

# bS-USA Solutions Providers Group (SPG)

## BIM for Bridges and Structures Unit Test Support Forum #07

22 May 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
  - **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) – End of May**
- Documentation and links based on **Official** version of **IFC4.3.2.0**  
[https://standards.buildingsmart.org/IFC/RELEASE/IFC4\\_3/index.html](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 2024 – Recap and Looking Ahead

24 April 2024

# Agenda

What is the SPG?

Resources

Review bSUSA + NIBS openBIM<sup>®</sup> Showcase 2024 Proposal

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# What is the SPG?

# Resources

A solid teal horizontal bar with a right-pointing arrow shape on its right end, spanning across the middle of the slide.

# bSUSA + NIBS openBIM<sup>®</sup> Showcase 2024 Proposal

# AOB

Thank you for your time