

BIM for Rail Bootcamp 2026

June 17 - 18 @Riga Technical University, Latvia

Co-hosted by Riga Technical University and Rail Baltica | Event partner Vossloh

Day 1 – Wednesday 17 June 2026

Time	Duration	Program item								
09.15 – 09.50	0:35	Walk-in and registration								
09.50 – 10.00	0:10	Welcome and opening								
10.00 – 10.30	0:30	Keynote Riga Technical University, by Raitis Busmanis								
10.30 – 11.00	0:30	Keynote Rail Baltica, by Emilien Dang and Jovita Starynina								
11.00 – 11.15	0:15	Coffee and networking break								
11.15 – 12.00	0:45	Workshops round 1 <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 5%; text-align: center; vertical-align: top;">1.1 G</td> <td> <p>BIM within the Whole Systems Lifecycle, from pre-concept to Operations Nathan Darroch, London South Bank University</p> <p>The session will explore:</p> <ul style="list-style-type: none"> • how BIM supports the earliest “idea” stage — defining what we want to achieve — through to operational delivery; • a qualitative approach to understanding existing conditions; • how this informs concept development, data gathering, analysis, and evidence-based reasoning; • project planning, detailing, and delivery; and • how the BIM data developed throughout the lifecycle enables sustainable, safe, time-efficient, and cost-effective railway operations, both now and in the future. </td> </tr> <tr> <td style="text-align: center; vertical-align: top;">1.2 D</td> <td> <p>Collaborating in BIM best practises with GIS Marcel de Rink, Esri</p> <p>In this session Esri would like to discuss best practices and explore ecosystem collaboration. Esri works in partnership with software vendors and contractors to learn and help to improve the decision-making in the asset management process by combining people, process, and new technologies to shape new best practices to work smarter. They will look into examples of GIS with IoT and reality capture to work more efficient with reliable data to improve the speed of the process.</p> </td> </tr> <tr> <td style="text-align: center; vertical-align: top;">1.3 G</td> <td> <p>Interoperability of data Rein Lemmens, Kapernikov</p> <p>RINF compliance becomes the catalyst, not the goal. The real prize is becoming a more data-centric organisation—where infrastructure data is defined once, governed consistently, and consumed by every process that needs it.</p> </td> </tr> <tr> <td style="text-align: center; vertical-align: top;">1.4</td> <td> <p>The Asset Register of Rail Baltica</p> </td> </tr> </tbody> </table>	1.1 G	<p>BIM within the Whole Systems Lifecycle, from pre-concept to Operations Nathan Darroch, London South Bank University</p> <p>The session will explore:</p> <ul style="list-style-type: none"> • how BIM supports the earliest “idea” stage — defining what we want to achieve — through to operational delivery; • a qualitative approach to understanding existing conditions; • how this informs concept development, data gathering, analysis, and evidence-based reasoning; • project planning, detailing, and delivery; and • how the BIM data developed throughout the lifecycle enables sustainable, safe, time-efficient, and cost-effective railway operations, both now and in the future. 	1.2 D	<p>Collaborating in BIM best practises with GIS Marcel de Rink, Esri</p> <p>In this session Esri would like to discuss best practices and explore ecosystem collaboration. Esri works in partnership with software vendors and contractors to learn and help to improve the decision-making in the asset management process by combining people, process, and new technologies to shape new best practices to work smarter. They will look into examples of GIS with IoT and reality capture to work more efficient with reliable data to improve the speed of the process.</p>	1.3 G	<p>Interoperability of data Rein Lemmens, Kapernikov</p> <p>RINF compliance becomes the catalyst, not the goal. The real prize is becoming a more data-centric organisation—where infrastructure data is defined once, governed consistently, and consumed by every process that needs it.</p>	1.4	<p>The Asset Register of Rail Baltica</p>
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		<p>3.3 Observational Method Monitoring by Sensoring2BIM O René van der Velden & Marcel de Koning, GeoNext Civil and railway infrastructure are observed 24/7 and in real time for any deformations during construction and maintenance activities. Sensor data becomes immediately visible and is directly integrated into the BIM model. This enables construction and asset managers to instantly interpret the effects and take appropriate measures. We discuss several existing monitoring projects in which GeoNext is involved e.g. High Speed Line (HSL), construction of Merwede bridge and the Schiphol rail tunnel. We present our vision, our lessons learned, and the challenges of converting monitoring insights into actionable BIM information.</p>				
		<p>3.4 From Design to Maintenance: exploring the different dimensions of the Digital Twin with lessons learned from SNCF Digital Journey O Alexis Menesis, Altametris This workshop explores not only the wide range of use cases enabled by digital twins in both project delivery and maintenance operations, but also the multiple dimensions that a digital twin can encompass—from geometric and informational to temporal and operational layers. Drawing on Altametris real-world experience participating in SNCF digital transformation journey, the session highlights key lessons learned, the challenges encountered, and the value created across the asset lifecycle.</p>				
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16.15 – 17.00	0:45	<p>Workshops round 4</p> <table border="1"> <tr> <td>4.1 D</td> <td> <p>Systems Engineering; the method from NASA to manage complex systems across the lifecycle, how can we apply this in the rail industry? Josefien Vanhuyse, Neanex</p> </td> </tr> <tr> <td>4.2 D</td> <td> <p>BIM in high speed rail project connecting CPK airport with Rail Baltica Artur Krygier, PORR We plan to cover BIM in a concise and practical way, focusing on its real application in the project, in particular: – working within a CDE platform, – the use of models for coordination and information management, – supporting the investment process through laser scanning, drones and 360° documentation. These practical experiences are what we would primarily like to share, concentrating on solutions that have proven effective during the delivery of the project. We would be pleased to present our contract and share our experience in delivering such a large-scale infrastructure project</p> </td> </tr> </table>	4.1 D	<p>Systems Engineering; the method from NASA to manage complex systems across the lifecycle, how can we apply this in the rail industry? Josefien Vanhuyse, Neanex</p>	4.2 D	<p>BIM in high speed rail project connecting CPK airport with Rail Baltica Artur Krygier, PORR We plan to cover BIM in a concise and practical way, focusing on its real application in the project, in particular: – working within a CDE platform, – the use of models for coordination and information management, – supporting the investment process through laser scanning, drones and 360° documentation. These practical experiences are what we would primarily like to share, concentrating on solutions that have proven effective during the delivery of the project. We would be pleased to present our contract and share our experience in delivering such a large-scale infrastructure project</p>
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17.00 – 17.15	0:15	Wrap up day 1				
17.15 – 19.00		Check-in hotels				
19.00 – 22.00		Networking Dinner				

Day 2 – Thursday 18 June 2026

Time	Duration	Program item								
08.30 – 08.50	0:20	Walk-in and coffee								
08.50 – 09.00	0:10	Welcome and introductions for day 2								
09.00 – 10.45	0:45	Workshops round 5 <table border="1"> <tr> <td>5.1 G</td> <td>BIM as Better Intelligence Management: Converging BIM, AIM, and GIS to run rail as a system Jugal Makwana, Autodesk The focus of this workshop is practical. How do teams converge horizontal and vertical design, govern information in a modern common data environment, support interoperable handover into AIM and GIS environments, and create a foundation for safer, faster, and more reliable outcomes?</td> </tr> <tr> <td>5.2 O</td> <td>Integrating Multi-Source Data for Proactive Railway Track Maintenance: A Case Study of the A2 Corridor in the Netherlands Karim El Laham, Haskoning In this presentation, I plan to showcase the power of combining data and expertise in a proven use-case for ProRail. Many Infrastructure managers talk about predictive maintenance, and big data. What is really needed behind the scenes to be able to get to that point from a data management and preparation perspective? What are the next steps after a prediction/analysis is made? How do we make sure we look at the track in a holistic manner and not in siloes? In this deep dive, we look at Culemborg-Geldermalsen track in the Netherlands, known for its unstable embankment and relatively weak soil structure, where we combine different data and expertise as to understand root-causes of the instability and to come up with adequate solutions for it, as well as provide a database and framework to unlock predictive maintenance.</td> </tr> <tr> <td>5.3 D</td> <td>Coventry Very Light Rail Project and BIM Christopher Micallef, Coventry City Council</td> </tr> <tr> <td>5.4 G</td> <td>Model Data Management @ RSRG: Our way to bring standards in our modelling and post processing</td> </tr> </table>	5.1 G	BIM as Better Intelligence Management: Converging BIM, AIM, and GIS to run rail as a system Jugal Makwana, Autodesk The focus of this workshop is practical. How do teams converge horizontal and vertical design, govern information in a modern common data environment, support interoperable handover into AIM and GIS environments, and create a foundation for safer, faster, and more reliable outcomes?	5.2 O	Integrating Multi-Source Data for Proactive Railway Track Maintenance: A Case Study of the A2 Corridor in the Netherlands Karim El Laham, Haskoning In this presentation, I plan to showcase the power of combining data and expertise in a proven use-case for ProRail. Many Infrastructure managers talk about predictive maintenance, and big data. What is really needed behind the scenes to be able to get to that point from a data management and preparation perspective? What are the next steps after a prediction/analysis is made? How do we make sure we look at the track in a holistic manner and not in siloes? In this deep dive, we look at Culemborg-Geldermalsen track in the Netherlands, known for its unstable embankment and relatively weak soil structure, where we combine different data and expertise as to understand root-causes of the instability and to come up with adequate solutions for it, as well as provide a database and framework to unlock predictive maintenance.	5.3 D	Coventry Very Light Rail Project and BIM Christopher Micallef, Coventry City Council	5.4 G	Model Data Management @ RSRG: Our way to bring standards in our modelling and post processing
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		<p>Mahshid Motie and Maciej Musialek, Rhomberg Sersa Rhomberg Sersa Model data management is extremely important. Rhomberg Sersa will demonstrate their method and look forward to hearing from participants how others solve these challenges!</p>								
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13.00 – 13.45	0:45	<p>Workshop round 8</p> <table border="1"> <tr> <td>8.1 G</td> <td> <p>Construction’s Kodak Moment: Beyond BIM, Toward a New Industry Playbook</p> <p>Jim Takki & Marzi Strutzke, 6D Planner</p> <p>Promise:</p> <p>The next era of construction will be won by the players that expand future options faster than legacy commitments compress them.</p> <ul style="list-style-type: none"> • Beyond BIM: This is not a talk about 3D models. It is about the shift from documents to decision systems — the commercial, operational, risk, and lifecycle models that actually determine how assets get built and run. • Kodak moment: The sector’s biggest risk is not missing a technology. It is misreading the operating-model shift that AI, robotics, and automation are now making impossible to ignore. • Why construction lags: Banking, retail, and manufacturing changed when workflows, incentives, and feedback loops changed. Construction still runs on fragmented accountability, one-off delivery logic, and legacy procurement. • Where the bottleneck really is: The deepest constraints sit upstream — in governance, incentives, owner capability, capital logic, and data continuity — not only downstream on site. • What separates winners from losers: The winners will be the players that widen their room to move while others get trapped by legacy commitments, rigid assets, and outdated delivery logic. </td> </tr> <tr> <td>8.2 D</td> <td> <p>Database driven design of catenary systems</p> <p>Andreas Klemens Kjaergaard, NIRAS</p> <ul style="list-style-type: none"> • NIRAS has adopted a database-driven approach for catenary system design, replacing manual processes with a single source of truth to reduce errors and improve efficiency. • Automated generation of 2D and 3D design drafts increases productivity while ensuring higher and more consistent quality. • Rule-based algorithms enable rapid mast placement across different standards, with ongoing work to fully automate drawings and model creation. </td> </tr> <tr> <td>8.3 D</td> <td> <p>Using GIS for innovative solutions on pole foundation for catenary track project</p> <p>Marie Kronborg Ellemose, Aarsleff Rail</p> </td> </tr> <tr> <td>8.4 D</td> <td> <p>Subject tbd</p> <p>Janek Pfeifer, Deutsche Bahn</p> </td> </tr> </table>	8.1 G	<p>Construction’s Kodak Moment: Beyond BIM, Toward a New Industry Playbook</p> <p>Jim Takki & Marzi Strutzke, 6D Planner</p> <p>Promise:</p> <p>The next era of construction will be won by the players that expand future options faster than legacy commitments compress them.</p> <ul style="list-style-type: none"> • Beyond BIM: This is not a talk about 3D models. It is about the shift from documents to decision systems — the commercial, operational, risk, and lifecycle models that actually determine how assets get built and run. • Kodak moment: The sector’s biggest risk is not missing a technology. It is misreading the operating-model shift that AI, robotics, and automation are now making impossible to ignore. • Why construction lags: Banking, retail, and manufacturing changed when workflows, incentives, and feedback loops changed. Construction still runs on fragmented accountability, one-off delivery logic, and legacy procurement. • Where the bottleneck really is: The deepest constraints sit upstream — in governance, incentives, owner capability, capital logic, and data continuity — not only downstream on site. • What separates winners from losers: The winners will be the players that widen their room to move while others get trapped by legacy commitments, rigid assets, and outdated delivery logic. 	8.2 D	<p>Database driven design of catenary systems</p> <p>Andreas Klemens Kjaergaard, NIRAS</p> <ul style="list-style-type: none"> • NIRAS has adopted a database-driven approach for catenary system design, replacing manual processes with a single source of truth to reduce errors and improve efficiency. • Automated generation of 2D and 3D design drafts increases productivity while ensuring higher and more consistent quality. • Rule-based algorithms enable rapid mast placement across different standards, with ongoing work to fully automate drawings and model creation. 	8.3 D	<p>Using GIS for innovative solutions on pole foundation for catenary track project</p> <p>Marie Kronborg Ellemose, Aarsleff Rail</p>	8.4 D	<p>Subject tbd</p> <p>Janek Pfeifer, Deutsche Bahn</p>
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13.45 – 14.00	0:15	Wrap-up and goodbye								

14.00 – 16.00	2:00	Technical tour – Rail Baltica site visit Transfer by bus to RTU and Park Inn Hotel
Legend		Workshop content is focussed on project life stages and indicated with icons: D - Design and Build O - Operate and Maintain G - Generic / across stages