

# REC TC Meeting Minutes

March 1, 2022

## Attendance:

- Karl Hammar (chair)
- Erik Wallin
- Chris Bupp
- Per Karlberg

## Absent

- Joakim Eriksson
- Peter Hartlev

## REC4+ process, feature requests, and timeline

General discussion on next steps for REC4 was held. Consensus in TC is that feature elicitation process will need to be shepherded by the TC membership rather than the REC board (though the latter should naturally be invited to review and participate as needed).

## Preliminary feature wishlist

- ESG modeling
  - EU taxonomy
  - GRESB/LEED/...
  - Feature requested by and assigned to Idun/ProptechOS.
  - This could be implemented as an extra module in a side repository, to be used with REC but not monolithically integrated.
  - Brick collaboration might be needed and useful.
  - **TODO:** [erik@idunrealestate.com](mailto:erik@idunrealestate.com) to initiate and lead.
- Energy systems
  - Grids, “prosumers”, etc
  - Known work ongoing in this space by Aug-E / Michel Dhont.
  - Could be implemented as an extra module or as integrated in mainline REC, depending on complexity, generalizability, IP, etc.
  - **TODO:** [erik@idunrealestate.com](mailto:erik@idunrealestate.com) will reach out to Aug-E and check status/interest in initiating/leading/contributing such content.
- Asset tracking / more asset types
  - Feature requested by and assigned to Chris Bupp / Acuity
  - I.e., augment current Asset hierarchy with missing pieces such as mobile ICT devices, movable carts, etc.
  - This would likely be part of core REC, unless the added assets are esoteric enough to warrant some submodule setup.
  - **TODO:** [christopher.bupp@gmail.com](mailto:christopher.bupp@gmail.com) to initiate and lead.

- Healthcare sector
  - Feature suggested by Idun/PropTechOS
  - Suggestion that we find and cover the gaps specific to the healthcare sector in terms of room types, equipment types, relationships, etc.
  - Likely a more open-ended exercise requiring a fair bit of scoping work, preferably led by a partner with in-depth knowledge in this field (e.g., some healthcare institution).
  - Likely implemented as an optional module rather than as part of mainline repo.
  - **TODO:** no specific lead assigned – await and evaluate
- Generic modularization
  - Since several of the features above might not be of interest to everyone, breaking them out as modules of some sort could be useful.
  - But DTDL does not have a built-in “module” concept.
  - Karl has worked with wrapping DTDL ontologies in NuGet packages which could be a vehicle for modularization and dependency management, but some design specs for how to implement such modules in a generic manner (e.g., naming, directory structure, etc) would be nice to have.
  - **TODO:** Once/if modularization becomes a requirement (i.e., the above feature designs are committed), Karl Hammar will work on a modularization spec together with platform implementers.

## Timeline

Suggestion: summer 2023 (to allow for new EU ESG legislation coming into force Q1 2024).

## Process

Open to discussion. Should we assign subprojects and corresponding leads?

The Ontology Decision Records approach was proposed by Chris Bupp.

**TODO:** Chris Bupp Will write up or in other appropriate format present the Ontology Decision Records process at next call.

## Open issues

- [SHACL: ensure consistency with GeoJSON vocabulary · Issue #230 · RealEstateCore/rec \(github.com\)](#)
  - Affects SHACL models
  - Background: we defined GeoJSON primitives in a fake geojson.org namespace.
  - Since then, GeoJSON have defined their own formal semantics in the purl.org/geojson namespace, utilizing the same prefix (geojson:).
  - This is not a logical inconsistency but could be confusing to devs.
  - Proposed solution: Move our own SHACL geojson primitives to within REC namespace to reduce confusion. Define these as owl:sameAs or rdfs:seeAlso to the old namespace.

- **Status:** TC briefed on issue, indicates general agreement w/ proposed solution, but this is not a top priority in the short term – can wait until next point release.
- [Digital Twin Graph creation error from guide · Issue #218 · RealEstateCore/rec \(github.com\)](#)
  - Work ongoing, assigned to Peter
  - **Status:** no decisions taken, follow up at next call
- [Update edge message format for REC4 GA release · Issue #190 · RealEstateCore/rec \(github.com\)](#)
  - Work ongoing, assigned to Per
  - **Status:** work ongoing with Per and Peter; Chris invited to join work also, has interests and is working in this same space.
- [rec:substance · Issue #151 · RealEstateCore/rec \(github.com\)](#)
  - Affects SHACL models
  - Will be resolved w/ fully operational DTDL->SHACL translation
    - Initial commit in repo
    - Maybe by REC 4.1?
  - **Status:** TC briefed on issue, indicates general agreement w/ proposed solution, but this is not a top priority in the short term – can wait until next point release.
- [Implement Bookings · Issue #55 · RealEstateCore/rec \(github.com\)](#)
  - Feature request
  - **Status:** See REC4+ bullet
- [Implement ESG Certification module · Issue #33 · RealEstateCore/rec \(github.com\)](#)
  - Feature request
  - **Status:** See REC4+ bullet