

# BIM for Rail Bootcamp 2024

June 4-5 @SBB, Bern-Worblaufen , Switzerland

## Day 1 – Tuesday 4 June 2024

Time	Duration	Program item								
9.30 – 10.00	0:30	Walk-in - Registration								
10.00 – 10.15	0:15	Welcome and introduction of the program for day 1								
10.15 – 10.45	0:30	Welcome and keynote by SBB, Billal Mahoubi - Overview BIM@SBB								
10.45 – 11.00	0:15	Coffee and networking break								
11.00 – 11.30	0:30	Keynote by ProRail, Marjoleine Jonker - ProRail's digitalisation vision and the adoption of BIM								
11.30 – 12.00	0:30	Keynote by Birmingham Centre for Railway Research and Education, Paul Plummer								
12.00 – 12.30	0:30	Keynote by buildingSMART Switzerland, Birgitta Schock - OpenBIM and IFC4.3 (Update from the Railway Domain)								
12.30 – 13.30	1:00	Lunch and networking break								
13.30 – 14.15	0:45	Workshops round 1 <table border="1" data-bbox="456 1182 1444 1536"> <tbody> <tr> <td>1</td> <td><b>BIM Implementation in ADIF and CDE deployment</b> Javier Lozano Lopez, ADIF</td> </tr> <tr> <td>2</td> <td><b>Order initiation &amp; base data for as-built BIM projects</b> Sandra Furrer and David Holdener, Rhomberg Sersa Rail Group</td> </tr> <tr> <td>3</td> <td><b>Vision on Digital Asset Management, using digital twins in Irish Rail</b> Jude Carey, Irish Rail</td> </tr> <tr> <td>4</td> <td><b>Deep Dive into IFC Rail</b> Chi Zhang, SBB</td> </tr> </tbody> </table>	1	<b>BIM Implementation in ADIF and CDE deployment</b> Javier Lozano Lopez, ADIF	2	<b>Order initiation &amp; base data for as-built BIM projects</b> Sandra Furrer and David Holdener, Rhomberg Sersa Rail Group	3	<b>Vision on Digital Asset Management, using digital twins in Irish Rail</b> Jude Carey, Irish Rail	4	<b>Deep Dive into IFC Rail</b> Chi Zhang, SBB
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14.15 – 15.00	0:45	Workshops round 2 <table border="1" data-bbox="456 1626 1444 2011"> <tbody> <tr> <td>1</td> <td><b>Value based collaboration - an investigation into the challenges of a Q-Gate test protocol from an architect's perspective</b> Birgitta Schock and Igor Karwacki, schockguyan GmbH</td> </tr> <tr> <td>2</td> <td><b>Assurance of AI enabled Digital Twins</b> Pieter Zuiddam and Jorge Aldegunde, DNV</td> </tr> <tr> <td>3</td> <td><b>Information Need on the Construction Site</b> Marie Kronborg Ellemose and Astridur Elin Asgeirsdottir, Aarsleff Rail</td> </tr> <tr> <td>4</td> <td><b>Consistency of data requirements from asset management to BIM</b> Basil Apotheloz, SBB</td> </tr> </tbody> </table>	1	<b>Value based collaboration - an investigation into the challenges of a Q-Gate test protocol from an architect's perspective</b> Birgitta Schock and Igor Karwacki, schockguyan GmbH	2	<b>Assurance of AI enabled Digital Twins</b> Pieter Zuiddam and Jorge Aldegunde, DNV	3	<b>Information Need on the Construction Site</b> Marie Kronborg Ellemose and Astridur Elin Asgeirsdottir, Aarsleff Rail	4	<b>Consistency of data requirements from asset management to BIM</b> Basil Apotheloz, SBB
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15.00 – 15.15	0:15	Coffee and networking break								

15.15 – 15.45	0:30	<b>Keynote Linh Truong Hong, GeoNext</b> - Creation of digital twins from high quality point clouds								
15.45 – 16.15	0:30	<b>Review BIM for Rail whitepaper</b>								
16.15 – 17.00	0:45	<b>Workshops round 3</b> <table border="1" style="margin-left: 20px;"> <tr> <td style="background-color: #d9ead3;">1</td> <td><b>Implementing AI-Powered Rail Inspections: Best Practices for Control and Governance</b> Mike Butler and Nick Smith, Cordel</td> </tr> <tr> <td style="background-color: #d9ead3;">2</td> <td><b>Standardisation of object catalogues for BIM-models regarding station buildings and platforms</b> Joshua Grzeskowiak, DB InfraGO</td> </tr> <tr> <td style="background-color: #d9ead3;">3</td> <td><b>Use cases for an “as built” 3D-visualisation model, after finishing a railway infrastructure project</b> Marc Pingoud, Rosenthaler + Partner AG</td> </tr> <tr> <td style="background-color: #d9ead3;">4</td> <td><b>Concept and realisation of component library</b> Mercedes Santos, SBB</td> </tr> </table>	1	<b>Implementing AI-Powered Rail Inspections: Best Practices for Control and Governance</b> Mike Butler and Nick Smith, Cordel	2	<b>Standardisation of object catalogues for BIM-models regarding station buildings and platforms</b> Joshua Grzeskowiak, DB InfraGO	3	<b>Use cases for an “as built” 3D-visualisation model, after finishing a railway infrastructure project</b> Marc Pingoud, Rosenthaler + Partner AG	4	<b>Concept and realisation of component library</b> Mercedes Santos, SBB
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17.00 – 17.25	0:25	<b>Panel discussion about BIM and Asset Management with the perspective on BIM by asset owners, contractors, engineering companies and railway suppliers</b>								
17.25 – 17.30	0:05	<b>Final remarks of Day 1</b>								
17.30 – 22.00		<b>Check-in hotels and evening program @Head Quarters SBB, Bern-Wankdorf</b>								

## Day 2 – Wednesday 5 June 2024

Time	Duration	Program item						
8.30 – 8.45	0:15	<b>Walk-in</b>						
8.45 – 9.00	0:15	<b>Welcome and introduction of the program for day 2</b>						
9.00 – 10.00	1:00	<b>Keynote Samuel Teo, Land and Transport Authority Singapore</b> - Enterprise architecture as the linking pin in the complex field of building information modelling, asset management and digital twins.						
10.00 – 11.00	1:00	<b>Workshops round 4</b> <table border="1" style="margin-left: 20px;"> <tr> <td style="background-color: #d9ead3;">1</td> <td><b>BIM for Mobility Hubs: similarities in designing stations and airports</b> Janek Pfeifer, Deutsche Bahn and Daniël Gmelig Meyling, NACO Netherlands Airport Consultants</td> </tr> <tr> <td style="background-color: #d9ead3;">2</td> <td><b>Evaluation of BIM deliverables in the Rail Baltica project</b> Urmaz Alber and Jovita Starynina, Rail Baltica</td> </tr> <tr> <td style="background-color: #d9ead3;">3</td> <td><b>SBB rule sets, binding for creating BIM technical models in IFC format.</b> André Wegener, SBB</td> </tr> </table>	1	<b>BIM for Mobility Hubs: similarities in designing stations and airports</b> Janek Pfeifer, Deutsche Bahn and Daniël Gmelig Meyling, NACO Netherlands Airport Consultants	2	<b>Evaluation of BIM deliverables in the Rail Baltica project</b> Urmaz Alber and Jovita Starynina, Rail Baltica	3	<b>SBB rule sets, binding for creating BIM technical models in IFC format.</b> André Wegener, SBB
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11.00 – 11.15	0:15	<b>Coffee break</b>										
11.15 – 12.00	0:45	<b>Workshops round 5</b> <table border="1"> <tr> <td>1</td> <td><b>Leveraging Ontologies for Object Type Libraries (OTL), Creation: Governance, Use, and Benefits</b> Karrar Ibrahim, Marco Andersson and Amra Halilovic, Trafikverket</td> </tr> <tr> <td>2</td> <td><b>Photogrammetry of railway bridges</b> Martin Laursen, Banedanmark</td> </tr> <tr> <td>3</td> <td><b>The future of digital delivery of designs; an interactive discussion about pragmatic ways of implementing ISO 19650 in the railway supply chain</b> Ron Rijkers, Movares</td> </tr> <tr> <td>4</td> <td><b>BIM and Point clouds</b> Kirstin Alphenaar, GeoNext</td> </tr> <tr> <td>5</td> <td><b>Project-based applications of BIM@SBB standards</b> Fernanda Benezra (GESTE) and Maria Tapia (SBB)</td> </tr> </table>	1	<b>Leveraging Ontologies for Object Type Libraries (OTL), Creation: Governance, Use, and Benefits</b> Karrar Ibrahim, Marco Andersson and Amra Halilovic, Trafikverket	2	<b>Photogrammetry of railway bridges</b> Martin Laursen, Banedanmark	3	<b>The future of digital delivery of designs; an interactive discussion about pragmatic ways of implementing ISO 19650 in the railway supply chain</b> Ron Rijkers, Movares	4	<b>BIM and Point clouds</b> Kirstin Alphenaar, GeoNext	5	<b>Project-based applications of BIM@SBB standards</b> Fernanda Benezra (GESTE) and Maria Tapia (SBB)
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14.15 – 14.45	0:30	<b>Keynote by Christos Papatheologos, SBB</b> <ul style="list-style-type: none"> <li>- The BIM implementation approach of SBB: ramp up of project portfolio followed by a panel discussion</li> </ul>										

<b>14.45 – 15.15</b>	<b>0:30</b>	<b>Closing panel discussion</b> <ul style="list-style-type: none"><li>- Exchange of information regarding the implementation of BIM by Rail Infrastructure Managers</li></ul>
<b>15.15 – 15.30</b>	<b>0:15</b>	- <b>End of Day 2 and closing remarks</b>
<b>16.00</b>		- <b>Technical tour Bern Central Station</b>