

MSP Output Sea Use data validation and upload to BASEMAPS

Andžej Miloš HELCOM Secretariat MSP Data Expert Sub-Group 12th meeting Warsaw, 3rd of October 2019

Data validation rules

File validation for Shapefile(s)

- 1 Data should be in ZIP archive.
- 2 Valid ZIP archive content. What is checked:
 - valid ESRI Shapefile(s). Required are files with extensions: "shp", "shx", "dbf".
 - allowed files with extensions: "sbn", "sbx", "fbn", "fbx", "ain", "aih", "atx", "ixs", "mxs", "prj", "xml", "cpg".
 - files should be placed in one file hierarchy level (no folders and sub-folders allowed within ZIP archive)

Service validation for WFS

- 1 It should be possible to open and read WFS.
- 2 WFS feature types should be valid.

Data validation rules

Dataset validation

- 3 Spatial reference should be defined.
- 4 Dataset should be with polygon geometry.
- 5 "priority", "reserved", "allowed", "restricted", "forbidden", "useDsc", "PlanID" fields should be present in the dataset.

Data validation rules

Feature validation

- 6 Empty geometries should not be included.
- 7 At least 1 of 5 fields ("priority", "reserved", "allowed", "restricted", "forbidden") should have a value.
- 8 "priority", "reserved", "allowed", "restricted", "forbidden" fields should have value(s) according SeaUse code list (multiple comma separated values are allowed).
- 9 If "forbidden" field has a value, then "priority", "reserved", "allowed", "restricted" fields should not have that value.
- 10 If "restricted" field has a value, then "priority", "reserved", "allowed", "forbidden" fields should not have that value.
- 11 "PlanID" field should have a value.

- msp_plan_id
- msp_use_dsc

Data validation

Results and discussion

ZIP archive or WFS should contain only Shapefiles or Feature Types with Sea Use data intended to upload to BASEMAPS.

- No MSP Area data or any other feature classes or tables.

ZIP archive with Shapefiles or WFS will be considered as valid only when all Shapefiles within that ZIP archive or all Feature Types within WFS are valid.

Shapefile validator is implemented and has been successfully tested in BASEMAPS by Latvia, Poland and Sweden.

WFS validator is under construction – looking for the best technical solution.

Data upload to BASEMAPS

For discussion

First time data upload and later updates.

Two upload options:

- Replace all country data
- Add new country data

Manual data validation and upload.

- Can be performed with Shapefiles and WFSes.
- For Shapefiles both "Replace all" and "Add new" options are possible.
- For WFSes "Replace all" option is possible.

Automatic scheduled validation and upload.

- Performed with WFSes only.
- Reporting validation and upload results to log file.
- Possible only "Replace all" option.

Country data backup before every upload. Possibility to restore after upload.

Summary

"priority", "reserved", "allowed", "restricted", "forbidden", "useDsc", "planId"

Only polygons in Basemaps Sea Use data. Point and lines are transformed to polygons. Buffer radius 500m.

ZIP and WFS can contain more than Sea Use data. Should be checked if dataset contains 7 attributes – then it is considered as Sea Use dataset.

Validation rule for spatial Sea Uses location. Bounding box around each country merged Plan Areas.

During upload use only "Replace All" option.

WFS version is 2.0.0 before we properly test WFS 3.0



Thank you.

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