



# **S100WG5 Papers 4.15**

## Validation Checks for GML and HDF5 Data Formats

**S-100 WG5 3-6 March 2020**  
**4.15 A/B/C**

S100WG5 – Taunton, England, 3-6 March 2020



# OVERVIEW

- Outline of a specification of generic validation checks for S-100 GML and HDF5 data formats.
  - Specification will be defined at the “S-100 level”.
  - Whether the specification will be a new S-100 Part or sub-Part, an Annex to Part 10, or a separate document (like S-58 is for ENC checks) is TBD at this point.
- The submission includes illustrative examples of HDF5 and GML checks.
  - The S-111 checks incorporate feedback from the S-111 project team & developers & should be in the next S-111 draft.
  - The S-127 checks are from the S-127 1.0.0 package reviewed by NIPWG.
- Individual Product Specifications are expected to include and extend the core sets of checks as appropriate.



## DOCUMENTARY COMPONENTS

- Derived from S-58 (S-57 ENC validation checks), with extensions for S-100 GML and HDF5 data formats.
- The main components of the planned specification are:
  - A “core specification” for validation, describing:
    - Check classification(s): e.g., critical/error/warning.
    - Description of check syntax.
    - Check application (e.g., base/update datasets – for GML in particular).
    - Operators (comparison, logical, and spatial).
    - Check processing flow (for HDF5 in particular, requested by the S-111 project team & developers).
  - Generic checks for the S-100 Part 10c HDF5 data format.
  - Generic checks for the S-100 Part 10b GML data format.
- Individual Product Specifications are expected to extend the core specification and generic validation checks as needed.



IHO

## ACTIONS REQUESTED

- 1) Endorse the development of generalized validation checks for the S-100 GML and HDF5 formats as described in this paper and the accompanying Annexes.
- 2) Subject to item (1), advise on any special requirements for other product specifications.
- 3) Additional action as appropriate.