## OEO Developer Meeting #25

#### Pads:

- Pad to this meeting: https://etherpad.wikimedia.org/p/oeo-dev-25
- Pad for next meeting: https://etherpad.wikimedia.org/p/oeo-dev-26
- Notes from last meeting: https://etherpad.wikimedia.org/p/oeodev-24

Date: 07.10.2021, 10:00 -- xx:xx

Participants: Mirjam, Vera, Kai, Carsten, Martin, Christian, Hedda, Adel, Janna

moderator: Veraprotocol: Christian

• next meeting organiser: Carsten

## **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, DFN)

## **Agenda**

- Phase-out plan for LOD-GEOSS project in oeo-dev @CH @CHK
  - RLI focus on Metadata keys, Framework concepts
  - DLR meteorology
  - technology data issue
  - LOD-GEOSS contributions will slowly fade out. official end of the project is July, but we're looking into an extension
  - There are things that need to be delivered, but they might not follow the original plan
  - DLR would like to create a continuous effort with less dependency on project funding. Helmholtz funding might be an option.
- Do we want / need an annotation property that indicates the MODULE a class is part of?
  - PRO: Especially for classes from oeo-shared that would be helpful.
  - CON: Takes some time and needs to be maintained (when not automated).
  - Create automated annotation for module identification #870 @Mirjam
  - https://github.com/OpenEnergyPlatform/ontology/issues/870
  - don't create an automated process
  - it'd be ok to deal with it with every release

- there'd be a constant difference between development and release version
- scenario: class definition update in new branch. while that is happening we create release branch, change annotations and the new branch has a merge conflict
- proposal hidden annotation option
  - added and moved classes and axioms
  - MG + AM will do a nerdy deepdive on this
  - Put this on the next meeting's agenda
- splitting class definitions and axioms into different modules #874
  @Janna
- https://github.com/OpenEnergyPlatform/ontology/issues/874

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- owl allows axioms to be in any module
- there will always be axioms that bridge between modules
- the language itself makes not difference between those kinds of axioms and others
- we as developers would want those to appear all in one specific module
- background is that we didn't want to move everything to oeo shared, especially when working with classes low in the hierarchy
- options
  - lose modular nature
  - lose context when editing
- advantage of modules:
  - originally we had many merge conflicts which can be mitigated by having modular files
  - you know where to look for specific terms
- now there aren't so many concurrent edits anymore, but that might also be a phase
- for the time being, when we need to have many axioms crossing content it should move to oeo-shared.
- @MS posts this in the issue. if former issue is solved we can come back to this
- update 'term tracker item' instruction (Kai)
- https://github.com/OpenEnergyPlatform/ontology/wiki/termtracker-item

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- add in instruction: brief description above links
- it wasn't in the wiki, so it should be updated
- inform people in developer's list? not necessary, bc we're all here and LE is aware
- @Kai can update the wiki

# 10:44 Short Break Back at 10:50

- Meta Issue: Collection of new OEO terms originating from LOD-GEOSS @Hedda
- https://github.com/OpenEnergyPlatform/ontology/issues/822
- New non-existent concepts:

- Unit --> related to issue #465 (discussion on "device")?
  - I could find that term only in the sense of measurement unit for a physical parameter not as "Generating capacity for one unit".
  - the two are different concepts, similar discussion in device issue
  - suggestion by simon
    - https://github.com/OpenEnergyPlatform/ontology/issues/465#issuecomment-937543348
  - have different incarnations of what this term unit confers
    - measurement unit -> rename original "unit"
    - numbering item for energy transformation unit
      - power generating unit is already there (in oeo shared)
      - proposed class energy transformation unit with power generation unit as a subclass
    - add more abstract unit term when needed
  - this would also solve the device issue
  - @Mirjam implement simon's solution 2 (issue #465)

#### Average

- alternative term to arithmetic mean
- note: alternative terms don't have to be unique
- @Hedda tries to implement. Should questions arise, contact Christian

#### Annual

- Exists in the combined term "annual Emission allocation"
- Implement is as a separate term?
  - If yes: TimeUnit?
  - We have timesteps, typical period
  - combine timestep year and integral?, alternative term annual?
  - individual of time resolution #849 --> add also other resolutions (hourly, dayly, weekly...)
- Forced outage / planned outage
  - entity/continuant/occurrent/process
  - when generating unit does not provide power.
  - should be a process
  - relation to quantity value: outage has quantity value some time unit
  - An outage is a process during which an artificial object cannot perfom or operate.
    - relation: e.g. energy transformation unit participates in an outage
    - energy transformation unit cannot transform energy for maintenence reasons or because of a failure.
    - subclasses:

- planned outage: A planned outage is an outage during which an artificial object is being maintained.
- forced outage: A forced outage is an outage of an artificial object caused by a failure.
- what about power outage?
- Curtailment:
  - entity/continuant/occurrent/process
  - Curtailment is a process in which a power generating unit is forced to reduce its output, in order to balance energy supply and demand or due to transmission constraints. --> agreed on

power outage = power grid participaes in forced outage

meeting ends here at 12 pm, more terms in next session

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- Space requirement
  - entity/continuant/generically dependent continuant/ information content entity/quantity value
  - entity/continuant/specifically dependent continuant/ quality
- Capacity factor
  - entity/continuant/generically dependent continuant/ information content entity/quantity value
  - entity/continuant/specifically dependent continuant/ quality
  - entity/occurrent/process attribute/ (emission factor)
- Extensions to existing concepts:

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- Variable operation & maintenance costs
  - entity/continuant/generically dependent continuant/ information content entity/quantity value/economic value/cost
- Cost of Equipment
  - entity/continuant/generically dependent continuant/ information content entity/quantity value/economic value/cost
- Cost of grid connection
  - entity/continuant/generically dependent continuant/ information content entity/quantity value/economic value/cost
- Cost of rent of land
  - entity/continuant/generically dependent continuant/ information content entity/quantity value/economic value/cost
- Cost of decommissioning

- entity/continuant/generically dependent continuant/ information content entity/quantity value/economic value/cost
- Other costs
  - entity/continuant/generically dependent continuant/ information content entity/quantity value/economic value/cost
- Rotor diameter
  - entity/continuant/independent continuant/material entity/object/EnergyConvertingDevice/Turbine
  - entity/continuant/specifically dependent continuant/ quality
- Specific power
  - entity/occurrent/process attribute/power
  - specific separate?
- Lifetime
  - entity/continuant/specifically dependent continuant/ quality
- Construction time
  - entity/continuant/specifically dependent continuant/ quality