IBPSA Project 2 Online meeting: Task 1 – Events & Project BOPTEST+

14/04/2025

Attendees:

<u>Name</u>	Affiliation
Kun Zhang	ETS, Canada
David Woelfle	FZI, Germany
David Blum	LBNL, USA
Ettore Zanetti	LBNL, USA
Antonio Galvez	R2M, Spain
Laura Zabala	R2M, Spain
Laura Perez	R2M, Spain
Hicham Johra	SINTEF, Norway
Bertrand Terres	Terion, Denmark
Javier Arroyo	Wedoco, Spain

Agenda.

- Events, workshops, and presentations [10 min]
- Website and other media [5 min]
- Project BOPTEST+ [40 min]
- Miscellaneous [5 min]

Intro

Introduction to:

- o David Woelfle (FZI): From the Research Center for Information Technology. They do research in applied informatics. Focusing on building energy management.
- o Hicham Johra (SINTEF): Working on energy efficiency and flexibility. Participates in Annex 81 and Annex 96.
- Laura Perez (R2M): Belongs to the innovation area of R2M that supports consortiums on proposal writing and most of the transversal activities needed in projects.

Events, workshops, and presentations.

- 2025/03/26 → 3rd Project 2 research webinar at IBPSA Webinar Series. Topic: Gridinteractive buildings. Two presentations took place:
 - 1) Flavia de Andrade Pereira (University College London) explores how demand flexibility controls can be made generalizable and portable across BOPTEST test cases and real-world buildings.
 - 2) Lucas Bex (KU Leuven) discusses simulation-based testing of control strategies for districts, introducing Yards, a simulation framework based on DOPTEST.

Webinar recording here.

- 2025/05/28 → 4th Project 2 research webinar at IBPSA Webinar Series. Topic: TBD. Two presentations will take place: TBD. Bertrand has already been contacted for this and will present in this webinar.
- 2025/05/13 → Presentation at the Building Digital Twin International Congress. Laura Zabala will present there.
- 2025/08/24 → BS2025 in-person meeting and workshop. Esther and Walter are organizing the workshop. The focus is on bringing together BOPTEST users or potential users. It is unlikely that Dave and Ettore would get approved to travel to the BS Conference in Brisbane.
- 2025/08/24 → BS2025 papers on software and test cases. Papers have been submitted. Harald may present one paper. Kun may go as well. He will let us know whether he is going in the end.

Website and other media.

Updates to website

Continued updates for project task meetings.

Pending edits:

- Results Dashboard: add a dashboard summary and a link to it. → Not addressed
- Documentation: Needs multiple updates here and there. Particularly to remove those sections that are deprecated. Distinguish between the technical implementation of custom KPIs and other KPIs. → Not addressed

Project BOPTEST+

- **Objective:** define a consortium emerging from IBPSA Project 2 that seeks <u>research</u> funding to support BOPTEST developments and community building. Sharing a research project leads to common goals and delivers a united community.
- In our last meeting, we agreed to go for the following **HORIZON call** (not CET Partnership because of the overly constraining regional requirements):
 - O HORIZON-CL5-2026-02-D4-02: Smarter buildings as part of the energy system for increased efficiency and flexibility Societal Readiness Pilot

"Cluster 5: Climate, Energy, and Mobility"

Project Type: Innovation Action (IA)

Technology Readiness Level (TRL): End at TRL 6-8

Opening: 16 Sep 2025 Deadline: 17 Feb 2026

- o An updated working draft of The Work Programme 2025-2027 for Cluster 5 was found (from November 2024) that delays the deadline for submission of the full proposal. We will probably start the project by the end of 2026 / beginning 2027.
- Suggested title adapted from the last meeting to include flexibility and system integration:

BOPTEST+: Smart Building and District Energy Optimization for Next-Generation Control Systems



BOPTEST+: Smart Building and District Energy Optimization to Enable Flexibility and System Integration

- A first draft of the **concept note** has been distributed. Feedback is very welcome. Thanks to all who have already provided suggestions.
- The consortium is being settled. Additional partners contacted:
 - o BAEDA research lab from the Polytechnic University of Turin: Alfonso Capozzoli has been contacted by Esther, but no response yet.
 - o dnergy: contacted by Javier, no response yet. Likely not joining.
 - Tea Zakula (professor from Zagreb University): Contacted by Javier to cover the need for missing representation from Eastern Europe. Javier will have a chat with her tomorrow. She has access to two potential pilots: a technical school and their recently renovated university building.
 - O Do we need an SSH expert? We are already on the higher end of the number of partners we can have for the call's budget. Ideally, we can have this aspect covered by partners already in the consortium (KU Leuven, SINTEF, R2M?). Laura: this aspect is very relevant. R2M can't address this. Either one of the organizations already in the consortium brings a department or an expert team, or we do need to bring an external partner. For this, we have a few recommendations
- We could get support letters to prove the broad and impactful scope of our project from:
 - o DOE
 - o IBPSA
 - o IEA Annex 96
- David Woelfle: FZI could potentially participate and bring the Smart East facility as a district pilot (10 buildings, 640 kWp PV, 46 charge points for EVs and many sensors and actuators). Multiple stakeholders are involved, which makes it interesting from a social point of view as well. Owned by multiple people. They are also in contact with the local DSO, very interesting for research on integrating a district into the broader grid. They also have a specialized division for knowledge transfer that might be able to address the SSH aspect here. They have developed a framework that allows the provisioning of forecasting and optimization algorithms at larger scales, especially for energy management applications, preprint here, paper soon to come.
- Thoughts/discussion:
 - The concept note is meant to settle the ground for the proposal writing. It's a dynamic document. Do not hesitate to suggest your ideas already!
 - o Dave: mentioning Ashrae 223P standard may be a good idea since it's more well-known than Brick standard. Maybe not in the EU? TBD.
- Laura Perez presents R2M's services on proposal writing: we are targeting a single-stage call with a tentative February 2026 deadline, subject to changes once Work Programme is officially published. Proposals are typically ~45 pages, structured in three parts: Excellence (innovation), Impact (expected outcomes and dissemination), and

Implementation (work plan, deliverables, effort distribution). R2M is a European group with offices in Spain, Italy, and France, involved in over 140 EU projects, having raised 600M+ in funding and supported 53 newcomers. R2M offers three services: (1) Full proposal writing support (main focus); (2) Proposal coordination; (3) Proposal review. The full support includes:

- o End-to-end guidance from concept to submission
- o Admin support (e.g. PIC registration, EU portal setup)
- o Consortium building and partner recommendations
- o Budget planning and proposal coherence
- Writing support using templates and best practices
- o Internal review, consistency checks, and final proofreading
- o Drafting a visual identity (e.g. logo)

Typically, two R2M members lead the process, working closely with consortium experts. Pricing:

- **Upfront Writing Fee of 0.55%** of the EU funding requested by each Consortium partner (to be billed upon proposal submission).
- Success Fee of 5% of the EU funding requested by each Consortium partner (to be charged only if the project is selected for funding).
- * To clarify, the fees (%) refer to the percentage of the total funding requested by your organization in the proposal ("Max EU contribution" as will be stated in the Proposal Budget). For example, if you are allocated a budget of 100,000 EUR, R2M would invoice, 550 EUR (0.55% writing fee) upon proposal delivery, and only if the proposal is funded, R2M would invoice 5,000 EUR (5% success fee) once pre-financing is transferred to your accounts.
- **Please discuss these service conditions internally within the Consortium and let us know your thoughts. We are flexible and open for discussion to find the best solution for everyone.
- The next meeting will be scheduled in \sim 1.5 months from now.