# **OEO Developer Meeting #36**

## Pads:

- Notes from last meeting: <a href="https://etherpad.wikimedia.org/p/oeo-dev-35">https://etherpad.wikimedia.org/p/oeo-dev-35</a>
- Pad to this meeting: <a href="https://etherpad.wikimedia.org/p/oeo-dev-36">https://etherpad.wikimedia.org/p/oeo-dev-36</a>
- Pad for next meeting: <a href="https://etherpad.wikimedia.org/p/oeo-dev-37">https://etherpad.wikimedia.org/p/oeo-dev-37</a>

Date: 05.05.2022

# **Participants:**

• moderator: Eugenio

• main reporter: Mirjam

- · next meeting organiser: Lukas
- developers with affiliation:
  - Eugenio (DLR)
  - Mirjam (IEE)
  - Martin (OvGU)
  - Janna (OvGU)
  - Markus (OVGU)
  - Lukas (Öko)
  - Vera (IER) just for the first hour
  - Christoph (RLI)
  - Ludwig (RLI)
  - Carsten (DLR)
  - Adel (OvGU)

## **Preparation:**

- Read last protocol: <a href="https://github.com/OpenEnergyPlatform/ontology/wiki/OEO-developer-meetings">https://github.com/OpenEnergyPlatform/ontology/wiki/OEO-developer-meetings</a>
- Check issues for next release: https://github.com/OpenEnergyPlatform/ontology/milestones
- Load software (GitHub, git, Protégé, DFN)

# Agenda:

- Good practise: Please work quickly on a Pull Request!
  - There is many pull request open!
  - Problems during implementation should not be that common. Normal issues should be discussed during the issue.
  - Leave current PRs open for release
- Extending OEO with terms from the Climate Ontology [CHK]
  - <a href="https://mmisw.org/ont/cf/parameter">https://mmisw.org/ont/cf/parameter</a>
  - see Email by CHK and response from FN
  - Climate Ontology doesn't apply BFO --> we'd need to classify terms ourselves
  - · Brainstorm which terms to consider
  - Seperate dev-meeting?

- New issues related to terms will be opened
- Extending OEO with terms from statistics ontology (STATO) [CM]
  - <a href="http://stato-ontology.org/">http://stato-ontology.org/</a> (~900 classes / 70 properties)
  - STATO relies on BFO as top level ontology & OBI as mid level ontology
  - · whole vs subset?
    - whole is easy -> add import to oeo-shared
    - subset -> follow module extraction approach, terms for inclusion -> use robot to implement
    - robot -> with implementation any manual edits/changes of imported ontologies (mostly RO axioms&ranges[possible solution -> edit in oeo-shared]) are overwritten -> fix that before
    - · potential problem with ontology import: overlap of ontology definitions
      - · any content overlap with different definitions
      - do import whole or subset
      - new issue with a collection of terms from STATO [CM]
- Individuals without definition
  - https://github.com/OpenEnergyPlatform/ontology/issues/859
  - LH takes care of the issue
- "Please cite as" recommendation [LE]
  - https://github.com/OpenEnergyPlatform/ontology/issues/1095
  - use CITATION.cff
    - <a href="https://docs.github.com/en/repositories/managing-your-repositorys-settings-and-features/customizing-your-repository/about-citation-files">https://docs.github.com/en/repositories/managing-your-repositorys-settings-and-features/customizing-your-repository/about-citation-files</a>
    - <a href="https://github.com/citation-file-format/citation-file-format/blob/1.2.0/schema-guide.md">https://github.com/citation-file-format/citation-file-format/blob/1.2.0/schema-guide.md</a>
  - Options to cite the repository:
    - 1. Citing the paper
    - 2. Citing all authors (someone et.al)
    - 3. Citing the developer team (OEO-DEV)
  - Cite a class from the OEO:
    - URI <a href="https://obofoundry.org/docs/Citation.html">https://obofoundry.org/docs/Citation.html</a>
- · Update on automated annotation for module identification [AS, JH]
  - <a href="https://github.com/OpenEnergyPlatform/ontology/issues/870">https://github.com/OpenEnergyPlatform/ontology/issues/870</a> #870
  - Basically done, but 1 Problem spotted which can be solved
- inverses / "input of" / "output of" hurt monohierarchy [MR, JH]
  - core problemm: no relation that connects 2 processes exists
  - new RO relations need to be imported, manually or automaically?
  - Idea: MR imports manually, fixes several issues --> after release a proper RO module will be created
  - with respect to monohierarchy: can we remove "functionally related to" from the OEO
- `primary energy carrier disposition` [MS, LE] --> discuss again next meeting
  - https://github.com/OpenEnergyPlatform/ontology/issues/1032
  - Question: Are the following portions of matter "primary energy carriers"?
  - def: disposition of material entities that are extracted directly from natural resources or that are natural energy flows.
    - air --> add primary energy carrier dispositions
      - compressed air --> secondary energy carrier

- add a class "atmospheric air? air in natural environment? open air under atmospheric conditions"
  - *Def: xxx* is air that is in natural environment.?
- water body --> add primary energy carrier dispositions
- steam --> add secondary energy carrier dispositions
- nuclear fuel or
  - uranium --> primary energy carrier disposition
  - thorium --> primary energy carrier disposition
  - plutonium --> secondary energy carrier disposition
- can we find a more general solution than just introduce more subclasses?
- Restructure biofuel --> discuss next meeting
  - https://github.com/OpenEnergyPlatform/ontology/issues/872
  - · Definition of sustainable/sustainability is not yet resolved
- Compentency Questions as queries [EA]
  - Roughly related to: https://github.com/OpenEnergyPlatform/ontology/issues/492
  - How viable is test driven development in the context of the ontology?
  - theoretical steps:
    - Create an instance of a triplestore database like apache Jena
      - Alternatively using a neo4j graph with neosemantics but I haven't been successful in loading the ontology there because of format issues (I haven't tried in Jena either)
    - Load the ontology as a base data model into the database
    - Create a test framework based in something like pytest where queries using the ontology are implemented.
    - Test would be query expected result pairs.
  - Discuss with Martin / OvGU
- JOWO Workshop
  - short abstract / paper deadline 3rd of June
  - https://ensusto.github.io/jowo2022/
  - ideas: sustainability, energy + axioms from RO
  - 3-5 pages
- Where to place measurement devices [CHK] artificial object?

  As a separate class parallel to e.g. energy converting compontent?

  continuent-> independet continuant > material entity -> object-> artifical object -> measurement devices.....
  - OEFamily Steering Committee
    - https://github.com/OpenEnergyPlatform/organisation/issues/50

feature-979-absence-inverses