# TPF-5(372) BIM for Bridges and Structures

Annual Software Vendor Workshop 20-22 July 2021

Day 3 - Thursday, 22 July 2021



#### Workshop Structure & Schedule

#### **Participants**

**HDR Project Team** 

**TPF Sponsors** 

**CBS T-19 Committee** 

**Software Vendors** 

**Invited Observers** 

Mics are muted by default

Vendors, please use "Raise hand" to request unmute

Guests/Observers please enter questions in Chat

Sessions will be recorded for future reference



Tuesday 20 July	Time	Session	Objectives
	9:00am-10:20am	Updates on TPF-5(372)	Overall Schedule / Scope review
			IDM / MVD
			Data Dictionary
			General Q&A
	10:20am-10:40am	Scheduled Break	
	10:40am-11:20am	Demo w/ Q&A: Allplan & LARSA	Demonstrate early development progress and/or intent to
	11:20am-12:00pm	Demo w/ Q&A: PGSuper	support "BIM for Bridges and Structures"

	Time	Session	Objectives
Wednesday 21 July	9:00am-10:20am	Review of Software Vendor	Letter of Intent
		Engagement Plan	Unit Test Suite
			• Certification
			General Q&A
	10:20am-10:40am	Scheduled Break	
	10:40am-11:20am	Demo w/ Q&A: Bentley Systems	Demonstrate early development progress and/or intent to
	11:20am-12:00pm	Demo w/ Q&A: OpenBrIM	support "BIM for Bridges and Structures"

	Time	Session	Objectives
Thursday 22 July	9:00am-10:20am	bSI IFC4.3 Progress	Candidate Standard status
			Feedback from participating Vendors on results
			General Q&A
	10:20am-10:40am	Scheduled Break	
	10:40am-11:20am	Demo w/ Q&A: Autodesk	Demonstrate early development progress and/or intent to
	11:20am-12:00pm	Demo w/ Q&A: Trimble –	support "BIM for Bridges and Structures"
		Quadri & Tekla Structures	

#### Today's Schedule – Day 3

Thursday 22 July	Time	Session	Objectives
	9:00am-10:20am	bSI IFC4.3 Progress	<ul><li>Standard status</li></ul>
			- Phase 1 of IFC4.3 Deployment
			- ISO Submittal and Process
			<ul> <li>Feedback from participating Vendors on results</li> </ul>
			■ General Q&A
	10:20am-10:40am	Scheduled Break	
	10:40am-11:20am	Demo w/ Q&A:	Demonstrate early development progress and/or intent to
		Autodesk	support "BIM for Bridges and Structures"
	11:20am-12:00pm	Demo w/ Q&A:	
		Trimble – Quadri & Tekla	
		Structures	





# buildingSMART International - IFC4.3 Development Progress



#### The Road: IFC4 -> IFC 4.3

**IFC4:** Revisions to IFC2x3 (Building-focused)

**IFC4.1:** Alignment for Linear Infrastructure

IFC4.2: Bridge Elements (Phase 1)

Adding new Spatial classes
(IfcFacility/IfcFacilityPart)

IFC4.3: Adding Rail, Road, Geotechnical, Ports & Waterways, & Bridge (Phase 2)

Rework of IfcAlignment (not backward compatible with IFC4.2 or IFC4.1)



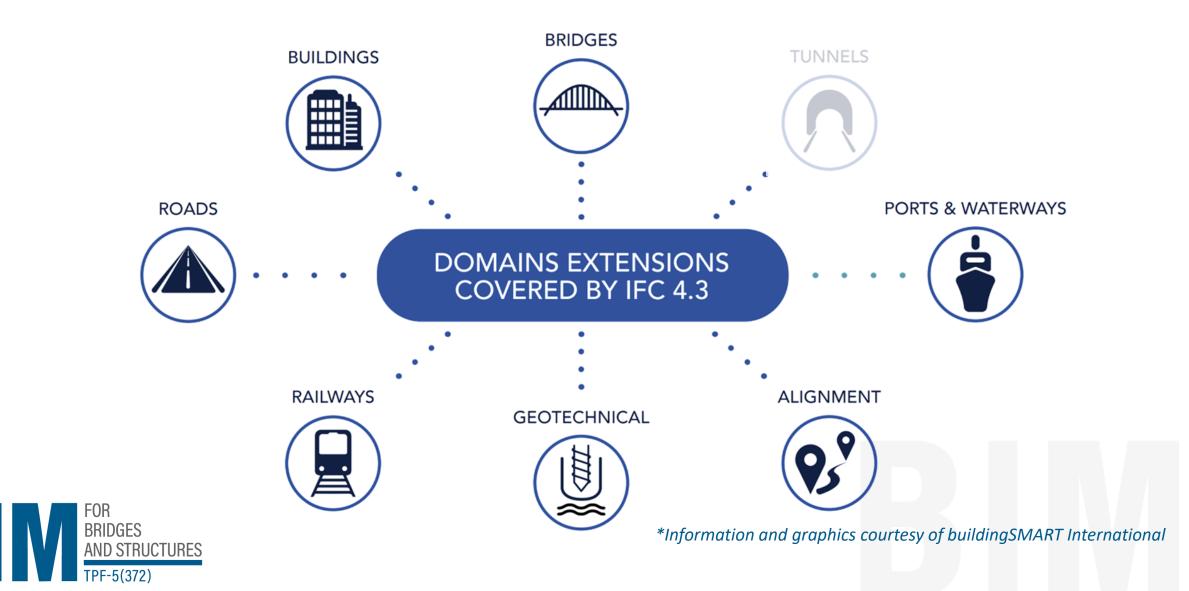




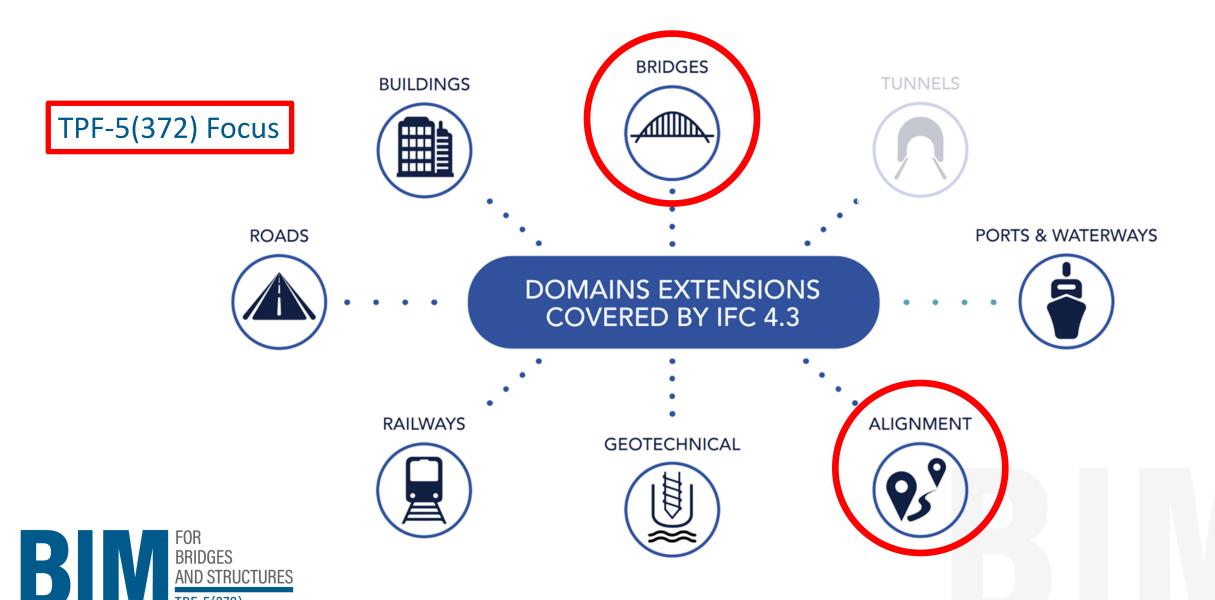




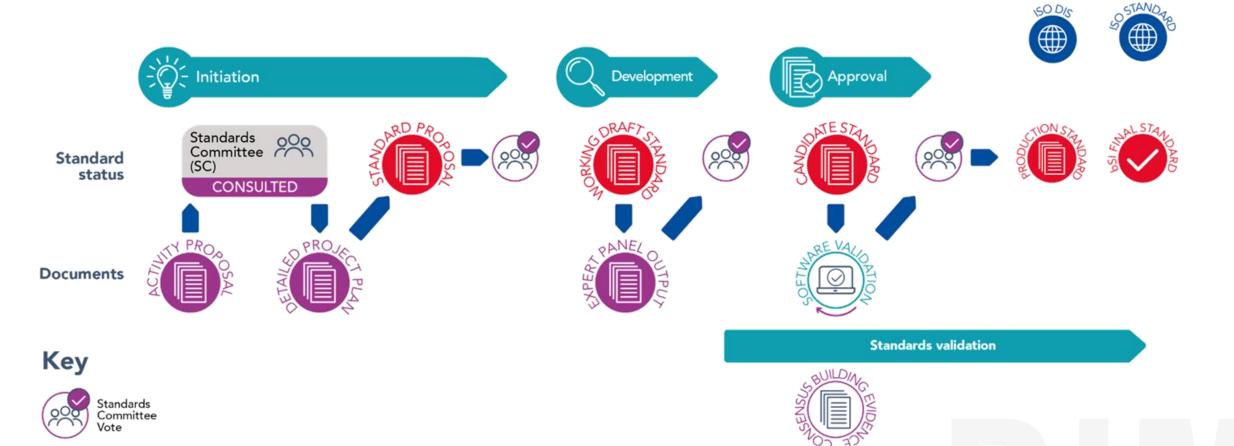
#### Domains in the new IFC 4.3 standard



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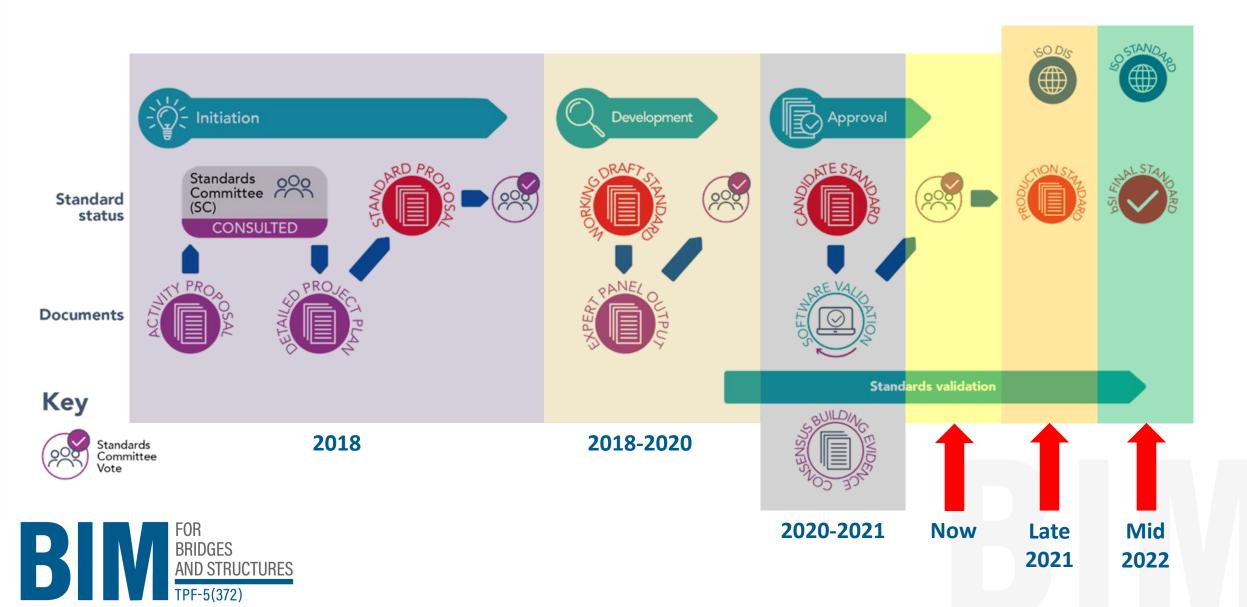


#### **bSI Process**

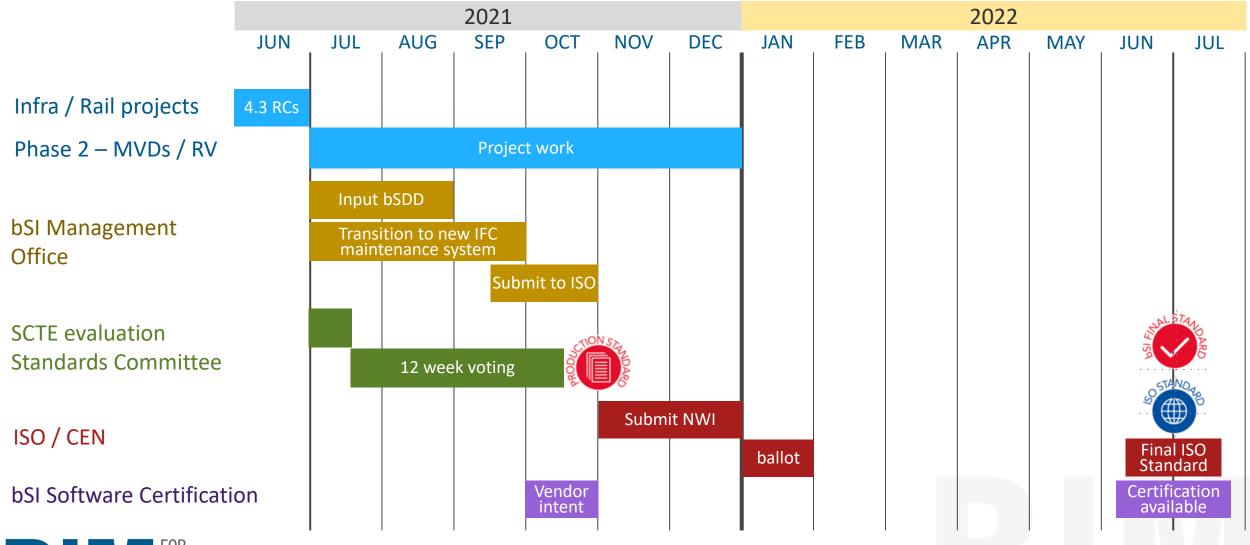




#### bSI Process: IFC4.3 Progress



#### IFC 4.3 Timeline





\*Information and graphics courtesy of buildingSMART International

#### Vendor Feedback Roundtable

Who has been involved (observer or active) with the buildingSMART IFC4.3 Rail and/or Infra Deployment projects?

Were you able to be actively involved with testing IFC4.3 through the unit testing import?

Have you identified any serious issues concerning support implementation (export and/or import) based on the latest know state of IFC4.3?

Do you feel your products can meet the goals and timeline of functionality and certification by the end of 2023?

What further support do you feel you will need moving forward with your IFC4.3 and AASHTO support development?





## General Q & A



## Day 3 Demos

Autodesk – 40 mins.

Trimble: Quadri & Tekla – 40 mins.

