IBPSA-USA -- Committee / Project / Working Group Application

Please review IBPSA-USA’s Committee Policy: <http://bit.ly/IBPSA-USA_CommitteePolicy>

Email completed forms to: Mike Wilson <mike@ibpsa.us>

# OVERVIEW

## Is this a committee, project, or working group?

Committee

## Proposed name

Building Data Exchange

## Brief description of purpose

1. Document key barriers to automating BIM to BEM workflows through purposeful interactions with practitioners who are end-users for software tools and workflow developers for their organizations,
2. Establish a formal channel of communication between end-users , software vendors and independent schema developers to highlight current strengths and deficiencies in building data exchange schemas,
3. Facilitate discussions with software vendors to encourage the adoption of engine-neutral and tool-agnostic data exchange schemas to avoid workflow duplication ,
4. Advocate for greater unification of adopted compliance rulesets by AHJs and rating authorities to help automate modeling for code and beyond compliance,
5. Facilitate discussions with rating authorities and AHJs to inform the development of standard mechanisms for output reporting to allow for greater automation of code compliance and utilities incentives modeling, and
6. Participate in ongoing and future standards processes pertaining to the development of related standards.

## Narrative description of the need for the group

The industry is in the process of making a steady shift towards connected databases and web technologies for the design, analysis, and operation of built environments. Consequently, the end-user must work with a multitude of unrelated data dictionaries, schemas, and file formats to represent necessary building information. Although some efforts have been made in the recent past to standardize data models, most practitioners (and programmers), developers, vendors, manufacturers, and performance testing organizations have their own data structures resulting in tremendous market fragmentation. This fragmentation is detrimental to overall productivity because tools and workflows become incompatible, resulting in duplication of effort and inefficient use of project funding.

In the larger interest of the industry and to truly bridge the gap between owners, architects, engineers, modelers, software vendors, AHJs, and other related stakeholders, it is recommended that a consensus-based engine-neutral data dictionary and schema be developed to enable building data exchange.

The development of standard data models will help overcome some of the key barriers to greater adoption of building performance modeling outlined in USDOE BTO’s Emerging Technologies Research and Development document, namely – improving value proposition, increasing accuracy, making time available to develop core modeling capabilities, and facilitating end-to-end workflow automation.

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Therefore, it is proposed that an IBPSA-USA Committee be set up to convene the many stakeholders to help alleviate pain-points in everyday data exchange for building performance modeling.

## List of proposed activities

1. Survey of end-users to identify key barriers to the successful implementation of BIM to BEM workflows,
2. arrange webinars for tool and schema developers to describe their data models, solicit feedback and pitch for greater adoption,
3. arrange periodic meetings with software vendors and schema developers to further the cause of engine-neutral data models,
4. arrange periodic meetings with code officials and rating organizations to advocate for a standard reporting schema, and
5. regularly participate in professional organization committees and the standards process to further the cause of building data exchange for all.

## Description of metrics for success

1. Convening at least 6 meetings per year, attended by stakeholders representing practitioners, schema developers, software vendors, national labs, utilities, and policy makers.
2. Contribute at least one paper to an IBPSA conference/journal to formally share the findings of the committee after 12 to 24 months from its first meeting.
3. Within two calendars years from the date of its inception, the committee will submit a formal recommendation to determine if an IBPSA-USA “standards” committee needs to be established to develop a data exchange standard for building performance modeling (in association with other pertinent organizations).
4. .

## Proposed IBPSA-USA Board of Director Liaison

*(Current Board of Director members are listed here:* [*https://www.ibpsa.us/board-directors*](https://www.ibpsa.us/board-directors)*)*

First and Last name

# MEMBERSHIP

## Proposed Chair or Project Lead

|  |  |
| --- | --- |
| Name: | Affiliation: |
| Email: | Phone: |

## Proposed Vice-Chair

|  |  |
| --- | --- |
| Name: | Affiliation: |
| Email: | Phone: |

## Initial member names and affiliations

(min of 5, including chairs)

|  |  |
| --- | --- |
| **Name** | **Affiliation** |
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## Proposed member diversity goals *(if applicable)*

1. XXX
2. XXX

## Proposed stakeholder balance *(if applicable)*

|  |  |  |
| --- | --- | --- |
| **Type** | **Required?** | **Comments** |
| Practitioners | Yes | Architects, Engineers, Energy Modelers, etc. |
| Software Vendor | Yes | Software developers,  |
| Schema Developers | Yes |  |
| Code Authorities | Yes | Eg: State and City AHJs  |
| Rating Agencies | Yes | Eg: USGBC, etc. |
| Utility and Efficiency Program | Yes |  |
| NGO / Govt | Yes | National Labs, etc. |
| Manufacturers |  |  |
| University and research |  |  |
| Other |  |  |

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