

## Attendees:

- Georg Ferdinand Schneider (Individual CLA but affiliated with Schaeffler)
- Joel Bender (Cornell University)
- Erik Wallin (Idun Real Estate / RealEstateCore)
- Gonçal Costa (LaSalle University)
- María Poveda-Villalón (Universidad Politécnica de Madrid)
- Serge Chávez-Feria (Universidad Politécnica de Madrid)
- Calin Boje
- Mads Holten Rasmussen
- Pouya Zangeneh (UofT/Hatch)
- Sylvain Marie
- Herve Pruvost (Fraunhofer)
- Thomas Beach (Cardiff University)

## Date and time

- 17/11/2020, Tuesday, [16:00-17:30@UTC/ 17:00-18:30@CET/ 08:00-09:30@PST/ 00:00-01:30@CST](#)

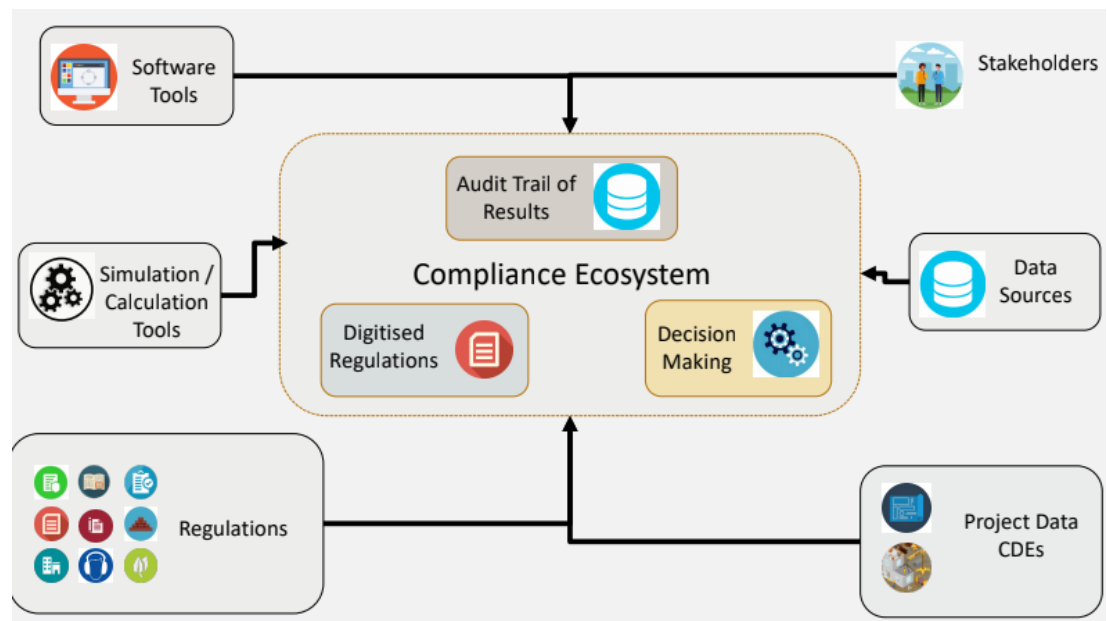
## Agenda (tentative)

1. Introduction of new participants
2. Announcements
  - 12 January 2021 - Léon van Berlo on IFC5
  - 26 January - Property modelling by Richard and Michel
3. "Towards the adoption of automated regulatory compliance checking in the built environment" by Thomas Beach from Cardiff University ([GoogleScholar](#))
  - Presentation
  - Q&A
4. W3C LBD CG meets WoT WG
  - Walk through [presentation](#)
5. Open Discussion

## Minutes

6. Introduction of new participants
  - No new participants
7. Announcements
  - 12 January 2021 - Léon van Berlo on IFC5
  - 26 January 2021 - Property modelling by Michel Böhms and Richard Pinka
8. "Towards the adoption of automated regulatory compliance checking in the built environment" by Thomas Beach from Cardiff University ([GoogleScholar](#))
  - [>SLIDES<](#)
  - Person:
    - PhD in Computer Science, working on built environment topics in his professional life

- Reader at Cardiff University
- Presentation
  - Motivation: formal checks according to compliance to standards should be very helpful
  - Distinguishes: regulations, requirements and recommendations
  - Methodology:
    - SoA Review and Survey on companies
    - Full landscape of research
      - a. 18 strands of work
      - b. 10 software tools published
      - c. 6 commercial tools
      - d. No mainstream adoption of automated compliance checking yet
      - e. Isolated efforts (dataformats and semantics), how to integrate them?
  - Survey of building professionals
    - Low answer rate from regulation professionals -> potentially fear from being replaced reduce response rate here
    - An appetite for automation in industry, no belief that no human intervention necessary
    - Obstacles identified from review are asked to experts
  - Picture of problem



- Software tools
- Simulation / Calculation tools
- Regulations
- Product data (e.g. fire resistance, ...)
- Project data from CDEs, etc.
- How to put this together
- Solution
  - Compliance checking system

- a. Checks model
    - b. Checks physical system?
    - c. Gives results to approver
    - d. Checks based on digitized regulations
  - Formal way to describe regulations
    - a. Searchable, queryable
    - b. Understand changes between versions
    - c. Need to track decisions
  - Compliance ecosystem
    - a. Digitised regulations
    - b. Decision making system
    - c. Audit trail of results
    - d. Security
  - Need standardised terms across domains
- Q&A
  - Q [Pouya]: Is it possible to circulate the slides? Yes, will be prepared afterwards.
  - Q [Georg]: Compliance checking on physical asset? Some more examples?
  - Q [Georg]: How to convince regulation bodies to move away from document-based publication of regulations?
    - A: Convince standardisation bodies to publish not in closed formats e.g. ODF
      - a. Meta data with published, superseded
      - b. Jurisdiction needs to be clear
  - Q [Georg]: As automated regulation checking should be also possible and important in other domains, is there similar efforts in other industries?
    - Raise, RuleML, legal rule ML, legal doc ML
    - Software industry -> formal requirements checking
- [Mads] : Pointer to SHACL as representation language for rules
  - [Presentation](#) at bsi + <https://devonsparks.com/2020/10/10/botframes.html>
- Q [Georg]: What if regulation standards are contradicting each others?
  - Have not come across in UK
  - Problems occur in mixed used buildings -> flats and commercial building at once
  - Solution in real world: You can design your building with with approver involved
- Q [Mads]: When does building design become compliance checking?

## 9. W3C LBD CG meets WoT WG

- Walk through presentation
- [https://docs.google.com/presentation/d/1aZosv92Mg59I1ErHQUyRqNITMMcIW9gwtwi0XbWLrd0/edit#slide=id.ga10f9409b8\\_2\\_56](https://docs.google.com/presentation/d/1aZosv92Mg59I1ErHQUyRqNITMMcIW9gwtwi0XbWLrd0/edit#slide=id.ga10f9409b8_2_56)
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## 10. Open Discussion

## **Next Call**

- [01/12/2020, Tue, 16:00-17:30@UTC](#)

We are interested in getting suggestions from the community about potential agenda items for the following calls. Please send your suggestions to [public-lbd@w3.org](mailto:public-lbd@w3.org), whether you have a short presentation to bootstrap the discussion, and an approximate duration you think the discussion will last.

## **Previous minutes**

<https://www.w3.org/community/lbd/meeting-minutes/>