | Change to read:  “Nautical Products: nautical publications, online services, S-100 compliant products, e-Navigation services, and all nautical products except nautical charts.” | Applied |
| PS | UK  HO | 6.2 |  | te | All datums belong at the panel level on a paper chart and not the product level? Therefor this should be at the PaperChart FeatureType not the CatalogueElements Feature Type |  | Datums are located in the super type feature(CatalogueElement) as some nautical products would need it. |
| PS | IT | Page 16, Clause 6.2 | 3 lines from the bottom | ed |  | Change “area” to read “are” | Applied |
| PS | FI | 6.2 last sentences | Last line | ed | S-129 DCEG. | S-128 DCEG | Applied |
| PS | PRIMAR | 6.2 Applications Schema | 6th paragraph last sentence. | ed | Replace erroneous reference to S-129 with S-128. | A derived class may impose additional constraints, which will be described in the definition of the derived class or the S-12~~9~~8 DCEG. | Applied |
| PS | ntou | 6.2 | p.16 | ed | not “S-129” DCEG | Change to “S-128” DCEG | Applied |
| PS | NGA | Page 17, Clause 6.2 | Line 6 | ed |  | Add the word “and” after “…onlineResource,” | Applied |
| PS | FI | UML |  | ge | Only “Electronic chart” can have “updateDate” and “updateNumber”. Only charts can have “editionNumber”. Despite differing current terminology, also the other Nautical products (or paper charts) could be assigned using this same functionality. It would be beneficial for future machine readability to have the same data-structure for all element “versioning”. | Allow all “CatalogueElements” to have editionNumber, updateNumber and updateDate.  Consider adding: editionDate, as the edition could be expressed also as a date only.  Use this structure for versioning of all products in a uniform manner. | Applied |
| PS | FI | UML | printInformation | ge | Substitute printWeek and printYear with single date and rePrintEdition with rePrintNumber.  A single date seems to be a more “data-centric” way of encoding and is easier read by a machine. Allows handling of reaprints in a similar manner to ENC ”update dates” | Substitute printWeek and printYear with printDate.  Rename rePrintEdition to rePrintNumber  With these changes a more fine-grained encoding is possible, and the structure similar to previous versioning of update and edition. A current week / year can still be encoded as a date representing the beginning of that week. |  |
| PS | DE | 6.2 | Figure 6-2 | ge | Panels in PaperChart are not intended? | If yes - that should be better explained in the diagram or text | Panels are intended for;  1) a main chart part + insert(s).  2) inserts without main chart part. |
| PS | DE | 6.2 | Figure 6-2 | ge | ISBN, ISSN are not intended? | Should be added | Applied  ISSN added to referenceSpcification  ISBN added to NauticalProduct |
| PS | JP | 6.2 | Figure 6-2 | ge | Some of special purpose maps in Japan have attached a report of the information, which was used to make the map. we provide the information of presence /nothing of the report. | Suggest to make a data model to enter presence /nothing of attached file. | Applied  Supportfile added to catalogueElement |
| PS | JP | 6.2 | Figure 6-2 | ge | In Japan we provide the Aeronautical chart which provide the information about airway, aerodrome, etc. It is provided in our catalogue of chart.  we provide the information of Date of Aeronautical information. | Suggest to make a data model to enter date of Aeronautical information. | No changes  Use ProductType-10(others) for Aeronautical chart |
| PS | JP | 6.2 | Figure 6-2 | ge | We provide the information of distributors of charts and publications (Name, Address, Phone number, etc.). | Suggest to make a data model to enter the information of distributors.  Information Type “ContactDetails” can use as distributors contact details probably. | Applied  ContactDetails has been changed to super class and 2 information type(DistributionDetail, ProductionDetail) has added as subordinate. |
| PS | JP | 6.2 | Figure 6-2 | ed | The color of the Feature Type and the information Type between the UML diagram conventions (PP.15-16) and Figure 6-2. | Conform the color of the Feature Type and the information Type to the UML diagram conventions. |  |
| PS | ntou | 6.2 | Fig.6-2 | te/ge | SOLAS Chapter V regulation 27 (Nautical Charts and Nautical Publications) states that: ‘Nautical charts and nautical publications, such as sailing directions, lists of lights, notices to mariners, tide tables and all other nautical publications necessary for the intended voyage, shall be adequate and up to date’.  IHO S-4 B-630.6 (Recapitulative lists of chart-updating NMs) states that:’ Every three to six months, hydrographic offices should publish (in paper form and/or on the web) recapitulative (cumulative) lists of NMs issued in that particular period, listed for each chart in numerical order.’ | “Notice to Mariners” is a nautical publication that may require specific modelling in the application schema of S-128. | Applied  Purpose has been changed as enumeration type following S-100 metadata UML.  NtM shall be used as productType-5(nautical publication). |
| PS | ntou | 6.2 | Fig.6-2 | te/ge | IHO S-4 B-630.2 (Reference to NM on charts) states that:’ Reference to NM on charts. Charts must state clearly on them (in the bottom left hand corner, outside the chart border – see B-252.3) to which NM they have been updated.’  ElectronicChart type has updateDate and updateNumber to support the up-to-dateness. Corresponding ones for the PaperChart type is missing. | If intended to support chart carriage requirement, the following items might worth to be incorporated:   1. Reference to NtM applicable/applied to the paper chart   Indicate whether the paper chart is part of the required backup for ECDIS (the “appropriate folio of paper nautical charts” identified or recommended by the Coastal State ) | referenceToNM has been added as Complex Attribute Type with week and year.  Question) Does Name, Language, ISO, number of NM not need to be added? |
| PS | ntou | 6.2 | Fig.6-2 | te/ge | The status of production of Temporary & Preliminary notices in the ENC update files varied among producers. | Add an attribute for ElectronicChart products to indicate whether T&P notices are encoded into the ENC update files. | Applied.  tnpUpdate has beed added as Boolean to ElectronicChart. |
| PS | ntou | 6.2 | Fig.6-2 | ed | background colours do not match the description (conventions) |  | Modified. |
| PS | rmm | 6.2 | Figure 6.2 | te | CatalogueElements.horizontalDatumReference appears to be an enumeration or complex attribute type, but there no corresponding box in Figures 6.3 or 6.4. In S-100 metadata the discovery metadata attribute of the same name is a CharacterString. | Correct type to “text”. | Applied as enumeration type following S-101 |
| PS | rmm | 6.2 | Figure 6.2 | te | CatalogueElements.horizontalDatumValue is a real number, but EPSG codes are whole numbers. In S-100 metadata the discovery metadata attribute of the same name is an integer. | Correct type to Integer. | Applied as integer type. |
| PS | rmm | 6.2 | Figure 6.2 | te | Attribute issueDate is of type S100\_TruncatedDate in CatalogueElements but “text” in CatalogueOfNauticalProducts. Can’t have different types for the same attribute name in different features or information types in S-100. | Change type of issueDate in CatalogueOfNauticalProducts to S100\_TruncatedDate. | Applied |
| PS  FC  XSD | rmm | PS 6.2 | PS  Figure 6.2 | te | Class names CatalogueElements, NauticalProducts, AbstractChartProducts should be singular, not plural. Names of classes in UML models are generally singular. | Change names to CatalogueElement, NauticalProduct, AbstractChartProduct.  FC and XSD should be updated accordingly. | Applied |
| PS | FR | 6.2 | Figures 6.2 to 6.4 | te | See attached paper “Comments of France related to the application schema” |  |  |
| PS | rmm | 6.2 | Figures 6-2, 6-3, 6-4 | ed | The color scheme used in Figures 6-2, 6-3, and 6-4 does not match the color scheme described at the beginning of clause 6.2. | Update figures to use the color scheme described in clause 6.2. | Updated. |
| PS | rmm | 6.2 | Figure 6.3 | te | Attribute price.priceNumber should probably be a real number instead of an integer. | Change type of price.priceNumber from integer to real | Applied as real type. |
| PS | JP | 6.2 | Figure 6-3 | ge | Although the Complex Attribute Type ”price” have priceNumber and currency, our ENC price is depends on contract period(3 months, 6 months, etc). | Suggest to change the Complex Attribute Type ”price” to enter Description. | Can be dicussed.  Using codelist for many possible pricing options would be difficult. |
| PS | NGA | Page 18 | Figure 6-3 | ed |  | Change font and type size of caption to match Figure 6-1. | Updated. |
| PS | NGA | Page 18 | Figure 6-4 | ed |  | Change font and type size of caption to match Figure 6-1. | Updated. |
| PS | NGA | Page 18, Clause 7 | Line 2 | ed | Should “7.1.1” be changed to “7.1”? |  | Applied |
| PS | NGA | Page 19, Clause 7 | Line 1 and Line 13 | ed |  | Change IHO URLs in both locations to read:  https://iho.int | Applied |
| PS | NGA | Page 19, Clause 7 | Line 2 | ed | There is no Table 6.2 in the document. |  | Applied |
| PS | PRIMAR | 7. 1.1 Introduction | 1st paragraph last sentence | ed | Reference to table is incorrect. | Update table reference from 6.2 to 7-1. | Applied |
| PS | ntou | 7.1.1 | 1st para. | ed | no/not Table 6.2 | Change to Table 7-1 | Applied |
| PS | IT | 7.2.1. | Geographic | ed |  | Changes “carries” to read “carry” | Applied |
| PS | NGA | Page 20, Clause 7.2.5.1 | Line 1 | ed |  | Change “…in the following table:” to read”  “…in Table 7.1.” | Applied |
| PS | NGA | Page 20, Clause 7.2.5.1 | Table 7.1 | ed |  | Change caption to read “Table 7.1-Simple…” | Applied |
| PS | NGA | Page 20, Clause 7.2.5.1 | Table 7.1 | ed |  | Add a period at the end of the  definition for the following Types:  1. Enumeration.  2. Real.  3. CharacterString | Applied |
| PS | NGA | Page 20, Clause 7.2.5.1 | Table 7.1 | ed |  | Do not split words in the Definitions for the following Types:  1. Boolean.  2. Real.  3. Integer.  4. CharacterString.  5. Codelist. | Applied |
| PS | NGA | Page 20, Clause 7.2.5.1 | Table 7.1, Type--Date | ed | In Line 1 of the Definition | Add a comma after the word “…month…” | Applied |
| PS | NGA | Page 20, Clause 7.2.5.1 | Table 7.1,  Type—Time | ed | In Line 1 of the Definition | Add a comma after the word “…minute…” | Applied |
| PS | IT | Page 20 | Table 7.1 | ed | Consistency in the use of full stops | (e.g. remove full stop after the title of the table; add full stop to the end of the sentences) | Applied |
| PS | NGA | Page 21, Clause 7.3 | Line 1 | ed |  | Change “…measure is used…” to read:  “…measure are used…” | Applied |
| PS | rmm | 7.3 | Units of Measure | ed | First sentence says “Marine Protected Areas” datasets | Change to “Catalogue of Nautical Products” datasets. | Applied |
| PS | FR | 7.3 | Units of Measure | ed | “The following units of measure is used in Marine Protected Areas datasets” | “The following units of measure is used in CNP datasets” | Applied |
| PS | rmm | 7.2 | Figure 7-2 | te | References S-100 3.0.0 | Reference S-100 4.0.0 instead |  |
| PS | FR | 7.4 | Geometric Representation | ed | “7.4 Geometric Representation”  Is that “spatial attribute” in the application schema? |  |  |
| PS | ntou | 8 | 8.1.1 | ed | Duplication with 8.1.2~8.1.5 |  |  |
| PS | FR |  | 8.1.1 | ed | “Spatial data are expressed as latitude (φ) and longitude (λ) geographic coordinates. Latitude values are stored as a negative number to represent a position south of the Equator. Longitude values are stored as a negative number to represent a position west of the Prime Meridian. Coordinates are expressed as real value, degree / degree decimal format. Datasets conforming to this product specification are not projected.” | Spatial data are expressed as latitude (φ) and longitude (λ) geographic coordinates. Latitude values are stored as a negative number to represent a position south of the Equator. Longitude values are stored as a negative number to represent a position west of the International Prime Meridian. Coordinates are expressed as real value, degree / degree decimal format. Datasets conforming to this product specification are not projected.” | Applied. |
| PS | NGA | Page 22, Clause 8.1.1 | Line 6 | ed |  | Change “… data are expressed…” to read:  “…data is expressed…” | Applied. |
| PS | PRIMAR | 8.1.1 Introduction | Vertical Coordinate Reference System last sentence | ed | Remove information in parenthesis. | Units must be in meters. ~~(From S-101 Draft).~~ | Applied. |
| PS | ntou |  | 8.1.3 | ed | For CNP, “data products” may be confusing | Use CNP “datasets” instead of “data products” | Applied. |
| PS | ntou |  | 8.1.4 | te | According to 6.1 (page 15), S-128 coordinates are restricted to 2D. | Reconsider whether the “Vertical coordinate reference system” is applicable to S-128 |  |
| PS | IT | Page 23 | 8.1.6  Line 6 | ed |  | Remove hyphen after “geometry.” | Applied. |
| PS | NGA | Page 24, Clause 9.1 | Line 5 | ed |  | Change the colon after “model” to a period | Applied. |
| PS | NGA | Page 24, Clause 9.2 | Table 9.1 | ed |  | Center-justify the headers. | Applied. |
| PS | NGA | Page 26, Clause 9.2 | Table 9.1 | ed |  | Center-justify the caption. | Applied. |
| PS | NGA | Page 27, Clause 9.4 | Table 9.2 | ed |  | Center-justify the headers.  Center-justify the caption. | Applied. |
| PS | FR | 10 |  | te | “Data source must be described in each data product.”  The data source will be always the producer himself. Multiplicity of dataSource is 0..\*. The “must” is too much strong. |  | Applied as:  Data source can be described in each data product |
| PS | ntou | 10 | 1st para. | te | “CNP defining authority” ? | Seems to be a term that needs definition | Applied |
| PS | NGA | Page 28, Clause 10 | Table 10.1 | ed |  | Center-justify the headers.  Add gray shading to haeders  Change caption from “Table 10-1. Data…” to read:  “Table 10.1-Data…” | Applied |
| PS | NGA | Page 28, Clause 10.1.2 | Lines 1-3 | ed |  | Change to read:  A dataset is a grouping of features, attributes, geometry, and metadata which comprises a specific coverage. The types of CNP datasets produces and contained within an exchange set are listed in Table 10.2. | Applied |
| PS | FR | 10.1.2 | Update dataset | te | ” A delta change of the latest edition of a dataset. If there are more than one update dataset, the subsequent update will be a delta of the base dataset + earlier update datasets.”  From 12.1 and 12.3 I understand that the cancellation is made via update dataset, and it is the only use of update data set. |  | Discussion needed |
| PS | FR |  | Cancellation | te | “Used to cancel dataset and any related update datasets.”  See comment above |  | Discussion needed |
| PS | NGA | Pages 28-29 | Table 10.2 | ed |  | Center-justify and boldface headers.  Change font and type size of all text to match Table 10.1.  Change caption to read: “Table 10.2-CNP…”  Center-justify the caption. | Applied |
| PS | IT | Page 29  Table 10.2 | Update dataset | ed |  | Change “If there are” to read “If there is” | Applied |
| PS | NGA | Page 29, Clause 10.1.3 | Line 1 | ed |  | Add a comma after the word “deletions” | Applied |
| PS | IT | Page 29, Clause 10.1.3 | 3rd para | ed |  | Change “Spatial objects … is treated … it needs” to read “Spatial objects … are treated … they need” | Applied |
| PS | FR | 10.1.3 |  | te | See French comments on 10.1.2 |  | Applied |
| PS | NGA | Page 29, Clause 10.2 | Line 2 | ed |  | Change “…described below. The…” to read:  “…described in Clause 110.2.1. The…” | Applied |
| PS | NGA | Page 30, Clause 10.5 | Lines 2-5 | ed |  | Change the comma at the end of each bullet point to a period | Applied. |
| PS | FR | 10.6 | 1st para | te | “When a mandatory attribute code or tag is present but the attribute value is missing, it means that the producer wishes to indicate that this attribute value is unknown. Missing mandatory attributes must be “nilled”.” |  |  |
| PS | FR | 10.9 | 2nd para | te | “An update dataset must not change the limit of a **Data Coverage** feature for the base dataset. Where the limit of a **Data Coverage** feature for a base dataset is to be changed, this must be done by issuing a new edition of the dataset.”  Not consistent with DCEG § 2.6.3. I understand that maintenance will only be done by new edition. |  | DCEG is amended that Datacoverage can be changed only for New edition. |
| PS | FR | 10.10 | Data overlap | te | “S-128 datasets can overlap other S-128 datasets.”  Good! DCEG must be aligned. |  | Applied |
| PS | FR | 10.11 | Data extent | te | “Datasets must not cross the 180° meridian of longitude”  So, the DCEG should explain the solution. |  | Applied |
| PS | IT | Page 31  Clause 10.11 | Data extent | ed |  | Insert full stop after “longitude”. | Applied. |
| PS | NGA | Page 32, Clause 11.1 | Line 3 | ed |  | Changes “…language, character set.” to read:  “…language, and character set.” | Applied. |
| PS | NGA | Page 32, Clause 11.1 | Table 11.1 | ed |  | Add gray shading to header  Change font and type size of table to match Table 10.1  Center-justify the caption  Change caption to read “Table 11.1-Data…” | Applied |
| PS | PRIMAR | 11.1 Data Product Delivery Information | Table 11.1 name | ed | Add format to table name to depict the table content. | Table 11.1 Data product delivery format | Applied |
| PS | NGA | Page 32, Clause 11.1.1 | Line 3 | ed |  | Change entire line to read:  “…1-5 is present and update 1-6 is missing, update 1-7 must not be loaded.” | Applied. |
| PS | NGA | Page 32, Clause 11.1.2 | Line 2 | ed |  | Add a comma after the word “updates” | Applied |
| PS | NGA | Page 32, Clause 11.1.2 | Line 3 | ed |  | Change to word “follow” to read “follows” | Applied. |
| PS | FR | Page 33 11.3 | 1st para | te | “Data which conforms to this product specification must be delivered by means of an exchange set.”  Online delivery should be envisaged. |  |  |
| PS | NGA | Page 33, Clause 11.3 | Line 6 | ed |  | Change the comma after the words “…catalogue file” to a period | Applied. |
| PS | NGA | Page 33, Clause 11.3 | Line 8 | ed |  | Change “S-128 Exchange set…” to read:  “S-128 exchange set…” | Applied. |
| PS | rmm | 11.3 | 2nd para | ed | The two references to S-100 3.0.0 figures should be to the corresponding figures to S-100 4.0.0 | Update S-100 3.0.0 reference to S-100 4.0.0 reference. | Applied |
| PS | NGA | Page 34, Clause 11.4 | Table 11.2 | ed |  | Add gray shading to header  Center-justify the headers  Change font and type size of table to match Table 10.1  In HTM Description, add a comma after the word “Flash”  Center-justify the caption  Change caption to read “Table 11.2-Support…” | Applied |
| PS | NGA | Page 34, Clause 11.5 | Line 4 | ed |  | Add a comma after the word “replacement” | Applied. |
| PS | PRIMAR | 11.5 Support File Naming Convention | 2nd paragraph and 3rd paragraph 3rd bulletpoint | ed | Align the number of flexible characters (X) in the support file name with the number of X in dataset file name.  This will facilitate the same level of flexibility for support files as there already are for the dataset files. | 128CCCCXXXXXXXXXX.YYY  And  The eighth up to the ~~fifteenth~~ seventeenth character can be used in any way…. | Applied. |
| PS | NGA | Page 34, Clause 11.5 | Line 15 | ed |  | After “dataset name” change the comma to a colon.  After “0 to 9” add a comma. | Applied. |
| PS | NGA | Page 35, Clause 11.5 | Line 13 | ed |  | After “dataset name” change the comma to a colon.  After “0 to 9” add a comma. | Applied. |
| PS | PRIMAR | 12.1 Introduction | 2nd sentence | ed | Add updates. | Data updates will be made by new editions or updates. | Applied. |
| PS | NGA | Page 36, Clause 12.1 | Line 1-6 | ed | Duplicated paragraphs |  | Applied. |
| PS | ntou | 12.1 |  | ed | The last 2 sentences are duplicated. | Delete one | Applied. |
| PS | NGA | Page 36, Clause 12.2 | Line 3 | ed | Will there be an Appendix X? As of now and according to the Table of Contents, There is no Appendix X in this document. |  |  |
| PS | NGA | Page 36, Clause 12.4 | Line 3 | ed |  | Add a comma after the word “picture” | Applied. |
| PS | NGA | Page 36, Clause 12.4 | Line 9 | ed |  | Add a comma after the word “fileReference” | Applied. |
| PS | NGA | Page 37, Clause 14.1 | Line 6 | ed | There is no Figure 31 in this document. |  | Modified |
| PS | rmm | 14.1 | 2nd para | ed | first sentence refers to a non-existent Figure 31 | Update to refer to Figure 14-1. | Applied |
| PS | PRIMAR | 14.1 Introduction | 2nd paragraph 1st sentence | ed | Reference to figure is incorrect. | Update figure reference from 31 to 14.1. | Applied |
| PS | NGA | Page 37, Clause 14.1 | Line 13 | ed |  | Add a comma after the word “load” | Applied. |
| PS | NGA | Page 37, Clause 14.1 | Line 15 | ed | There is no Figure 32 in this document. |  | Modified |
| PS | rmm | 14.1 | 4th para | ed | Refers to non-existent Figure 32 | Change to Figure 14-2 | Applied |
| PS | NGA | Page 37, Clause 14.1 | Line 16 | ed |  | Change “…clauses…” to read “…Clauses…” | Applied |
| PS | NGA | Page 38 | Figure 14.1 | ed |  | Change caption to read:  “Figure 14-1. Metadata…” |  |
| PS | rmm | Page 39  14.1 | Figure 14-2 | ed | Note at bottom of figure references S-127 | Change note to say “S-128” instead of “S-127”.  If the constraints on metadata classes are different for S-128 (compared to S-127), Figure 14-2 and the tables describing the classes and attributes should be updated accordingly to add any restrictions specific to S-128 and remove S-127 restrictions not applicable to S-128. | Applied to UML |
| PS | ntou | 14.1 | Figure 14-2 | ed | In the lower left box, not S-127 | Change to S-128 | Applied to UML |
| PS | FR | 14.1 | Figure 14-2. | te | There are some duplication between the dataset content and these data. Should we duplicate or should we avoid duplication? |  | Applied |
| PS | ntou | 14.1 | Note 2 | ed | Inconsistent/incorrect | Change 3(terminated) to 4 (cancellation) as shown in Table 14.2 (page 43) | Applied |
| PS | rmm | 14.2.1 | Table 14.1 | ed | Remarks for several attributes refer to “Figure 32” but there is no Figure 32. | Change reference to “Figure 14-2”. | Applied |
| PS | NGA | Page 40 | Table 14.1 | ed |  | Add gray shading to header  Center-justify the headers  Table 9.1 replicates the headers across a multi-page table. Can we do this for Table 14.1? | Applied |
| PS | NGA | Page 42 | Table 14.1 | ed |  | Center-justify the caption  Change caption to read “Table 14.1-Dataset…” | Applied |
| PS | rmm | 14.2.2 | Table 14.2 | ed | Remarks for several attributes refer to “Figure 32” but there is no Figure 32. | Change reference to “Figure 14-2”. | Applied |
| PS | NGA | Page 42 | Table 14.2 | ed |  | Add gray shading to header  Center-justify the headers  Table 9.1 replicates the headers across a multi-page table. Can we do this for Table 14.2? | Applied |
| PS | US | Page 44 | Table 14.2 | ed |  | Center-justify the caption  Change caption to read “Table 14.2-Update…” | Applied |
| PS | rmm | 14.3 | Table 14.3 | ed | Remarks for several attributes refer to “Figure 32” but there is no Figure 32. | Change reference to “Figure 14-2”. | Applied |
| PS | NGA | Page 44 | Table 14.3 | ed |  | Add gray shading to header  Center-justify the headers  Table 9.1 replicates the headers across a multi-page table. Can we do this for Table 14-3? | Applied |
| PS | NGA | Page 45 | Table 14.3 | ed |  | Center-justify the caption  Change caption to read “Table 14.3-Support…” | Applied |
| PS | NGA | Page 45 | Table 14.4 | ed |  | Add gray shading to header  Center-justify the headers  Table 9.1 replicates the headers across a multi-page table. Can we do this for Table 14.4? | Applied |
| PS | NGA | Page 46 | Table 14.4 | ed |  | Center-justify the caption  Change caption to read “Table 14.4-S100…” | Applied |
| PS | NGA | Page 46, Clause 14.4.1 | Notes—Lines 1-2 and 6 | ed | There is no Figure 32 in this document. |  | Figure 32 means S-100 4.0 in Appendix 4a-D |
| PS | rmm | 14.4.1 | Notes 1 & 2 | ed | Refers to Figure 32 but there is no “Figure 32” | Change reference to “Figure 14-2”. | Figure 32 means S-100 4.0 in Appendix 4a-D |
| PS | rmm | Page 48  Appendix X | Producer | ed | IHB should be IHO or IHO Secretariat. | Update 1st line of Producer address. |  |
| PS | rmm | Appendix X |  | ed | Note at end refers to an Annex with a review print of the feature catalogue, but no such print was included in the package. | Delete note. |  |
| PS | ROK | UML |  |  | Inconsistency issueDate between CatalogueOfNauticalProducts(as text) and CatalogueElements(as S100\_TruncatedDate) |  | Modified |
|  |  |  |  |  |  |  |  |
| FC | rmm |  |  | te | The XML feature catalogue included in the package fails schema-validation with any of the feature catalogue schemas I tried. Since there is no S100FC.xsd included in the package, it is not clear whether it is using the S-100 3.0.0 4.0.0 feature catalogue XSD. | The best solution would be to include the S100FC.XSD (and indirectly included feature catalogue XSDs) in the distribution. If not, the package should specify in a README file exactly which version and build the XML FC conforms to.  The S-100 schemas are on the S-100 GitHub site. | Validation check completed with S-100 4.0.0 Feature Catalog XSD |
| FC | rmm |  |  | te | A visual check of the XML FC indicates that it is clearly a work-in-progress at this time. For example, in the FC header the version number is 0.1.5 and the date is 2017-11-16. The version number in the FC XML file itself is 0.1.3. There are also validity issues, e.g., decimal numbers for some multiplicity lower and upper bounds. | Supply an updated XML FC for review in the next draft. | Modify according to data model |
| FC | rmm |  |  | te | I can generate Word documents from XML feature catalogues, which makes it easier for more people to review the XML FC, but that works better if the XML feature catalogue is schema-valid. | If I get a valid (or almost-valid...) XML FC for the next draft I should be able to generate a Word version for inclusion in the review package. | Validation check completed with S-100 4.0.0 Feature Catalog XSD |
| FC | rmm | CatalogueElements |  | te | geometry in the appliction schema (PS Figure 6-2) is presumably the feature’s location, and therefore should not be listed as an attribute in the FC. Instead it is represented by the permittedPrimitives element. | Remove attribute “geometry” or clarify its meaning. | Applied |
| FC | rmm | CatalogueElements |  | te | Permitted primitives include “point”, but PS (Figure 6-2) and DCEG (Table 2-1) allow only surface. | Delete “point” from permitted primitives. | Applied |
| FC | FI | line 557 | muliplicity | te | Misspelled tag in XML: information –text definition;  infinite=”false” with asterisk as tag value | infinite=”true” with no tag value | Applied |
| FC | FI |  |  | te | Several referenced types are not defined within the file. Also some “unnecessary” definitions seem to be present. Date and version number 0.1.3 seem to not correspond to current PS 0.7.5.  example; printInformation is referenced in Feature PaperChart, but not defined within the FC- file. | The FC seems to be still “work in progress”. Needs to be updated. | Modify according to data model |
| FC | FI |  |  |  | Catalogue of Nautical Products;  Missing Contact details informationBinding(?)  Missing Catalogue elements featureBinding(?) | Add Associations and roles to FC | Modify according to data model |
|  |  |  |  |  |  |  |  |
| XSD | rmm | CatalogueElements |  | te | issueDate is of type text instead of S100\_TruncatedDate as in the application schema | See the S-127 schema for an example. | Set S-128 date type to xs:date |
| XSD | rmm | CatalogueElements |  | te | dataTypeVersion not in application schema | Delete | Applied |
| XSD | rmm | CatalogueElements |  | te | soundingDatum, productType, minimumDisplayScale, marineResourceName, producingAgency, are in the application schema class but not in the corresponding type definition in the schema. | Harmonize application schema and XSD type definitions. | Applied |
| XSD | rmm | ElectronicChart, PaperChart, NauticalProducts |  | te | No textPlaceCorner in application schema | Harmonize application schema, FC and XSD type definitions | Applied |
| XSD | rmm | NauticalProducts |  | te | FC and XSD type definitons do not have all the attributes of the NauticalProducts class in the application schema. Also, they have a simple(?) attribute “content” but no complex attribute “textContent”. | Harmonize application schema, FC and XSD type definitions | Applied |
| XSD | FI |  |  | te | targetNamespace="http://www.iala-aism.org/S128/gml/1.0" | Is this the correct namespace? | Fixed to www.iho.int |
| XSD | FI |  | replace case | te | DataSet | Dataset | Applied |
| XSD | FI | line 436 | check multiplicity | te | ChartProduct needs one invelements tag as mandatory. Is this correct? | ? | Deleted |
| XSD | DE | Schema | UML diagramm | te | contactinstructions in ContactDetails are not described | Provivide information (example?) about expected text | Modify according to data model |
| XSD | DE | Schema | UML vs. XSD | te | complex attribute productSpecification with type productSpecification or referenceSpecification? | Equivalent to other S-1xx PS | Modify according to data model |
| XSD | DE | Schema | UML vs. XSD | te | element or marineResourceName in CatalogueOfNauticalProduct? | Equivalent to other S-1xx PS | Modify according to data model |
| XSD | DE | Schema | UML vs. XSD | te | Content or textContent in NauticalProducts? | Equivalent to other S-1xx PS | Modify according to data model |
| XSD | DE | Schema | UML vs. XSD | ed | Commented rows in CatalogueElements (XSD) vs. CatalogueElements (UML) | Equivalent to other S-1xx PS | Modify according to data model |
| XSD | DE | Schema | UML vs. XSD | te | CatalogueOfNauticalProduct consists 6 attributes in XSD but only 5 in UML (additionalinfo is missing) and elements instead of marineResourceName | Equivalent to other S-1xx PS | Modify according to data model |
| XSD | DE | Schema | UML vs. XSD | te | textPlaceCorner in NauticalProducts or EletronicChart | Equivalent to other S-1xx PS | Deleted |
| XSD | DE | Schema | UML vs. XSD | te | Commented distributionStatus (XSD vs. UML) in AbstractChartProducts | Equivalent to other S-1xx PS | Modify according to data model |
| XSD | DE | Schema | Cross check with S-127 | te | categoryOfAuthority vs. categoryOfAuthorityType  categoryOfCommPref vs. categoryOfCommPrefType  categoryOfSchedule vs. categoryOfScheduleType  dayOfWeek vs. dayOfWeekType  InformationType vs. InformationTypeType  telecommunications vs. telecommunicationsType  featureName vs. featureNameType |  | Applied |
|  |  |  |  |  |  |  |  |
| DCEG | rmm | 2.4.2 | Table 2-3 | ed | Table mentions an “issueDate” attribute for ElectronicChart and PaperChart, but Figure 6.2 in the PS does not have an issueDate attribute in those classes. | Harmonize Table 2-3 and the application schema in the PS. | Applied |
| DCEG | PRIMAR | 2.5.3 Association roles | 2nd sentence | ed | Reference to Figure 2, which doesn't exist. | Insert figure and update name accordingly. | Applied |
| DCEG | rmm | 2.5.3 |  | ed | There is no Figure 2. | Add figure. | Applied |
| DCEG | PRIMAR | 2.6.1 Types of Datasets | Table 2-6 | ed | The table does not list cancellation type dataset, which is listed in table 10-2 in main document. | Add cancellation type to table. | Applied |
| DCEG | rmm | 2.7.1 |  | te | S-128 does not include any physical or navigational features. The only *geographic* features S-128 datasets contain are the extents of datasets or navigational service areas (which may be named after VTS areas, ports, sea areas, etc., but they are still the names of particular datasets or services.) So considerations about naming groups of features, or features named in sailing directions will not apply unless they are also used as name of product cells, datasets, or navigational service areas.  Note that the classes ElectronicChart and NauticalProducts also have a *datasetName* attribute. | Remove reference to “Marine Traffic Management” in paragraph 5.  Update clause 2.7.1 by removing items 1 & 3 from the numbered list and add a bullet about potential use of names as the names of product cells or service areas.  In general this clause should be revised to harmonize with how names are used with respect to what S-128 describes, such as data product cells, datasets, service areas, etc. | Applied |
| DCEG | rmm | 2.7.1 |  | te | According to Table 2-1, S-128 has only area features. | Remove references to point features in 2.7.1. | Applied |
| DCEG | rmm | 2.7.2 |  | te | The role of Text Placement in S-128 is not clear. The application schema diagrams in the PS do not show it, nor does DCEG Table 2-1. | If S-128 is not using Text Placement, delete clause 2.7.2. | Applied |
| DCEG | rmm | 2.8 |  | te | The actual relationship between scales and CNP datasets will need more thought. For example, it is not clear that there can actually be any useful CNP product at a 1:1000 scale; and, if there are navigational products at 1:10,000,000 or smaller scale, (NAVAREAs, METAREAs, GMDSS areas?), a smaller scale CNP will probably be needed to depict dataset coverages. | Remove the 1:1000 scale (and maybe the a few of the next larger scales as well). If this recommendation is applied, also add an explicit statement that certain of the S-101 scales are not being used.  Discuss scale issues in NIPWG: (1) What should be the smallest scale for CNP products? (2) Will CNP datasets be produced at all the scales currently listed, or only a subset of them? | Applied |
| DCEG | rmm | 2.9, 2.9.1 |  | ed | “Marine Traffic Management” | Change to Catalogue of Nautical Products | Applied |
| DCEG | rmm | 5 |  | te | Various attributes with multiplicity 0,1 are also labelled “ordered,” but order is irrelevant unless the upper bound is unbounded (..\*) or greater than 1 AND the order is significant for some reason. | Delete “(ordered)” for all attributes with multiplicity upper bound = 1. | Applied |
| DCEG | rmm | 5ff. |  | ge | The DCEG from clause 5 onwards is clearly a work in progress, so this comment is just a reminder to ensure that it gets reviewed in a future draft. | N/A | Applied |
| DCEG | PRIMAR | 5. Geo Features | All features | ed | In all the tables the headline S-10x Attribute is used. | Update headlines to S-128 Attribute. | Applied |
| DCEG | PRIMAR | 5.2 additional mark, 5.5 Area of Fog, 5.6 Area of Gales 8 Beaufort or more), 6.1 Dew-Point Temperature |  | ed | Although these attributes are described they are not defined used by any of the features described in DCEG. | Consider remove them? | Applied |
| DCEG | PRIMAR | Application Schema vs DCEG |  | ed | When comparing the application schema and DCEG, there seems to be more defined in the application schema then what is included in DCEG.  E.g. Figure 6-3 in main document describes 14 complex attribute types, only 7 are registered in the DCEG. | Align DCEG with application schema. | Applied |
|  |  |  |  |  |  |  |  |
| AppE  PS | rmm | 6.2 (PS);  3.2 (App. E) | Figures 6-2 - 6-4 (PS);  AppE Checks 124, 125, 126, 136, 137, 138 | te | Fixed and periodic date range attributes don’t appear to be used in S-128. However some products (e.g., ice charts) are seasonal, there will be seasonal services, and there will be cases where a product is released for the first time after a specified data. | Add fixed and periodic date range attributes to application schema class CatalogueElements, or delete checks for unused attributes. |  |
|  |  |  |  |  |  |  |  |
| All | rmm |  |  | te | Proper definitions of S-128-specific classes and attributes don’t appear to have been provided anywhere, except that the second bulleted list in the PS clause 6.2 defines the three non-abstract classes. | Define all classes, attributes, associations, and roles somewhere. Definitions should definitely be included in the feature catalogue and DCEG. | Applied |
| All | UK HO | l |  | ge | No definitions of terms contained with document. |  | Applied |