

## OEO Developer Meeting #48

### Pads:

- Notes from last meeting: <https://etherpad.wikimedia.org/p/oeo-dev-47>
- Pad to this meeting: <https://etherpad.wikimedia.org/p/oeo-dev-48>
- Pad for next meeting: <https://etherpad.wikimedia.org/p/oeo-dev-49>

### Date:

### Participants:

- Moderator: Christoph
- Main reporter: Mirjam
- Next meeting organiser: Ulf
- Developers with affiliation:
  - Christoph (RLI)
  - Lukas (Öko)
  - Ludwig M (TUM)
  - Mirjam (OVGU)
  - Ulf (IEE)
  - Eugenio (DLR)

### Preparation:

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

### Agenda:

#### *Announcement*

#### *Organisational*

- Template - Example Topic [Name]
  - <https://github.com/OpenEnergyPlatform/ontology/wiki/oeo-dev-meeting-etherpad-template>
  - Note and comment
- Ontology LNG contacted Martin for collaboration
  - Ludwig H follows up
- OEO dev meeting 47 is not yet archived in the wiki --> EA
- language labels (@en, @de)
  - we once decided not to use them / remove them
    - why is it problematic?

- sometimes set automatically -> set to @de -> this should be corrected
  - removing them additional work
  - if we decide to go multi-lingual at some point, language labels will be necessary
    - script could add automatically in future
- check your setting in protege
  - Protege sometimes ignores language settings
- are sometimes added automatically by protege --> any solution?
  - remove language labels when reviewing pull requests
- **new decision:**
  - during review:
    - remove @de labels in review - when it is allocated to english term
    - leave @en
- Some concept definitions are quite technical
  - possibility to extend concepts by more simplified/accessible definitions?
    - Yes -> as AnnotationProperty
  - Other option: Extension in module
  - [TODO] collect examples @LH
- Reviews
  - update and specify processes
  - also check for language labels and remove them if @de
  - wiki / contributing.md unspecific number / qualification of reviewer
  - <https://github.com/OpenEnergyPlatform/ontology/issues/1106>
  - <https://github.com/OpenEnergyPlatform/ontology/wiki/Pull-request-workflow>
  - <https://github.com/OpenEnergyPlatform/ontology/blob/dev/CONTRIBUTING.md>
  - [TODO] LE and MS prepare something for the next meeting
- OEO 1.12.0 not available in OEMetabuilder annotation tool @Adel
  - Terms from the latest OEO release (1.12.0) are missing i.e., not available in the drop-down menu.
  - <https://openenergy-platform.org/dataedit/oemetabuilder/>
  - @CM contact Adel, check in Wiki, what has to be updated

### *Release*

- Release v1.13. scheduled for 2023-02-01

### *OEO Classes*

- spatial context information [LM]

- <https://github.com/OpenEnergyPlatform/ontology/issues/1379>
  - Original use case: data set with passenger-kilometres for NUTS1 regions. Pkm were given as a "pkm-inner" (referring to pkm from traffic entirely within the NUTS1 region) and "pkm-inter" (referring to pkm from traffic that crosses the boundary of the NUTS1 region).
  - goal: distinction between "within a spatial boundary" and "crosses a spatial boundary"
  - Only for processes or also for objects like electricity grid?
  - Distinguish between inner and within?
  - Modellierung als object property?
  - Use cases: transport, energy balancing
  - check RO for properties
    - has start location: x 'has starts location' y if and only if there exists some process z such that x 'starts with' z and z 'occurs in' y
    - has end location: x 'has end location' y if and only if there exists some process z such that x 'ends with' z and z 'occurs in' y
  - we might be confronted with OWL limitation, because variables are not depictable in OWL: start location != end location is not possible
  - **last status:** think about implementation as object property vs process attribute
- Composed module:
    - <https://github.com/OpenEnergyPlatform/ontology/issues/1328>
    - Typical problem
      - Fabian talked to Janna
    - Example:
      - energy consumption
      - located in
      - germany
    - 1) introduce concepts that belong together as new concepts, define as equivalent concepts
      - if it gets too large, tools might be überfordert
      - might be too
      - in separate module
    - 2) on-the-fly-annotation: tool to enable people to compose their own compositions in MAN syntax
      - maybe omit quantoren, e.g. some, all
      - aim: well-defined owl class
    - HACK
      - reduce relations
      - domain and range
      - if between domain and range only a specific relation is possible
        - than a tool could be written that adds relation to sole concepts
          - user annotates
            - energy consumption value (has axiom: has spatial region)
            - germany

- -> axiom is added by tool
  - Task: "isAbout" relation has to be replaced by more specific relations
  - potential funding for tool
    - NFDI4energy/ing
    - @CM check in SEDOS
    - DKZ
    - place in own project
  - **last status:** undecided, both options are resource-intensive and little user-friendly. Currently, slight preference to Option 1)
- transport mode via modal split [LM]
  - <https://github.com/OpenEnergyPlatform/ontology/issues/1276>
  - What is a transport mode?
    - No clear definitions in literature
    - Modes used in modeling are almost unique for every model i.e. everyone defines modes depending on their own needs
      - A list of somewhat common/recurring modes is in the issue
    - Used in modeling to distinguish different types of transport.
      - Common attributes for distinction:
        - transported "object": passenger or freight
        - organisation: public or private
        - transport medium: road, rail, air, or water
        - national or international
        - vehicle type: small, medium, or big/heavy vehicle (especially for trucks)
        - short, medium or long distance
  - Is there a difference between transport modes and subclasses of transport?
    - Both characterize transport further
    - freight transport has a subclass fuel transport. Is that a transport mode as well?
      - Isn't that a special kind of freight transport? - Yes, it is.
  - Analogy to sectors?
  - Can we import stuff from transport ontologies?
    - LMs search wasn't successful for OEO purposes
  - **last status:** propose definitions in issue and check if this is viable during dev process
- Regions - specific
  - are included via other ontologies, which are not imported in OEO
    - <https://github.com/OpenEnergyPlatform/ontology/issues/1336>
  - include in oemetabuilder as dropdown options
  - use cases: metadata, OEKG
    - potentially update oemetadata, add more fields for spatial field
  - related to this: module structure discussion
  - **last status:** pick up in next dev meeting

- Template - Ontology Workspace (use for joint development) [NAME]
  - Add issue link
  - Collect related terms
  - Create an aristotelian definition
  - Find axioms

### *OEKG*

- Small BFO understanding question [EA] --> needs Input from FN
  - How to deal with aggregates?
    - Example: "The energy demand of vehicles in germany"
    - We could model the class of vehicles in germany but not the "Vehicle park" of germany.
  - Open new issue -> [EA]

### *Other Topics*

#### **Collection of Tasks:**

- Add something @A