S-100TSM10-8.2a

Comments – Governance of Catalogue Distribution

Submitted by: Portolan Sciences LLC

Executive Summary: Comments on catalogue governance

Related Documents: S100WG8-6.19 (TSM10-8.2)

Related Projects: --

Comments

1) Feature, portrayal, and interoperability catalogues are different species in spite of all being called "catalogues":

- a) The feature catalogue (FC) is an integral part of a Product Specifications and is developed as part of the development or revision of the Product Specification. Several other components of the Product Specification package depend on it. Except for corrections of typographic errors and the like, a revision of the feature catalogue is implicitly a revision of the Product Specification. Also, there is no executable code in an FC.
- b) A Product Specification need not include a portrayal catalogue (PC). It is also possible for multiple portrayal catalogues to exist for the same Product Specification. A PC revision affects only the portrayal section of the Product Specification, and that only if this section specifically describes portrayal rules or symbology.
- c) An "Interoperability Catalogue" (IC) does not represent any geographic or information domain, but is rather a method of harmonizing the presentation of disparate product types to human users of ECDIS. Interoperability functionality is where disparate application schemas can be reconciled for end-user presentation. A revision to an IC does not affect any part of the Product Specifications for its covered products.
- 2) Changes to FC, PC, and IC therefore have very different impacts on Product Specifications.
- 3) However and in whatever order DCEG and FC are constructed, automated means of ensuring their validity compared to the IHO GI Registry already exist as part of the IHO toolkit.
 - a) A Feature Catalogue can be constructed using the IHO FC Builder. If externally constructed, it can be automatically checked.
 - b) DCEG tables can be generated from an FC using tool support (e.g., the IHO DCEG builder).
 - c) Neither FC Builder nor DCEG builder was operational while early Product Specifications were being developed. S-100 level validation tests are also still under development. In short, early editions of Product Specifications were and are being developed without adequate tool support or well-defined checks.
 - d) When the tools and checks are mature they can be used or applied by the project team as easily as by an external review group.
- 4) Validation against the GI registry is part of the process of developing the Product Specification. It is the responsibility of the project team. An external body of independent experts is not needed for this.
- 5) Other types of validation of product specification components against S-100 schemas, using S-100 validation checks (when those are finalized), security evaluation, etc., can and should also be carried out by the project team.
- 6) OEMs, RENCs, and industry representatives are welcome to participate in project teams, and supply validate, evaluate security, contribute feedback, suggest modifications, etc., while a Product Specification is being developed or revised. Project teams also consider input from non-member stakeholders while the Product Specification is being developed or revised.
- 7) Early inputs to development require less rework and are therefore preferable to late input. A second stage of review after a new edition or revision of the Product Specification is developed by the project team will unduly prolong the development process for a new edition or revision because finished work would have to be redone and discussions reopened.
- 8) OEMs, RENCs, industry representatives, and other stakeholders should contribute, validate components, review for security, etc., while the project team is working on the Product Specification. Adding a post-development review stage encourages non-participation in the initial development process.

- 9) Edition 1.x versions of Product Specifications are intended for testing and not operational implementation. This is when stakeholders who have not participated in the initial development process can still provide feedback to the responsible working groups.
- 10) Gaps in current guidelines (such as security-related guidelines) should be filled by developing the necessary guidelines as part of a new edition of S-97.
- 11) New tool support, or maturation of existing tool support, should be developed and contributed by Hydrographic Offices or by contract, after developing requirements in consultation with other Working Groups.

Summary

- 1. Focusing on guidelines, checklists, and tool support for use by project teams working on Product Specifications will be more effective than adding a secondary review process.
- 2. Adding a second review stage will prolong the development and revision of Product Specifications. It has the potential of delaying Phase 1 implementation of S-100.
- 3. The tasks recommended in the cited paper for the secondary review stage should be carried out while the Product Specification is under development or revision by the project team and as part of the project team's work.
- 4. Phase 1 Product Specifications are all in Phase 1.x at this time and are therefore still open for feedback from all stakeholders.
- 5. Participation by OEMs, RENCs, industry, etc., in the early stages of development should be encouraged. Providing a special and separate review stage acts against participation in project teams.
- 6. Feature, portrayal, and interoperability catalogues are different species and have different impacts in relation to Product Specifications. The same governance processes will not work for all three.