bS-USA Solutions Providers Group (SPG)

BIM for Bridges and Structures Unit Test Support Forum #05

10 April 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	05 JUN	**25 SEP***
28 FEB	**19 JUN***	09 OCT
13 MAR	03 JUL	**23 OCT***
27 MAR	**17 JUL***	06 NOV
10 APR*	31 JUL	**20 NOV***
24 APR*	**14 AUG***	04 DEC
08 MAY	28 AUG	**18 DEC***
22 MAY*	11 SEP	

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)**

- 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...

Alignment-based View Requirements

A BIM for Bridges Perspective

Reference View and Alignment-based Reference View **should be exactly the same, except** for addition of Alignment and more flexible spatial containment

- "Reference"-level geometry is suitable for many Bridge data exchange use cases

- Both Base MVDs should be able to cover similar uses cases/workflows, one for buildings, one for infra

- Broad use case coverage for bridges includes, but not limited to:

  - Design coordination (includes interference/clash detection)

  TPF-5(372)
  - 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

Alignment-based View Requirements

A BIM for Bridges Perspective

Reference View and Alignment-based Reference View ***should be exactly the same, except*** for addition of Alignment and more flexible spatial containment

Base MVDs 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 Requirements

A BIM for Bridges Perspective

Reference View and Alignment-based Reference View **should be exactly the same, except** for addition of Alignment and more flexible spatial containment

- **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