#### Sample form, not for offline completion.

Visit <a href="https://awards.buildingsmart.org">https://awards.buildingsmart.org</a> to enter.



# Construction for Infrastructure using openBIM

An industry construction project with demonstrated excellence using openBIM during the Construction phase of project delivery specific to civil infrastructure works.

### **Entry Details**

Satisfying the following core requirements is necessary to advance to the judging round. Entries that do NOT meet these minimum core requirements will not be considered in the judging round.

- 1. Entries must demonstrate with evidence the deployment of one or more buildingSMART tools or standards.
- 2. Entries must be delivered in International English; the jury will not be able to assess content written in a language other than International English.
- 3. One submission = one project.
- 4. One project can submit for multiple awards if they meet the criteria. When submitting a project for multiple awards, it is expected that each submission be tailored to each category scope.
- 5. There is no limit to the number of submissions a proponent can submit.
- 6. Past submissions that did not win an award in previous seasons are able to resubmit to any new season. Past award winners are not eligible for resubmission in the same category but may submit to other categories.
- 7. It is a requirement for applicants to submit IFC model files and/or any other technical file formats as evidence of the claims of the submission.

<b>Please note:</b> - The Submission Title will be used to refer to your submission throughout the process
For examples of previous project titles, please visit the buildingSMART.org website:
[https://www.buildingsmart.org/awards/bsi-awards-2022/]

Submission Title			

Dear Submitter,

We want to ensure your submission efforts are focused and the mission is clear.

Need help?

Contact your chapter representative for help with understanding the submission requirements or language translation support.

Alternatively, you can contact the Awards Program Manager at awards@buildingsmart.org.

If you are having technical issues with the platform, you can contact websupport@buildingsmart.org.

Good luck!

By checking this box I understand and acknowledge that this awards program is to assess information about openBIM, and that openBIM is not only about the use of solutions.

openBIM is about setting up an environment where every party in a team can work in the optimal way ("how they prefer") without putting limitations on others.

It is about freedom to take control over your data and workflows, while keeping that freedom for others as well. Full use of open standards is not mandatory for this mission.

#### Entry Overview

Use this section to provide a high-level overview of the scope of work.

Keep in Mind: openBIM is not only about the use of solutions. openBIM is about setting up an environment where every party in a team can work in the optimal way ("how they prefer") without putting limitations on others. It is about freedom to take control over your data and workflows, while keeping that freedom for others as well. Full use of open standards is not mandatory for this mission.

*Note:* Use the Attachments section to upload attachments, such as images, screenshots, documents, and videos.

Website (optional)

If the entry has a website or webpage, you can link to it here.

Location 100 words

Address Country This should be where the project is located OR the company or institution and faculty where the research was conducted or technology solution was developed.

Submitting Party and Stakeholder Logos (compiled into one .ppt/pptx file for upload)



Provide all stakeholder logos. Include any additional logos relevant to the entry. Identify all contributors to the project/research/product. You are encouraged to credit all members that contributed to this submission. Ensure to spell names correctly and get titles correct. You may also use this space to credit any contributing organizations. Email addresses or contact information is not required.

**Entry Description** 1000 words

TIP: You can write in Word and copy/paste to this field when ready. Describe the entry to the jury. Introduce the context, scope and objectives. What was achieved? How was openBIM relevant? Are there any innovative advancements? What makes this entry competitive within this awards competition? Where relevant, include construction or facility type, size and scope of project, budget/cost or investment value, link to any larger programs of work or development efforts, etc.

What stage of completion is the entry content representing?
Ex: Design Development, Substantial Completion, Beta Testing Stage, Initial Development
Upload a 2 minute video to show the scope of the entry.
This does not need to be professionally made. We are asking for a video created specifically for this entry. it should introduce the jury and any public viewers to the scope of the work captured in this submission.
openBIM Claim
This section should clearly demonstrate openBIM environment achievements on the project. Refer to the following sites for reference:  "What is openBIM?" bSI Standards
NOTE: openBIM is not only about the use of solutions. openBIM is about setting up an environment where every party in a team can work in the optimal way ("how they prefer") without putting limitations on others. It is about freedom to take control over your data and workflows, while keeping that freedom for others as well. Full use of open standards is not mandatory for this mission.
Detailed description of openBIM used on the project or initiative 500 words
How is openBIM used? Include the benefits, highlights and achievements of using openBIM on the project or initiative. For example: • Client mandated native file formats and IFC • Over 1,305,000 IFC structural objects modelled • Delivered on time and under budget • How the use of openBIM brings value to the project or initiative • How use of openBIM enhances operational objectives or outcomes
"We were able to innovate using openBIM." (optional)  250 words
If this statement is true, describe what the innovation was and how this was achieved on the project. Definition: 'Innovation' refers to a new or novel method, idea, product, etc.
openBIM methods used  IFC 2x3
☐ IFC 4
ifcXML
ifcOWL
bSDD
□ BCF
mvdXML
COBie
Choose all that apply.

Have you used bSDD to add additional extensions on top of IFC?
○ Yes
○ No
Provide supporting screenshots or documentation on the Evidence Tab.
Were there other regional or open standards used other than those listed above? (optional)
Was interoperability achieved in an open format by a standard or schema not identified in the openBIM list above? Ex: OmniClass, UniClass, MasterFormat, UniFormat, CoClass, SFB, ETIM, etc. Was this instrumental in the successful use of openBIM?
Level of Collaboration (optional)
One individual
One domain within an organization
Several domains within an organization
One domain in two or more organizations
Multi-domain in two or more organizations
Indicate the level of collaboration using openBIM information exchanges.
Information Requirements (optional)
Did you use/create/get 'information requirements'? Please upload them. (Ex: Within the contract or as an appendix to the contract; or iterated out from the contract for easier consumption on the project.) Did you create any information requirements (as an organization or for the specific project or scope of work)? Ex: Asset Information Requirements, Project Information Requirements, Owner Information Requirements, Information Delivery Specification, etc.

### openBIM Evidence

This section should provide evidence to support the claims. Refer to the following site for reference:

**bSI** Technical Site

**bSI Certified Software List** 

Software Ecosystem Map



What tools and information exchanges were used? How were the tools connected? Provide a visual diagram of all the BIM software and openBIM information exchanges between the various project stakeholders or user groups. Be explicit about openBIM elements. We want to see the openBIM data exchanges, formats and applications, related to the outcomes. What APIs did you use? (Ex: BCF, Documents API, bSDD API, property exchange API, other)

**Process Maps** 



Use this field to upload process map views (as a single file upload) that shows where and how openBIM was used between the various parties exchanging digital information. Include any description text you feel is important to describe the processes demonstrated. Ensure the jury can easily understand and read the content (ex: Does it have a title? Is it well labelled? Is it a logical sequence? etc.).

openBIM Data Metrics Summary



For example: How many revisions, how many objects inside IFC, how many BCF topics/issues, how many IFC aspect files during coordination, etc. This summary should give a general idea of scope and scale of use or impact of openBIM.

Additional openBIM Supporting Evidence (optional)



Use this field to provide additional supporting evidence to better your submission. May include written materials, process maps, visual graphics, photos, screenshots, images, etc. Submit as a single document in .pdf format.

Lessons Learned (optional)	1000 words
Describe what was learned through this project experience about openBIM and open environments for data exapply what you learned to your next project, what would that be? You can also include recommendations for what should consider providing to the industry in the form of reference resources, technical standards or tools.	
"We were able to identify where we need openBIM to develop further." (optional)	250 words
Identify where you could have used more development of openBIM to bring greater benefit to the project.	
Upload .ifc file(s) to an online viewer and provide the URL for viewing HERE [copy/paste URL]:	
Refer to the Submission Guidelines for more information about free IFC Viewer platform choices. *NOTE: For reto viewing these files, send a message to awards@buildingsmart.org.	estrictions around access
Share any instructions for accessing the .ifc or other technical files for review. (optional)	
Include any log in requirements or access restrictions.	

Use the bSI Validation Service to check IFC files against the specification (and bSDD). Create a free account at: <a href="http://validate.buildingsmart.org">http://validate.buildingsmart.org</a>

Send an email to awards@buildingsmart.org to request a free Box folder to upload the same IFC files for use by the Technical Team to run through the bSI Validation Service. These IFC files will not be available to the jury or the public; only the technical team.

Attach results from the bSI Validation Service. (optional)



PDF format The Technical Team will provide this service. However, submitters are encouraged to try it out themselves in parallel. The Validation Service is in Beta version. For technical issues or feedback, email validate@buildingsmart.org.

## Sustainability

Completion of this section remains optional, as not all submissions will have sustainability criteria or outcomes as part of the scope of work. Those that do have sustainability elements to demonstrate, have the opportunity here to highlight them in this

advancements or excellence in sustainability using openBIM.	
What were the sustainabile outcomes achieved? (optional)	500 words
For example: -Carbon emissions decrease (lower embodied carbon and/or lower energy usage) -Better dec wholistic view on sustainability (supported by i.e. lifecycle assessments) -Better working conditions (i.e., lncr construction) -Better climate change resilience of the built asset/built environment -Enhanced biodiversity/g environment -Increased well-being of the built asset's occupants or users (i.e. measured by feedback/testin value) -Generation and usage of renewable energy -Increase of reuse and lifespan of materials and building or better connection to, sustainability assessments or reporting systems -Reduced (potable) water consumptions of the construction in the construction to the construction to the construction of the construction of the construction in the construction of the constru	reased safety in greening of the built nonies or increased asset g elements -Automation of,
Describe in detail how openBIM was used to achieve the sustainable outcomes. (optional)	500 words
Include the benefits, highlights and achievements of using openBIM. Describe how the research, solution or contribute to the sustainability outcomes.	project used openBIM to
Level of Impact (optional)	
Return-On-Investment Realised	
Greenhouse Gas Emissions Savings	
Reduced Lifecycle Costs	
Reduced Environmental Costs	
Increased Monetary Value of the Built Asset	
☐ Increased Longevity in Service Life of Built Assets	
Higher Score on Rating System	
Obtained Sustainability Certificate	
Other	
Indicate the level of impact of the sustainable outcomes achieved.	
Sustainability Metrics (optional)	
<u> </u>	
Submit metrics to support the sustainable outcomes and levels of impact identified. Use a company or projeinfographics if desired to prepare this attachment document.	ect template and
Sustainability Requirements (optional)	250 words
Describe how sustainability requirements were defined for the project, operations, technology solution or rethese formulated? -Where were they written down? -Are they measurable? -How are they (to be) enforced?	esearch studyHow were
Sustainability Requirements Documentation (optional)	
<u></u>	
Attach the documentation that shows where or how the sustainability requirements have been captured.	
Business Value	

section. Competion of this section results in the **potential to win an award** or special mention that commends innovative

Business value or return-on-investment (ROI) can be defined in quantitative metrics and qualitative measures. Business value can achieve gains economically, environmentally, and socially. Business value can also show a decrease in risk, uncertainty, or waste. However you are able to demonstrate business value or ROI, be sure to identify how openBIM contributed to these desired business outcomes. Provide stakeholder statements. 500 words Provide a minimum of one (1) and a maximum of five (5) different stakeholder statements that exemplify the merits or business value of this scope of work. Consider client/owner, senior executive, director, technical or end user stakeholders that could support this requirement. Also consider how to identify business value from using openBIM. Describe the business value generated from using openBIM. 1000 words For example, but not limited to: • Increased Revenue • Increased Profitability • Decreased Risk • Increased efficiency • Standing out from the competition • Positive Environmental or Social Impact • Improved organizational culture • Improved relationships between stakeholders • Improved employee attitude, skills, and maturity • Faster Time-to-market • Reduced waste • Shortened production processes • Usability, utility, and value of outputs • The satisfaction of users and clients • Return on Investment • Innovation opportunities Provide an attachment that promotes the achievements in business value using openBIM on this scope of work. (optional) This format can be promotional in nature, with a company or project template and logos. Complete the bSI survey on Business Value from openBIM. https://bsicommunications.typeform.com/to/SoEJhpbx Attach survey results as PDF export. Results can help contribute to the strength of your submission and judges' overall scoring. **Use Cases** You are invited to submit information regarding "Use Cases" to strengthen your submission and help inform ongoing buildingSMART activities around this important topic. Completion of this tab is optional. Entrants are encouraged to leverage the bSI Use Case Management Tool activity page. Competion of this section results in the **potential to win an award** or special mention that commends innovative advancements or excellence in use case activities using openBIM. BIM Uses were defined on the project (optional)

Documentation on use case(s) as a single file upload (optional)

File formats accepted: .doc, .docx, .pdf, .ppt, .pptx, .xls, .xlsx You may need to consolidate various documentation into one file format. This file may also include live links.

BIM Uses formed an integral part to how the project was delivered (optional)

#### **Attachments**

Additional material shall be supplied as follows:

- 1. Ensure the written component of your entry be fully explained within the other tabs; only supporting documentation used as reference should be added here;
- 2. A **minimum of ten (10) images** should be uploaded with your entry that best represent the submission;
- 3. Formats accepted are as follows: .pdf; .ppt/pptx, .jpg/jpeg; .png, .mp3; .mp4;
- 4. Links and externally hosted videos are allowed as attachments.



Type of attachment (optional)

