

S-101 DATA CLASSIFICATION AND ENCODING GUIDE

ISSUES TO RAISE WITH TAMAD AND OTHER FORA

GENERAL:

- Is TSMAD happy to retain the “strength of wording” as used in S-57 Appendix B.1 – Annex A (i.e. “must”, “should” and “may”)?
- How would TSMAD like the document to be ordered? It is currently in INT1 (US Chart 1) order, which is similar to the order used for S-57 Appendix B.1 – Annex A, which is S-4 order. Are there other preferences? IEHG is different again – it may be worth looking at that order.
- Maintenance: S-101 (draft version from TSMAD18) did not include a section for maintenance of the PS (according to Clause 1.2 it will be an Annex to the PS). Is Appendix A going to be maintained as a separate document or as part of the maintenance of S-101 as a whole?
- Based on the answer to the question above, a statement similar to S-57 UOC 1.1 Para 3 may need to be included in the document?
- Is it required to include the camelCase in the feature descriptions?
- References to IHO Dictionary in definitions have been amended to “IHO Dictionary – S-32, **Edition 5**” to conform to IHO standard wording.
- Definitions: Where a definition is attributed to a Hydrographic Office or other government institution, should we be looking for a more authoritative definition (if one exists) e.g. from DGIWG FDD?
- Language: What English language version is to be used for the document? The draft uses English (Australian). This will impact on some spelling e.g. metre/meter.
- Attributes such as CONVIS have a “default state” where if the attribute is not present, it is assumed that the feature has no relevance to the mariner in terms of that attribute. That being so, suggest that the “default state”, such as “not visually conspicuous”, not be allowable in ENC unless the attribute is mandatory or TSMAD consider that in certain cases the enumerate may be required.
- “display scale” has been replaced with “optimum display scale [for the/of the] ENC data” throughout the document. Is this OK, or are there other suggestions?
- INT1 references: Hans has suggested that the INT1 references could be included with the graphic for the paper chart symbol in the Table. Will need further investigation/discussion.
- Hans has suggested that examples of attribute encoding should not be included in the “Allowable Encoding Value” column of the Tables. Requires explanation and discussion.

FEATURES:

AIRARE:

- Suggest amended definition for **AIRARE**, as adapted from DGIWG FDD. (Register).
- Aeroplanes or airplanes?

BERTHS:

- Maximum draft at berth is currently encoded in INFORM. Suggest that maximum draft be an attribute combined as a sub-attribute with DRVAL1 to form a complex attribute?

BRIDGE:

- Definition for **BRIDGE** has been changed slightly to agree with current definition in S-32 (544(2)). Or is the “to carry utility services” part important? If so need to suggest a change to the S-32 definition. (HDWG/Register).
- Suggest pipe, overhead be added to list of Distinctions. (Register).
- INT1 references have been abbreviated to “D 20-24” as the existing list is all inclusive. (Register)

BUAARE:

- Suggest amended definition for **BUAARE**, as taken from DGIWG FDD. (Register).
- Suggest landmark and railway be added to list of Distinctions. (Register).

BUISGL:

- Definition for **BUISGL** has been changed to agree with current definition in DGIWG FDD. (Register).
- Suggest INT1 – D8 (Ruins) be added to list of INT1 references. (Register).
- Suggest INT1 – D28-30.1 be removed from list of INT1 references. (Register).
- Suggest B-375.1,2 and B-487.3 be removed from list of S-4 references. (Register).
- Suggest silo and tank be added to list of Distinctions. (Register).
- Why can't a **BUISGL** area or point sit on a **SLCONS** area (WATLEV = 2) which is covered by **UNSAARE** or **DEPAARE**? (S-58 Check 54).

CBLARE:

- Definition of **CBLARE** has been amended to the S-32 definition. (Register).

CBLOHD:

- Suggest removing "An overhead cable is" from definition for **CBLOHD**. Also, is AHS a sufficient authority for this definition; there is a definition in DGIWG FDD for "cable overhead"? (Register).
- The question in the AHO has been asked as to whether populating VERCLR when the safe vertical clearance (for power or transmission cables) is unknown, as the mariner may misinterpret VERCLR for VERCSEA. AU policy is to populate VERCSEA with an empty (null) value for power and transmission cables where safe vertical clearance is not known.

COALNE:

- The method for encoding mangroves needs to be addressed to be consistent with S-4 B-312.4.
- Distinctions: Are canal bank, lake shore and river bank still considered to be distinctions if they are prohibited for ENC?

CONVYR:

- The DGIWG FDD definition has been substituted for **CONVYR** in lieu of the current non-authorised S-57 definition. This definition appears to be a bit narrower than the S-57 definition, but seems to satisfy the two values for CATCON. Is TSMAD happy with this change? (Register).

CONZNE:

- What is the point of having STATUS as an allowable attribute for **CONZNE**?
- It looks like the word "shelf" is missing from the distinctions (continental shelf zone). (Register).

CRANES:

- How does the ECDIS user know that the lifting capacity is in tonnes? Is this an issue?

CTRPNT:

- Are all values for attribute CATCTR required for ENC? Issue for Feature Catalogue.
- Distinctions have been added – these require review.

DEPAARE:

- The sub-section "Bathymetry in areas of minimal depiction of detail on paper charts" needs to be revised to reflect discussions from TSMAD meetings.

DISMAR:

- Suggest a new attribute (DISTCE?) to encode the value of the distance. Perhaps a complex attribute also containing the unit of measurement?

DRGARE:

- Suggest a new attribute to encode the date of dredging (DRGDAT?).

DRYDOC:

- Maximum draft at dock is currently encoded in INFORM. Suggest that maximum draft be an attribute combined as a sub-attribute with DRVAL1 to form a complex attribute?

DYKCON:

- Why is CONVIS not an allowable attribute for this feature?

FLODOC:

- Is **FLODOC** going to be a Group 1 feature in S-101? If so, then DATEND and DATSTA should be removed from the allowable attribute list.
- The implementation of ENC Encoding Bulletin needs to be looked at. It doesn't look like it will work properly.
- Maximum draft at dock is currently encoded in INFORM. Suggest that maximum draft be an attribute combined as a sub-attribute with DRVAL1 to form a complex attribute?

FNCLNE:

- Existing S-57 definition includes the words "natural or man-made". Current DGIWG definitions for both fence and wall only state man-made. Suggest the "natural or" be removed from the definition, or is there a situation where such a natural feature would be encoded as **FNCLNE**?

FRPARE:

- What is the point of having STATUS as an allowable attribute for **FRPARE**?

FSHZNE:

- What is the point of having STATUS as an allowable attribute for **FSHZNE**?
- If a fishery zone is encoded as an area, why does the distance of the associated limit have to be encoded in INFORM?

LAKARE:

- Suggest removing lake shore from Distinctions (not allowed for ENC) (Register).

LIGHTS:

- Complex Attribute: Suggest SECTR1 and SECTR2 can be sub-attributes of a complex attribute SECTOR. Would it be possible to have multiple instances of SECTOR for a single light, so that multiple lights do not need to be encoded? Need discussion.
- Clause "Unwatched lights". Isn't this up to the HO? Suggest removing this clause.

LNDARE:

- Suggest moving this to section 6.2 (Natural Features).

LNDELV:

- Suggest adding S-4 – B-352 (Relief: Spot Heights) to references.

LNDMRK:

- There is a disparity between the S-32 definition and the S-57 definition (adapted from S-32) for landmark. Suggest S-32 definition be amended as the S-57 definition is better suited to hydrography? (HDWG).

- Suggest removing INT1 D 5-6 and 13 and inserting D 8; removing E 10.1-22 and inserting E 10.2-10.4; 20; amending to E 22-31 (all inclusive) for INT1 references for **LNDMRK**.

LOCMAG:

- Minor change to definition of Local Magnetic Anomaly to agree with S-32. (Register).
- Complex Attribute: Suggest VALLMA can be a complex attribute with sub-attributes VALPOS and VALNEG to populate the range of magnetic anomaly. This would remove the requirement to populate INFORM (or an information object).
- Heading in body of text changed to Local magnetic **anomaly**.

MAGVAR:

- Definition for Magnetic variation amended to be derived from S-32 (Register).
- Complex Attribute: Suggest that VALACM and VALMAG can be combined as sub-attributes to a complex attribute to define the overall magnetic variation at a specific date (perhaps this can be combined with RYRMGV at some stage to internally calculate the actual magnetic variation for the displayed ECDIS date?).
- INT1 references for magnetic variation amended (Register). Will need to be reviewed and confirmed.
- S-4 references for magnetic variation amended (Register). Will need to be reviewed and confirmed.

NAVLNE:

- Definition for Navigation line amended to remove the "A navigation line is" bit.
- Request a definition be included in S-32 for Navigation line. (HDWG).
- What does "legend as shown on the source" mean for INFORM? There should be an example here.

PINGOS:

- "Unexcluded" (see Extension 6/01). CATSLO = 5 (pingo) removed from **SLOGRD** and **SLOTOP**. Are there any additional words to add for this feature?
- The original deleted S-57 object contained the attribute QUAVEM, which has been deleted from S-57, and therefore is not currently in the S-100 Register. S it required to have this attribute re-proposed?

PIPOHD:

- Suggest S-57 definition of overhead pipeline be included in S-32.

PONTON:

- Is **PONTON** going to be a Group 1 feature in S-101? If so, then DATEND, DATSTA PEREND and PERSTA should be removed from the allowable attribute list.
- The implementation of ENC Encoding Bulletin No. 11 needs to be looked at. It doesn't look like it will work properly.

PYLONS:

- Suggest S-57 definition of pylon/bridge support be included in S-32. (HDWG)
- Suggest adding landmark as a distinction for **PYLONS**. (Register).

RAILWY:

- Definition for **RAILWY** has been changed to agree with current definition in DGIWG FDD. (Register).
- Suggest adding B-328.4 to S-4 references (as listed in Object catalogue). (Register).

RAPIDS:

- Is this required for S-101 ENCs? AU has tidal rapids on the north-west coast (**check if these are encoded**), but does anyone else use this feature?
- If the answer to the above is yes, consider excluding Point as a valid primitive for rapids in S-101 ENCs, as it does not symbolise in ECDIS (ENC EB 29 refers).

ROADWY:

- Suggest removing “A road is” from the start of the definition for road. (Register).
- Is square a valid distinction for ENC, given that it is prohibited? (Register).

RUNWAY:

- Suggest amending “airport area” to “airport/airfield”, and adding seaplane landing area, in distinctions.

SBDARE:

- Consider adding K16 to list of INT1 references (as mentioned in paragraph (c)).

SEAARE:

- Suggest STATUS be added as an allowable attribute for **SEAARE** to allow for buoyed (STATUS = 19) (marked by buoys) areas of navigable lakes and rivers, where the positions of the buoys are not known, to be encoded.

SLOGRD:

- Non-display of most **SLOGRD** areas unless CONRAD = 1 needs to be further discussed. What about a large visually conspicuous hill or sand dune? [DIPWG discussion.]
- Suggest all values of CONRAD except CONRAD = 1 be excluded from the allowable enumerate list for **SLOGRD**.
- Suggest INT1 – F1 be removed from list of references. This reference is more appropriate for **DYKCON**.

SLOTOP:

- Suggest all values of CONRAD except CONRAD = 1 be excluded from the allowable enumerate list for **SLOTOP**.
- Do we have to restrict the use of **SLOTOP** to on the land only? What if a HO considers it important to encode an ocean cliff (that cannot be represented in the depth contour range) on its ENCs?

SOUNDG:

- Definition in S-57 is a derivative from S-32 and has been adapted to suit nautical charting. Is this definition too narrow for other hydrographic applications? [Refer HDWG discussions February 2010 and CSPCWG discussions mentioned in this discussion].
- The EXPSOU = 2 issue for soundings needs to be sorted out in regards to the way it is implemented in the ECDIS.

SWPARE:

- Suggest a new attribute to encode the date of sweeping (SWPDAT?).

TIDEWY:

- There are two definitions for Tideway in S-57, one being the S-32 definition and the other being a slightly more specific definition with no stated authority. Does this need to be addressed with HDWG?
- Suggest adding S-4 – B-413.3 as a reference in the feature title.

TNLENT:

- This feature was made obsolete for S-57. Perhaps there is a reason to re-activate this feature in S-100/101 given the new approved symbology for paper charts for tunnel entrances? (Register).

TOPMRK:

- Complex Attribute: This feature should be a complex attribute of **BCN*****, **BOY***** and **DAYMAR** (at least), with COLOUR and TOPSHP as sub-attributes..

TS_PAD:

- Suggest adding tidal stream (flood/ebb) to distinctions.

TS_PRH:

- Suggest adding tidal stream (flood/ebb) to distinctions.

TS_PNH:

- Suggest adding tidal stream (flood/ebb) to distinctions.

TS_TIS:

- Suggest adding tidal stream (flood/ebb) to distinctions.

TUNNEL:

- Suggest adding definition of tunnel to S-32. Definition in DGIWG FDD is too restrictive. Alternatively, suggest amendment to DGIWG definition for purposes of interoperability. (HDWG/DGIWG/Register).

VEGATN:

- Suggest amended definition for Vegetation, as adapted from DGIWG FDD. (Register).
- Consider excluding CATVEG = 1, 10, 11, 12 as allowable values for **VEGATN** in S-101 ENC's, as they do not symbolise in ECDIS (ENC EB 29 refers).
- The way that mangroves are encoded in intertidal areas (particularly the seaward edge) needs to be determined (refer revised S-4 guidance at B-312.4).

WATFAL:

- Suggest amended definition for waterfall, as taken from DGIWG FDD (Register).
- Consider excluding Point as a valid primitive for rapids in S-101 ENC's, as it does not symbolise in ECDIS (ENC EB 29 refers).

ATTRIBUTES:

BCNSHP:

- Suggest definition for BCNSHP = 1 (stake, pole, perch, post) be amended slightly to improve syntax (as a result of MD8 – 7.Cl.12 and 7.Co.12). (Register).

CATBRG:

- Definition for CATBRG = 4 (lifting bridge) contains the words “(or span thereof)” which is not in the S-32 definition. This needs to be resolved with S-32. (HDWG/Register).
- Definition for CATBRG = 5 (bascul bridge) missing “bridge” at end of definition. (Register).
- Suggest amended definition for CATBRG = 8 (transporter bridge), as taken from DGIWG FDD. (Register).

CATBUA:

- Suggest amended definition for CATBUA = 2 (settlement), as taken from DGIWG FDD. (Register).
- Suggest amended definition for CATBUA = 3 (village), as taken from DGIWG FDD. (Register).
- Suggest amended definition for CATBUA = 4 (town), as taken from DGIWG FDD. (Register).
- S-57 definition for CATBUA = 5 (city) is the same as DGIWG FDD definition. Suggest add DGIWG FDD as authority. (Register).
- Suggest amended definition for CATBUA = 6 (holiday village), as taken from DGIWG FDD. (Register).

CATCBL:

- Suggest amended definition for CATCBL = 1 (power line), as taken from DGIWG FDD. (Register).
- Although the S-57 definition for CATCBL = 3 (transmission line) is not authorised, it is more appropriate (i.e. provides a better distinction from power line) than the DGIWG definition. Is TSMAD happy to retain this unauthorised definition (bearing in mind that the current S-57 definition may not be totally appropriate for **CBLSUB**)?
- Suggest amended definition for CATCBL = 4 (telephone), as taken from DGIWG FDD. (Register).
- Suggest amended definition for CATCBL = 5 (telegraph), as taken from DGIWG FDD. (Register).
- Although the S-57 definition for CATCBL = 6 (mooring cable/chain) is not authorised, it is more appropriate (i.e. is not restrictive to mooring of vessels) than the DGIWG definition. Is TSMAD happy to retain this unauthorised definition?

CATCON:

- Suggest amended definition for CATCON = 1 (aerial cableway (telepheric)), as taken from DGIWG FDD. (Register).

CATCOA:

- All definitions in CATCOA will need to be checked once CSPCWG have completed their review of S-4 section B-300.
- Mangrove: Does this enumerate for CATCOA belong here? Should it be re-named “mangrove seaward edge” or similar (and is this therefore really a type of “coastline”)? This needs to be considered in line with the revised S-4 guidelines for the depiction of mangroves on paper charts (B-312.4). Suggest that the seaward edge of a mangrove area can be encoded as a **VEGATN** line perhaps? Or the ECDIS symbology simply depicts the edge of a **VEGATN** area with the appropriate symbol?
- Marshy shore: As for mangrove above in regards to its relevance to coastline.
- There is a definition for marsh in S-32 but the definition in S-57 has been adapted from the definition for swamp. Options include changing the definition to be consistent with the S-32 definition of marsh or amending the enumerate value to “swampy shore” (S-4 and INT1 implications).
- Definition for ice coast has had abbreviation “m” expanded to “metres” for consistency. (Register). Also, there is no reference for this definition – where did it come from?
- S-57 definition for shelly shore does not include a reference for the definition. Have included reference to S-32 to be consistent with sandy, stony and shingly shore.
- INT1 Reference: There was no reference for glacier seaward edge or ice coast in S-57. Have added C-25 (glacier) to the reference. (Register).
- S-4 Reference: As for INT1 Reference above – have included B-353.8.

CATCTR:

- Minor change to definition for Triangulation Point to agree with S-32 (Register).
- Source for definition of Boundary Mark amended to DGIWG FDD (Register).

CATFNC:

- Suggest amended definition for CATFNC = 1 (fence), as taken from current Version of DGIWG FDD (previous definition superseded). (Register).
- Suggest amended definition for CATFNC = 4 (wall), as taken from current Version of DGIWG FDD (previous definition superseded). (Register).

CATLMK:

- Suggest amended definition for CATLMK = 2 (cemetery), as taken from DGIWG FDD. (Register).
- Suggest amended definition for CATLMK = 3 (chimney), as taken from current Version of DGIWG FDD (current S-57 definition superseded). (Register).
- Suggest amended definition for CATLMK = 5 (flagstaff (flagpole)), as taken from current Version of DGIWG FDD (current S-57 definition superseded). (Register).

- Should S-32 definition for flare stack be expanded to include the additional S-4 wording? (HDWG).
- There is no definition for mast (as in on land or on a vessel) in S-32. Is one required? (HDWG).
- Suggest amended definition for CATLMK = 9 (monument), as taken from current Version of DGIWG FDD. Note that this definition is based on the DFDD definition for memorial monument – the DFDD definition for monument is much broader, and may be too broad for hydrographic applications? May need further discussion. (Register).
- Suggest amended definition for CATLMK = 13 (statue), as taken from DGIWG FDD. (Register).
- Suggest amended definition for CATLMK = 17 (tower), as taken from current Version of DGIWG FDD (current S-57 definition superseded). (Register).
- Suggest amended definition for CATLMK = 18 (windmill), as taken from current Version of DGIWG FDD (current S-57 definition superseded). (Register).
- Suggest amended definition for CATLMK = 19 (windmotor), as taken from DGIWG FDD. (Register).
- Definition for CATLMK = 21 (large rock or boulder on land) amended to include S-32 number (4415), and “Adapted from” to indicate that the definition is not a direct translation from S-32.

CATLND:

- Incorrect S-32 reference for CATLND = 3 (moor/bog) – amended to entry 502. (Register).
- Suggest amended definition for CATLND = 9 (agricultural land), as taken from DGIWG FDD. (Register).
- Suggest amended definition for CATLND = 10 (savanna/grassland), as taken from DGIWG FDD. Note that this is a combination of the individual definitions for savanna and grassland. (Register).
- S-57 definition for CATLND = 18 (cave) is no longer valid in the DGIWG FDD. Slightly amended version taken from Merriam-Webster On-line Dictionary. (Register).
- **Suggest a new value for CATLND (blowhole) be proposed for the Hydro Register.**

CATNAV:

- Request a definition be included for CATNAV = 2 (transit line) in S-32. (HDWG).

CATOBS:

- AU Proposal: Insert new value for CATOBS = Artificial Reef.

CATPIP:

- Current S-57 definition for CATPIP = 2 (outfall pipe) agrees with DGIWG definition. Add DGIWG FDD as authority for the definition or add to S-32? (Register/HDWG).
- Definition for CATPIP = 3 (intake pipe) is not the same as the S-32 definition (intake – 2468). Suggest adding “Adapted from” to definition. (Register).
- Current S-57 definition for CATPIP = 4 (sewer) agrees with DGIWG definition. Add DGIWG FDD as authority for the definition or add to S-32? (Register/HDWG).
- Suggest amended definition for CATPIP = 6 (supply pipe), as taken from DGIWG FDD. Note this is only a minor variation from the current S-57 definition. (Register).

CATPYL:

- Definition for CATPYL = 1 (power transmission pylon/pole) amended to the current DGIWG FDD definition. (Register).
- Definition for CATPYL = 2 (telephone/telegraph pylon/pole) amended to the current DGIWG FDD definition (previous definition for telephone-telegraph pylon/pole superseded). (Register).
- Could not find definition for CATPYL = 3 (aerial cableway/sky pylon) in DGIWG FDD 2.1 that looks like it has been adapted to the S-57 definition. Closest was “A pylon supporting an aerial cable” for Aerial Cable Pylon. Have left it at the FDD 1.2 definition. Is TSMAD happy with this?

- Definition for CATPYL = 4 (bridge tower/pylon) amended to the current DGIWG FDD definition. (Register).
- Definition for CATPYL = 5 (bridge pier) amended to the current DGIWG FDD definition. (Register).

CATROD:

- Suggest amended definition for CATROD = 1 (motorway), as adapted from DGIWG FDD. (Register).
- Consider separating CATROD = 4 (track/path) into separate enumerates. Note that DGIWG FDD has an attribute "Thoroughfare Use Code" which has a code "TrackOrPath" which is identical (including definition) to CATROD = 4. (Register).
- Suggest attributing definitions for track and path in CATROD = 4 (track/path) to DGIWG FDD (see above bullet). (Register).
- Suggest CATROD = 7 (crossing) be deleted. (Feature Catalogue).
- Suggest adding D7 (street name) to INT1 references. (Register).

CATRUN:

- Suggest amending definition for CATRUN = 1 (aeroplane runway), as taken from S-32. (Register).

CATSIL:

- Suggest amended definition for CATSIL = 1 (silo), as taken from DGIWG FDD. (Register).

CATSLO:

- Suggest amended definition for CATSLO = 2 (embankment), as taken from DGIWG FDD. (Register).
- Suggest amended definition for CATSLO = 7 (scree), as taken from S-32. (Register).

CATVEG:

- Suggest amended definition for CATVEG = 13 (tree in general), as taken from DGIWG FDD. (Register).
- Suggest amended definition for CATVEG = 14 (evergreen tree), as taken from DGIWG FDD. (Register).
- Suggest amended definition for CATVEG = 20 (deciduous tree), as taken from DGIWG FDD. (Register).
- Suggest amended definition for CATVEG = 21 (filao tree), as taken from DGIWG FDD. (Register).

CATWED:

- Minor editorial changes to definitions of kelp and sea grass. (Register).

COLOUR:

- Complex Attribute: Can COLOUR and COLPAT be combined into a complex attribute?

COLPAT:

- Complex Attribute: Can COLOUR and COLPAT be combined into a complex attribute?
- With COLPAT being mandatory where COLOUR has more than 1 value, COLPAT has been made allowable for many features where the enumerate values just don't make sense (e.g. **BRIDGE**, **CONVYR**). Can the entire enumerate list be prohibited, and instruction inserted in the guide to populate the attribute with an empty (null) value? Another alternative would be to make COLPAT non-mandatory where colour has more than one value in certain circumstances.

CONDTN:

- Suggest amended definition for CONDTN = 1 (under construction), as adapted from DGIWG FDD. (Register).

- No comparable definition for CONDTN = 4 (wingless). Suggest add “vanes or” to current S-57 definition if it is to be retained to be consistent with windmill definition. Should this definition be proposed for DGIWG FDD? (DGIWG FDD).
- Suggest amended definition for CONDTN = 5 (planned construction), as taken from DGIWG FDD. (Register).

FUNCTN:

- Suggest amended definition for FUNCTN = 3 (custom office), as taken from DGIWG FDD. (Register).
- Suggest amended definition for FUNCTN = 9 (police station), as taken from DGIWG FDD. (Register).
- S-57 definition for FUNCTN = 10 (water-police station) is the same as DGIWG FDD definition. Suggest add DGIWG FDD as authority. (Register).
- Suggest amended definition for FUNCTN = 19 (educational facility), as taken from DGIWG FDD. (Register).
- Suggest amended definition for FUNCTN = 30 (television), as taken from DGIWG FDD. (Register).
- Suggest amended definition for FUNCTN = 31 (radio), as taken from DGIWG FDD. (Register).
- Incorrect S-32 reference for FUNCTN = 32 (radar). Amend reference to 4133. (Register).
- Suggest amended definition for FUNCTN = 33 (light support), as taken from DGIWG FDD. (Register).
- Suggest amended definition for FUNCTN = 35 (cooling), as taken from DGIWG FDD. (Register).
- Incorrect S-32 reference for FUNCTN = 36 (observation). Amend reference to 3500. (Register).
- S-57 definition for FUNCTN = 37 (time ball) has been taken from S-32 (5536). Add S-32 reference to definition. (Register).
- Current S-57 definition for FUNCTN = 38 (clock) is adapted from S-32 5536 (time ball), but clock is a defined word in the Dictionary. Suggest use S-32 833 (clock) definition. (Register).
- Suggest amended definition for FUNCTN = 39 (control), as taken from current Version of DGIWG FDD (current S-57 definition superseded). (Register).
- Suggest amended definition for FUNCTN = 40 (airship mooring), as taken from current Version of DGIWG FDD (current S-57 definition superseded). (Register).
- Suggest amended definition for FUNCTN = 41 (stadium), as taken from DGIWG FDD. (Register).
- Suggest amended definition for FUNCTN = 42 (bus station), as taken from DGIWG FDD. (Register).
- Suggest definition for FUNCTN = 43 (passenger terminal building), as taken from DGIWG FDD. (Register).
- Suggest definition for FUNCTN = 44 (sea rescue control), as taken from DGIWG FDD. (Register).
- Suggest definition for FUNCTN = 45 (observatory), as taken from DGIWG FDD. (Register).
- Time ball (FUNCTN): Enumerate is “Timeball” and definition is “Time ball”. Which is correct? (suggest “Time ball”).

HEIGHT:

- The S-32 and S-57 definitions for height, as applied in hydrography, need to be reviewed and aligned. (HDWH/Register).

NATCON:

- Suggest amended definition for NATCON = 1 (masonry), as adapted from DGIWG FDD. (Register).

PRODCT:

- Current spelling for PRODC = 18 and 19 is “liquified”. All other sources investigated indicate spelling should be “liquefied”. Suggest amend spelling accordingly. (Register).
- Suggest amended definition for FUNCTN = 18 (liquified natural gas (LNG)), as taken from DGIWG FDD. (Register).

SIGGEN:

- Suggest use text in Remarks for a definition of SIGGEN. (Register).

STATUS:

- Suggest amended definition for STATUS = 4 (not in use), as adapted from DGIWG FDD. (Register).
- Suggest amended definition for STATUS = 8 (private), as taken from DGIWG FDD. (Register).
- Request a definition be included in S-32 for STATUS = 12 (illuminated). (HDWG).
- Suggest amended definition for STATUS = 18 (existence doubtful), as taken from DGIWG FDD. (Register).
- Request a definition be included in S-32 for STATUS = 19 (buoyed). (HDWG).

TOPSHP:

- Suggest amended definition for TOPSHP = 4 (2 spheres). Current definition is not a definition as it is. Also may need to have an authorised definition (S-32?). (Register).
- Suggest amended definition for TOPSHP = 9 (cube, point up) to combine the definition of cube with cube, point up. (Register).
- Suggest adding definition for TOPSHP = 13 (2 cones, points up) and 14 (2 cones, points down). (Register).
- Suggest amended definition for TOPSHP = 15 (besom, point up) and 16 (besom, point down) to include description of what “point up) and “point down” means. (Register).

VERCCL:

- Suggest adding “horizontal” in relation to the plane of reference from which VERCCL is measured.
- DGIWG FDD has used the S-57 definition for this attribute to define vertical clearance, closed. Suggest this definition be included in S-32. (HDWG).

VERCLR:

- Suggest adding “horizontal” in relation to the plane of reference from which VERCLR is measured.
- Suggest S-57 definition be included in S-32. (HDWG).

VERCOP:

- Suggest adding “horizontal” in relation to the plane of reference from which VERCOP is measured.
- DGIWG FDD has used the S-57 definition for this attribute to define vertical clearance, open. Suggest this definition be included in S-32. (HDWG).

VERCSA:

- Suggest adding “horizontal” in relation to the plane of reference from which VERCSA is measured.
- DGIWG FDD has used the S-57 definition for this attribute to define vertical clearance, safe. Suggest this definition be included in S-32. (HDWG).

VERDAT:

- For VERDAT = 30 (Highest astronomical tide (HAT)), the abbreviation is included in the enumerate value. This is inconsistent with other values. Suggest (HAT) be removed. (Register).