OEO Developer Meeting #60

Pads:

- Notes from last meeting: https://etherpad.wikimedia.org/p/oeo-dev-59
- Pad to this meeting: https://etherpad.wikimedia.org/p/oeo-dev-60
- Pad for next meeting: https://etherpad.wikimedia.org/p/oeo-dev-61

Date: 2023-06-15
Participants: Lukas, Mirjam, Christoph, Eugenio, Hannah, (Karl-)Uwe, Viktor, Hannah, Christian

- Moderator: Lukas
- Main reporter: Hannah (Lukas will upload)
- Next meeting organiser: Mirjam
- Developers with affiliation:
    - A (AFF)
    - B (BFF)

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

- OEO-SC meeting today at 13:00
    - Mirjam and Lukas participate
    - All OEO developers can participate if they want to
    - Probably short meeting with reflection of FNE
- FNE Symposium: big interest in OEO and ontologies
    - SIROP had 3 workshop and 1 poster. 1 Workshop, 1 Poster regarding OEO
    - lots of inetrest also beyond the Systemanalyse Netzwerk

Organisational

- Template - Example Topic [Name]
    - https://github.com/OpenEnergyPlatform/ontology/wiki/oeo-dev-meeting-etherpad-template
    - Note and comment
- Check the open PR: https://github.com/OpenEnergyPlatform/ontology/pulls

Release

- Next release 1.16.0 planned for 1th August -- holiday season, is it possible?
- Better 1st September ?

PRs open for more than a month

- Simplify the process to add new users https://github.com/OpenEnergyPlatform/ontology/pull/1525

- ○ please check this issue and provide feedback
- ○ the tutorial on how to add onself as a developer to oeo could be improved
  - ▪ Wiki oder contributing.md
- Draft: Added reasoning to the creation of oeo-full.omn https://github.com/OpenEnergyPlatform/ontology/pull/1465
  - ○ separate issue for disjoints (EA)
  - ○ treat this issue without the disjoints (EA)
  - ○ name is ok, ready for peer review without disjoints
- Feature 1419 competency question coverage report https://github.com/OpenEnergyPlatform/ontology/pull/1420
  - ○ Very nice test suite: https://github.com/edmcouncil/fibo
  - ○ EA merges and opens new issue for competency questions with errors.
- Added definition to individuals of boolean values https://github.com/OpenEnergyPlatform/ontology/pull/1255
  - ○ Depends on true / false question: https://github.com/OpenEnergyPlatform/ontology/issues/1148#issuecomment-1309000497
  - ○ pull request open for a year
  - ○ temporary solution ok before finding the better solution?
- Ceature 870 create automated annotation for module identification https://github.com/OpenEnergyPlatform/ontology/pull/1111
  - ○ keep as reminder

OEO Classes

- Macro-economic and monetary concepts
  - ○ https://github.com/OpenEnergyPlatform/ontology/issues/1487
  - ○ Collect related terms
  - ○ Create an aristotelian definition
  - ○ Find axioms
  - ○ High priority:
    - ▪ **population count**
      - ▪ Def: A population count is a quantity value to measure the size of a population.
      - ▪ Unit: count unit
      - ▪ ok
    - ▪ **gross domestic product** (already implemented)
      - ▪ A gross domestic product is an economic value that represents the broadest measure of aggregate economic activity, measuring the total unduplicated market value of all final goods and services produced within a statistical area in a period.
      - ▪ Add unit: currency?
        - ▪ currency per time unit
        - ▪ ok to implement
    - ▪ **annual GDP growth**
      - ▪ Def: Annual GDP growth is an economic value that quantifies the difference between GDP in one year compared to the previous year
      - ▪ Unit: percent
      - ▪ Suggestion: add formula on how this is caclulated as additional information
      - ▪ ok to implement
    - ▪ **average annual growth rate**
      - ▪ Def: The average annual growth rate is a fraction value that depicts the average increase or decrease in the value of a variable over a specified period of time
      - ▪ Unit: percent (per year)
      - ▪ suggestions: add formula on how this can be calculated (e.g. linear, compound

average annual growth)
- ok to implement
- **constant monetary value / price**
  - A constant monetary value / price is a value / price that was adjusted for inflation / deflation
  - Unit: currency?
  - multi hierarchy?
    - economic value (already implemented)
      - has disposition / quality constant or nominal
  - discuss further -> mark in issue -> make new issue (LE)
- **nominal monetary value / price**
  - Def: A nominal monetary value / price is a value / price that was **not** adjusted for inflation / deflation
  - Unit: currency?
  - see above

- ○ ▪ **gross domestic product real growth rate**
    - Def: A gross domestic product real growth rate is a fraction value that quantifies the difference between GDP in one year compared to the previous year, adjusted for inflation / deflation.
    - Unit: percent
    - see above

- ○ ▪ **gross domestic product nominal growth rate (add to issue)**
    - Def: A gross domestic product real growth rate is a fraction value that quantifies the difference between GDP in one year compared to the previous year, adjusted for inflation / deflation.
    - Unit: percent
    - see above

- ○ ▪ **nominal GDP**
    - Def: Nominal GDP is an economic value that expresses GDP nominally, that means including inflation / deflation
    - Unit: currency
    - see above
  - **real GDP**
    - Real GDP is an economic value that expresses GDP adjusted for inflation / deflation
    - Unit: currency
    - see above

- ○ ▪ price change
    - process
    - suggested def: A price change is a process in which monetary prices of some goods or services increase over time.

- - - ▪ market basket
      - ▪ a market basket is a collection of goods and services defined by an organisation which exhibit a level of similarity because of which they are attributed to the basket
      - ▪ Note: we need to define output of a service to be able to include it properly.
        - ▪ Relevant, Barry Smith: Towards an Ontology of Social Services ICBO, 2022: https://www.youtube.com/watch?v=aPvYcqWgyWE

- - ▪ ▪ **inflation**
      - ▪ ~~Inflation is a (general) increase in monetary prices over time.~~
      - ▪ Inflation is a price change in which the monetary prices of some goods or services <u>increase</u> over time.
      - ▪ process attribute: inflation rate is a process attribute that describes the price increase over time . Inflation rate value is a fraction value that measures the inflation rate.
      - ▪ Unit: percent per time unit
      - ▪ needs some refinement
      - ▪ Idea: Inflation is a price change of a consumer basket over time

- - ▪ ▪ **deflation**
      - ▪ Def: Deflation is a price change in which the monetary prices of some goods or services <u>decrease</u> over time.
      - ▪ process attribute: analogue to above

- - ▪ **inflation rate**
      - ▪ Current def: Inflation rate is an economic value reprensenting the ratio between the monetary price for a good at two different points in time that equalises differences in monetary price levels between these two points in time.
      - ▪ Proposed new def: Inflation rate is an economic value representing the ratio between the monetary price for a good at two different points in time. The inflation rate can be used to equalise differences in monetary price levels between these two points in time when the monetary prices increased due to inflation between those two points in time.

- - ▪ **deflation rate**
      - ▪ Def: Deflation rate is an economic value representing the ratio between the monetary price for a good at two different points in time. The deflation rate can be used to equalises differences in monetary price levels between these two points in time when the monetary prices descreased due to deflation between those two points in time.
    - ▪ **price index [Not discussed]**
      - ▪ Def: A price index is an economic value that …
  - ○ Medium and low priority
- Further price-related concepts

- https://github.com/OpenEnergyPlatform/ontology/issues/1488
- Collect related terms
- Create an aristotelian definition
- Find axioms
- High priority
  - **energy price**
    - Def: An energy price is a monetary price per energy amount.
    - Difficulty that energy price can be based on physical basis (volume, mass) or on energy content.
  - **electricity price**
    - Old definition: Electricity price is the monetary price per energy unit of electricity.
    - Proposed new definition: An electricity price is a monetary price per amount of electrical energy
  - **fuel price**
  - **international (wholesale) fuel import prices**
  - **wholesale price**
  - **consumer price / national retail fuel price**
- Subclasses of policy instrument
  - https://github.com/OpenEnergyPlatform/ontology/issues/1545
  - Collect related terms
  - Create an aristotelian definition
  - Find axioms
- Final definition of sector coupling [from last meeting]
  - https://github.com/OpenEnergyPlatform/ontology/issues/1521
  - move to end of meeting :-)
    - distinguish between sector coupling and coupled sectors (with "coupled" as quality)
    - seems we need both the process of sector coupling and coupling as plan specification
- import geo-ontology [moved from last meeting, not discussed, move to next meeting]
  - context:
    - we want to collect all necessary geo terms for the factsheets.
    - discussion: https://etherpad.wikimedia.org/p/oeo-geo
    - summary:
      - place of publication
        - https://github.com/OpenEnergyPlatform/ontology/issues/1581
        - Idea of solution from the issue:
        - As far as I can tell, we don't have anything that equates to publication as in a publicized article, book. However in this context we're only referring to a scenario or study report, both of which are defined in the OEO as a subclasses of information content entity. With those terms defined, we could just add an object property is_published, is_published_in, has_publication_place, or something more generic than I can come up with. We could add these to the specific classes or the parent class.
      - regionalisation isn't really a geo term, has its own issue
        - https://github.com/OpenEnergyPlatform/ontology/issues/1554
      - structurally everything is there,what's missing is the actual countries/regions /places
      - suggestion: import an ontology!
  - We want:
    - countries, regions, subregions, maybe city level
    - NUTS would be nice
    - codes would be nice

- we could import an obo foundry ontology
  - related issue: https://github.com/OpenEnergyPlatform/ontology/issues/1336
  - https://www.ebi.ac.uk/ols/ontologies/gaz
  - pros:
    - includes apparently all countries and regions down to city level
  - cons:
    - no NUTS, as far as I can tell
- Another ontology is LCC "Languages, Countries And Codes"
  - pros:
    - countries and codes
  - cons:
    - not an obo foundry ontology(?)
- questions to ontology experts:
  - how does an import work?
  - should we use an alternative geo-ontology?

OEKG

Other Topics

Collection of Tasks:

- Add something @A