

bS-USA Solutions Providers Group (SPG) BIM for Bridges and Structures Unit Test Support Forum #08 & SPG General Meeting

05 June 2024

Agenda

Updates on Unit Test Suite and Design-to-Construction data exchange requirements and methodology

Updates on specific instructions

GitHub and Teams updates

Questions **for** Vendors

Questions **from** Vendors

AOB

General Notes

Meeting is being recorded. Recordings and notes will be made available on the [project Teams site](#)

Any documentation resulting from discussions will be included on GitHub repository Readme.md and/or repository wiki

Speak up. Silence is NOT golden in this case. Active participation helps us all. If you see something, say something. We are flexible to form the optimal process and get the best results. When in doubt, ask. There are no dumb questions.

Meeting Schedule

Back to bi-weekly. Same day of week, same time.

Tentative 2024 Dates & *Tentative SPG 2024 Dates:

~~14 FEB~~

~~28 FEB~~

~~13 MAR~~

~~27 MAR~~

~~10 APR*~~

~~24 APR*~~

~~08 MAY cancelled~~

~~22 MAY~~

05 JUN*

19 JUN

03 JUL

17 JUL*

31 JUL

14 AUG*

28 AUG

11 SEP

25 SEP*

09 OCT

23 OCT*

06 NOV

20 NOV*

04 DEC

18 DEC*

Unit Test Suite Updates

Unit Test Suite – Continued Work/Challenges

- Coordination with the bSI
 - **Tech Services is aware of our UTS (reviewing)**
 - **Technical Coordination meetings to kick off Phase 2 - TPF-3[523]**
 - IDS, bSDD, Base MVDs, IDM, UCM
 - Almost complete
 - **Est. date of AbV(?)... End of June 2024?!?!?!?**
- Mapping of Data Dictionary items to IFC4.3.2.0
 - **“Version 2.0” – posted to bSDD (more work to be done) – Imminent**
- Documentation and links based on **Official** version of **IFC4.3.2.0**
https://standards.buildingsmart.org/IFC/RELEASE/IFC4_3/index.html
- Permissible Use letter – Will be made available on the GitHub repo (***pending***)

Test Instructions Updates

TI Updates

1. PDFs for bridges 01-03 finished. Alignment data added to L4 folders. Working on **README.md** files for all, listing requirements per bSI template
2. No further UTS additions unless explicitly called for in GitHub Discussions by vendors.

GitHub / Teams Updates

UTS on GitHub / Teams Updates

- Any further feedback?

Questions for Vendors

Your input is valuable...

bSI base MVD Updates

- Alignment-based Reference View (abRV) -> Alignment-based View (AbV)
 - More than “Reference geometry”
 - Updated documentation – *Let's take a look...*

IFC4x3 MVD

<https://docs.google.com/spreadsheets/d/1K4apJAJ0Embq811KtjGJIPExN-gr8yIEw1JiXg5W10k/edit#gid=2118705671>

IFC 4.3.2.20240512 (IFC4X3_ADD2) under development

<https://ifc43-docs.standards.buildingsmart.org/IFC/RELEASE/IFC4x3/HTML/concepts/content.html>

Alignment-based View (AbV) Requirements

A BIM for Bridges Perspective

Alignment-based View should include:

- Broad use case coverage for bridges includes, but not limited to:
 - Design coordination (includes interference/clash detection)
 - Quantity takeoff (QTO)
 - Baseline reference for Construction Process/Sequencing Simulation
 - Baseline reference for further Detailing and Fabrication Modeling
 - As-builts
 - Baseline reference for Monitoring/Inspection/Maintenance
- Flexible spatial containment (not one standard for depiction of bridge spatial hierarchies... similar, but not always the same)

TPF-5(372)

Alignment-based View (AbV) Requirements

A BIM for Bridges Perspective

Alignment-based View should include:

- All “Products”
- All “Annotation” objects (Grids, “2D” lines/shapes/text)
- All Aggregations/Groupings
- IfcDocumentReference/IfcDocumentInformation
- Any/all Coordination Reference Systems
- IfcRelSequence
- Simple, but efficient geometries... (Advanced) Swept Solids, Surface Model, ...
- ...???

Alignment-based View (AbV) Requirements

A BIM for Bridges Perspective

Alignment-based View should include:

- **Is this position viable and acceptable to BIM authoring vendors?**
- **Any issues, questions, feedback?**
- **Next steps?**

Questions from Vendors?

See something, say something...

AOB

Thank you for your time

SPG June 2024

05 June 2024

bSUSA + NIBS openBIM[®] Showcase 2024 Proposal

Feedback?

AOB

Thank you for your time