

## Program Outline

| MONDAY 17 AUGUST 2026                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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| Technical Tours <i>(limited space available)</i> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 0845 - 1400                                      | <b>Dry Creek Rail Operations Experience – Keolis Adelaide &amp; Operations Control Centre</b><br>Gain a unique behind-the-scenes perspective into Adelaide's passenger rail network with an exclusive visit to the Dry Creek rail precinct. Combining the Keolis Adelaide Railcar Maintenance Facility and the Department of Infrastructure and Transport's Operations Control Centre (OCC), this technical tour offers delegates a rare opportunity to explore both the operational and maintenance functions that keep Adelaide's rail services moving.<br><br>Delegates will gain insight into the maintenance, servicing and operational readiness of Adelaide's passenger rail fleet, while also experiencing the operational heartbeat of the network through the OCC, where real-time monitoring, coordination and management of rail services takes place. Together, these facilities provide a comprehensive overview of the systems, technology and teams responsible for delivering safe, efficient and reliable public transport across Adelaide. |
| 1015 - 1330                                      | <b>Port Dock Precinct &amp; National Railway Museum</b><br>Step back in time and explore South Australia's rich rail heritage with a visit to the historic Port Dock precinct. Delegates will travel by train to Port Dock to experience the newly developed station precinct and surrounding rail corridor, followed by an exclusive tour of the National Railway Museum, home to one of Australia's most significant collections of railway history and rollingstock. A relaxed opportunity to continue networking may follow at a local venue nearby.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 1030 – 1230                                      | <b>Intercast &amp; Forge – Wingfield</b><br>Gain behind-the-scenes insight into railway manufacturing with an exclusive tour of the Intercast & Forge facility in Wingfield. Delegates will experience the production environment responsible for manufacturing Pandrol rail fastening systems, a critical component in rail infrastructure across Australia and internationally. This technical tour provides a unique opportunity to see precision engineering and manufacturing processes firsthand.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 1300 - 1600                                      | <b>Exhibitor Move In</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 1300 – 1800                                      | <b>Registration Desk Open</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 1600 – 1700                                      | <b>Emerging Rail Professional Icebreaker</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 1700 – 1830                                      | <b>Welcome Reception</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| TUESDAY 18 AUGUST 2026                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 0730 - 1800                                      | <b>Registration Desk Open</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 0730 - 1800                                      | <b>Exhibition Open</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 0830 – 1000                                      | <b>Day One Plenary Session</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 0830 – 0845                                      | <b>Welcome to Country</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 0845 – 0850                                      | <b>Welcome, Master of Ceremonies</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 0850 – 0900                                      | <b>RTSA Welcome</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 0900 – 1000                                      | <b>Keynote Address - Michael McQueen</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 1000 – 1030                                      | <b>Morning Tea</b> <i>Served in the exhibition space</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

| 1030 – 1230 | Concurrent Sessions - Concurrent sessions are 20-minute presentations + 5-minute question time                                                                                                |                                                                                                                                                                                                                |                                                                                                                                                                 |                                                                                                                                                        |                                                                                                                           |
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|             | SESSION 1<br>LIGHT RAIL AND METRO<br>SYSTEMS                                                                                                                                                  | SESSION 2<br>TRAIN OPERATIONS                                                                                                                                                                                  | SESSION 3<br>SAFETY & RISK<br>MANAGEMENT                                                                                                                        | SESSION 4<br>SIGNALS &<br>COMMUNICATIONS                                                                                                               | SESSION 5<br>TRACK DESIGN &<br>CONSTRUCTION                                                                               |
| 1030        | Small Network, Big Change: Adelaide's Tram Grade Separation Project and Innovative Track Solutions<br>Jason Williams,<br>Aurecon & Tram Grade Separation Projects Alliance,<br>VIC, Australia | Intelligent Event-Triggered Robust Model Predictive Control for Disturbance-Affected Automated Train Platooning<br>Yufeng Lin,<br>Central Queensland University, Centre for Railway Engineering QLD, Australia | Rail Surveying Safety Innovations Transforming Shutdown Delivery, Machine Control and Workforce Protection<br>Olan Healy,<br>McDonald Surveys,<br>WA, Australia | A Practical Playbook for Signalling & Engineering Management for Brownfield ETCS Level 2 Migration<br>Subhajit Dey,<br>UGL Limited,<br>NSW, Australia  | Buffer Stop Design for Varying Requirements for Bellevue Depot<br>Surendra Bisht,<br>Aurecon, WA, Australia               |
| 1100        | Energy-Centric Design & Maintenance Framework (ECDMF) for GoA4 Depots<br>Vinod Kumar<br>Mott Macdonald Australia,<br>VIC, Australia                                                           | Interoperability in Rail Systems - Economic Drivers, International Lessons, and Implications for Australia<br>Brychan Morris,<br>Network Rail Consulting, QLD, Australia                                       | Integrated Dynamic Track Quality Assessment for Australian Rail Networks Using TQI, Vehicle Dynamics, And Standards<br>Yan Sun,<br>CQUniversity, QLD, Australia | When Legacy Systems Fail Catastrophically<br>Haki Singh,<br>Keolis Australia & New Zealand,<br>SA, Australia                                           | Flood Resilience of Inland Rail<br>Ali Ayub & Hartley Bulcock,<br>Inland Rail, QLD, Australia                             |
| 1130        | Keeping Adelaide Trams Running Through Grade Separations: Temporary Stabling and Network Isolation on Glenelg Line<br>Tom Kerr<br>McConnell Dowell, SA, Australia                             | What Is Capacity? A Review of Measurements and Applications in Literature and Industry<br>David Bannister,<br>Minerva Transport Planning Company, VIC, Australia                                               | Effective Bowtie Diagram Development – Supporting Safety and Risk Management<br>Steven Gibson,<br>ESR Consulting, WA, Australia                                 | Cyber Security in an EtcS, Eulynx and FRMCS Brownfield Environment<br>Andrew Mac<br>Quantum Rail, VIC, Australia                                       | Boef-Rail: Deterministic Software for Railway Track Analysis<br>Mahan Yoldashkhan, MTM, VIC, Australia                    |
| 1200        | Digital Twin Modelling of Complex Light Rail Intersections<br>Robert Lambert,<br>Monash IRT, VIC, Australia                                                                                   |                                                                                                                                                                                                                | Talk Isn't Cheap: Examining The Effectiveness of Risk-Triggered Commentary in Rail Driving<br>Anjum Naweed,<br>CQUniversity Adelaide, SA, Australia             | Transition From RRI to CBI<br>Zhe Xu,<br>Siemens Mobility, NSW, Australia                                                                              | Major Infrastructure Programs - Learning Lessons from High Speed 2 Limited<br>Colin Westwood<br>Atkins, VIC, Australia    |
| 1230 - 1330 | Lunch Served in the Exhibition Hall                                                                                                                                                           |                                                                                                                                                                                                                |                                                                                                                                                                 |                                                                                                                                                        |                                                                                                                           |
| 1330 – 1530 | Concurrent Sessions - Concurrent sessions are 20-minute presentations + 5-minute question time                                                                                                |                                                                                                                                                                                                                |                                                                                                                                                                 |                                                                                                                                                        |                                                                                                                           |
|             | SESSION 6<br>ENERGY, ENVIRONMENT & SUSTAINABILITY                                                                                                                                             | SESSION 7<br>INSPECTION & CONDITION MONITORING                                                                                                                                                                 | SESSION 8<br>SYSTEMS ENGINEERING                                                                                                                                | SESSION 9<br>TRACTION SYSTEMS                                                                                                                          | SESSION 10<br>TRACK DESIGN & CONSTRUCTION                                                                                 |
| 1330        | A Multi-Objective Corridor Resilience Assessment Framework For Battery Electric Trains<br>Sakura Mukhopadhyay,<br>Arcadis, NSW, Australia                                                     | Augmenting Track Inspection With AI to Enhance Track Asset Management Strategy<br>Darren Tan,<br>Monash Institute of Railway Technology, VIC, Australia                                                        | Integration: When Simplicity is the Key to Managing Project Complexity<br>Nicolas Teulier, Acmena, NSW, Australia                                               | Challenging the EN 50122-1 Overhead Contract Line Zone (OCLZ )for Catenary and Contact Systems<br>David Stuart-Smith, Arup, NSW, Australia             | Topographical Vertical Alignment Design Using a Rolling Stock Derived Method<br>Miles Sexton, Inland Rail, Qld, Australia |
| 1400        | Net Zero Rail For South Australia<br>Tilo Franz, Ricardo, NSW, Australia                                                                                                                      | Battery Electrification of the Flash-Butt Rail Welding Process<br>Shane Mayhill,<br>Holland, L.P., IL, USA                                                                                                     | Fail-Safe or Fail-Secure? Security Gaps in Rail<br>Soroush Tazerji, Sener, VIC, Australia                                                                       | What's the Big Inrush? Modelling Traction Power Transformer Energisation: Case Studies and Procedures<br>Reece McIntosh, Incite Energy, QLD, Australia | Managing Track Stiffness Variations In Brownfield Railway Projects<br>Sebastian Ocampo & Maneesh Gupta, AECOM Australia   |

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| 1430        | <b>Numerical Assessments of Energy Saving From Improved Rolling Stock Designs</b><br><b>Qing Wu</b> ,<br>CQ University,<br>QLD, Australia                                                                            | <b>From Inspection to Intervention: Using Eddy Current Data and to Produce Focused, Optimized Rail Repair Plans</b><br><b>Ben Muscat</b> ,<br>Goldschmidt,<br>NSW, Australia    | <b>Maintenance Change Evaluation Using Reverse MRA and RCM Logic</b><br><b>Michael Siminski</b> ,<br>Downer,<br>NSW, Australia                                                                                                                | <b>Developing the OLE Sectioning Arrangement for Auckland's Waitematā (Britomart) Station and Tunnel</b><br><b>Ralph Moulang</b> ,<br>Aurecon,<br>VIC, Australia                       | <b>A Simple Conceptual Model to Predict Lateral Ballast Resistance due to Rail Compression Buckling</b><br><b>Shah Neyamat Ullah</b> ,<br>Central Queensland University Centre for Railway Engineering<br>QLD, Australia                        |
| 1500        | <b>Qubo-Qaoa-Based Battery Configuration Selection for Heavy-Haul Battery Electric Locomotives</b><br><b>Daniel Roi Agustin</b> ,<br>Central Queensland University Centre for Railway Engineering,<br>QLD, Australia | <b>Data-Driven Intelligent Decision Systems in Rail</b><br><b>Abdurrahman Beg</b> ,<br>Monash Institute of Railway Technology,<br>VIC, Australia                                | <b>Applying Principles of Space Mission Analysis to Australian High Speed Rail</b><br><b>David Venn-Brown</b> ,<br>Velotyx Rail, NSW,<br>Australia & <b>Pankaj Johri</b> ,<br>Alstom Group                                                    |                                                                                                                                                                                        | <b>Numerical Modelling of Ballasted Railway Track Stability Enhanced by Lateral Supports Using FEM-DEM Approach</b><br><b>Milad Alizadeh Galdiani</b> , Central<br>Queensland University<br>Centre for Railway<br>Engineering<br>QLD, Australia |
| 1530 – 1600 | <b>Afternoon Tea</b> served in Exhibition Hall                                                                                                                                                                       |                                                                                                                                                                                 |                                                                                                                                                                                                                                               |                                                                                                                                                                                        |                                                                                                                                                                                                                                                 |
| 1600 – 1730 | <b>Concurrent Sessions</b> - Concurrent sessions are 20-minute presentations + 5-minute question time                                                                                                                |                                                                                                                                                                                 |                                                                                                                                                                                                                                               |                                                                                                                                                                                        |                                                                                                                                                                                                                                                 |
|             | <b>SESSION 11</b><br><b>TRACK MAINTENANCE</b>                                                                                                                                                                        | <b>SESSION 12</b><br><b>ROLLING STOCK DESIGN, CONSTRUCTION &amp; MAINTENANCE</b>                                                                                                | <b>SESSION 13</b><br><b>TRAIN-TRACK &amp; WHEEL-RAIL INTERACTION</b>                                                                                                                                                                          | <b>SESSION 14</b><br><b>TUNNELS, BRIDGES &amp; STRUCTURES</b>                                                                                                                          | <b>SESSION 15</b><br><b>RAILWAY ECONOMICS</b>                                                                                                                                                                                                   |
| 1600        | <b>High Speed Monitoring to Detect Process Instabilities in Rail Flash Butt Welding</b><br><b>Fangzhou Zhang</b> ,<br>Monash University,<br>VIC, Australia                                                           | <b>Before Things go off the Rails: Shedding Light on Dynamic Vehicle Simulation with Vampire Pro</b><br><b>Andre Volpato</b> ,<br>Rail Confidence,<br>NSW, Australia            | <b>Prediction of Track Geometry Degradation Using Iterative Multibody Dynamics Simulation With Monte Carlo Fleet Variability</b><br><b>Esteban Bernal</b> ,<br>Central Queensland University Centre for Railway Engineering<br>QLD, Australia | <b>Design Renewals of Corrugated Steel Culverts</b><br><b>Mostafa Emara</b> ,<br>Metro Trains Melbourne,<br>VIC, Australia                                                             | <b>Designing Through Competing Priorities: Optimising Yard Layout at Mount Maunganui</b><br><b>Ryan Spooner</b> ,<br>Arup, Auckland, New Zealand & <b>Andrew Smetherham</b> , Arup,<br>NSW, Australia                                           |
| 1630        | <b>Increase in Rail Stress Over Mud Spots</b><br><b>Franco Fanucci</b> ,<br>Loram Maintenance of Way,<br>MI, United States                                                                                           | <b>Asset Management Planning in Decarbonisation of Heavy Haul Rail Rolling Stock</b><br><b>Adriane Ho</b> ,<br>Aurecon,<br>WA, Australia                                        | <b>Rail Roughness Evolution During Commissioning: From Post-Grinding Acceptance to Acoustic Compliance</b><br><b>Ash Athukoralalage</b> ,<br>Speno Rail Matenance<br>Australia,<br>NSW, Australia                                             | <b>Designing Elevated Side Walkways for Real-World Tunnel Variability</b><br><b>Opinderjit Samra</b> ,<br>Arup,<br>NSW, Australia<br><b>Mary Hadjiangeli</b> ,<br>SMEC, NSW, Australia | <b>Rail Projects That Have Gone Well</b><br><b>Philip Laird</b> ,<br>University of Wollongong, NSW,<br>Australia                                                                                                                                |
| 1700        | <b>Data-driven Rail Milling</b><br><b>Carsten Jörn Rasmussen</b> , Linsinger<br>Maschinenbau GmbH,<br>Vic Australia                                                                                                  | <b>A Risk-Based Signalling Compatibility Assessment Framework for Rail Infrastructure Maintenance Vehicles</b><br><b>Chinmay Sankhe</b> ,<br>Rail Confidence,<br>NSW, Australia | <b>Optimizing Heavy-Haul Track Design through Under Sleeper Pads (USPs)</b><br><b>Hayagreev Raman</b> ,<br>Getzner, VIC, Australia                                                                                                            | <b>Platform Screen Door Façade Glazing – Benefits and Considerations</b><br><b>Steven Wong</b> ,<br>Metro Trains Melbourne,<br>VIC, Australia                                          |                                                                                                                                                                                                                                                 |
| 1830 – 2230 | <b>Gala Dinner</b>                                                                                                                                                                                                   |                                                                                                                                                                                 |                                                                                                                                                                                                                                               |                                                                                                                                                                                        |                                                                                                                                                                                                                                                 |

| WEDNESDAY 19 AUGUST 2026 |                                                                                                                                                                                                              |                                                                                                                                                                                                                   |                                                                                                                                                   |                                                                                                                                                                          |                                                                                                                                                                                                                 |
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| 0730 - 1800              | Registration Desk Open                                                                                                                                                                                       |                                                                                                                                                                                                                   |                                                                                                                                                   |                                                                                                                                                                          |                                                                                                                                                                                                                 |
| 0700 - 1800              | Exhibition Open                                                                                                                                                                                              |                                                                                                                                                                                                                   |                                                                                                                                                   |                                                                                                                                                                          |                                                                                                                                                                                                                 |
| 0830 – 1030              | Day Two Plenary Session                                                                                                                                                                                      |                                                                                                                                                                                                                   |                                                                                                                                                   |                                                                                                                                                                          |                                                                                                                                                                                                                 |
|                          | Sponsor Address                                                                                                                                                                                              |                                                                                                                                                                                                                   |                                                                                                                                                   |                                                                                                                                                                          |                                                                                                                                                                                                                 |
|                          | <b>Keynote Address: David C Clark</b> , Senior Vice President – AREMA & Director Construction Engineering - CSX Transportation                                                                               |                                                                                                                                                                                                                   |                                                                                                                                                   |                                                                                                                                                                          |                                                                                                                                                                                                                 |
|                          | <b>Keynote Address: Alex Payne-Billard</b> , Principal Consultant, AtkinsRéalis                                                                                                                              |                                                                                                                                                                                                                   |                                                                                                                                                   |                                                                                                                                                                          |                                                                                                                                                                                                                 |
|                          | RTSA University Challenge                                                                                                                                                                                    |                                                                                                                                                                                                                   |                                                                                                                                                   |                                                                                                                                                                          |                                                                                                                                                                                                                 |
| 1000 – 1030              | Morning Tea Served in the exhibition space                                                                                                                                                                   |                                                                                                                                                                                                                   |                                                                                                                                                   |                                                                                                                                                                          |                                                                                                                                                                                                                 |
| 1030 – 1230              | Concurrent Sessions - Concurrent sessions are 20-minute presentations + 5-minute question time                                                                                                               |                                                                                                                                                                                                                   |                                                                                                                                                   |                                                                                                                                                                          |                                                                                                                                                                                                                 |
|                          | SESSION 16<br>RAILWAY ENGINEERING<br>MANAGEMENT                                                                                                                                                              | SESSION 17<br>RAILWAY RESEARCH AND<br>MATERIALS                                                                                                                                                                   | SESSION 18<br>SAFETY & RISK<br>MANAGEMENT                                                                                                         | SESSION 19<br>SIGNALS &<br>COMMUNICATIONS                                                                                                                                | SESSION 20<br>Track Design &<br>Construction                                                                                                                                                                    |
| 1030                     | <b>Recent Developments in Undergraduate Education in Rail Engineering</b><br><b>Graham Holden</b> ,<br>Edith Cowan University,<br>WA, Australia                                                              | <b>Development of Next Generation Recycled Plastic Composite Sleepers for Mainline Railway Application</b><br><b>Le Quan Ngoc Tran</b> ,<br>Institute of Railway Technology, Monash University,<br>VIC, Australia | <b>What is a Safety Integrity Level (SIL) Useful for? And How Do They Work?</b><br><b>Andrew Gabler</b> ,<br>Acmena Group,<br>QLD, Australia      | <b>Case Study: Optimising Level Crossing Audible Warning Systems in Urban Settings</b><br><b>Graeme Miles</b> ,<br>Metro Trains Melbourne,<br>VIC, Australia             | <b>New Approach to Estimate Bearing Capacity of Strip Footings on Geogrid-Stabilised Granular Layer Over Clay</b><br><b>Boon Chua</b> ,<br>KBR Australia,<br>SA, Australia                                      |
| 1100                     | <b>Discipline-Based Engineering Assurance for Railway Civil Structures – a Metronet Practitioner Case Study</b><br><b>Faranak Fahimi Hanzaee</b> ,<br>Public Transport Authority,<br>WA, Australia           | <b>Evaluation of Aged Proper Synthetic Sleepers Follow-Up Survey for Major Applications and Predictable Life Span</b><br><b>Naoto Kotani</b> ,<br>Sekisui Chemical Co<br>Tokyo, Japan                             | <b>Assessing the Future Role of Railways Safe Workers</b><br><b>Adrian Ponton</b> ,<br>Adrian Ponton & Associates, VIC,<br>Australia              | <b>Intelligent Self-learning Optimization Algorithm Enhanced Stopping Accuracy</b><br><b>Yaju Wang &amp; Xuwen Yang</b><br>Traffic Control Technology,<br>Beijing, China | <b>Increase Track Stability by Innovative Fastening Systems</b><br><b>Jefferson Fern</b> ,<br>VFS Australia, Vossloh,<br>QLD, Australia                                                                         |
| 1130                     | <b>Insurance Pays for Damage. Assurance Prevents It. Engineering Confidence in a Fragmented Rail Environment</b><br><b>Stephen Muscat</b> ,<br>Rail Confidence,<br>NSW, Australia                            | <b>Evaluation of Methods to Extend IRJ Asset Life Through Optimisation of Track Structure Support</b><br><b>Daniel Cumming &amp; An Tang</b> ,<br>Worley Consulting,<br>WA, Australia                             | <b>Integrating Safety and Security in Risk Assessments</b><br><b>Keerthy Mysore</b> ,<br>Shakti Corp,<br>NSW, Australia                           | <b>Planning for Complexity in Digital Train Control Technology Project Delivery</b><br><b>Raj Menon</b> ,<br>Network Rail Consulting,<br>NSW, Australia                  | <b>Bottom-Up Slab Track as a Driver of Tunnel Fitout Sequencing and Programme Optimisation</b><br><b>Gian Luca Vicchi</b> ,<br>VIXRAIL Solutions,<br>WA, Australia                                              |
| 1200                     | <b>An Integrated Multidimensional Approach to Skills Development Supporting the Future of Railways</b><br><b>Ravi Rativtharan</b> ,<br>Institute of Railway Technology, Monash University,<br>VIC, Australia |                                                                                                                                                                                                                   | <b>Delivering System Safety on Railway Mega Project</b><br><b>Hitesh Patel</b> , HKRP<br>Australia Pty Ltd, QLD,<br>Australia                     |                                                                                                                                                                          | <b>Combined Vibro-Acoustic and Vehicle/Track Dynamic Considerations for the Design of Floating Track Slab Systems</b><br><b>Ben Lawrence</b> , RWDI,<br>NSW, Australia                                          |
| 1230 - 1330              | Lunch Served in the Exhibition Hall                                                                                                                                                                          |                                                                                                                                                                                                                   |                                                                                                                                                   |                                                                                                                                                                          |                                                                                                                                                                                                                 |
| 1330 – 1530              | Concurrent Sessions - Concurrent sessions are 20-minute presentations + 5-minute question time                                                                                                               |                                                                                                                                                                                                                   |                                                                                                                                                   |                                                                                                                                                                          |                                                                                                                                                                                                                 |
|                          | SESSION 21<br>INSPECTION &<br>CONDITION<br>MONITORING                                                                                                                                                        | SESSION 22<br>ROLLING STOCK DESIGN,<br>CONSTRUCTION &<br>MAINTENANCE                                                                                                                                              | SESSION 23<br>TUNNELS, BRIDGES &<br>STRUCTURES                                                                                                    | SESSION 24<br>ADVANCING THE FUTURE<br>OF RAIL THROUGH<br>ENGINEERING, SAFETY,<br>AND SUSTAINABILITY                                                                      | SESSION 25<br>Systems Engineering                                                                                                                                                                               |
| 1330                     | <b>From Symptoms To Solutions: A Prescriptive Approach to Rail Risk</b><br><b>Nithurshan Nadarajah</b> ,<br>Monash Institute of Railway Technology,<br>VIC, Australia                                        | <b>Reducing Emissions Through Repurposing Ageing Rolling Stock</b><br><b>Josh Steed &amp; Jia Chua</b> ,<br>Metro Trains Melbourne,<br>VIC, Australia                                                             | <b>From Point Clouds To Prediction - The Emerging Role of AI in Transit Space Assurance</b><br><b>Shaina Minchin</b> ,<br>Aecom,<br>WA, Australia | <b>An Efficient Wear Simulation Method for Railway Wheel Life Prediction</b><br><b>Philipe Pacheco</b> ,<br>IF Sudeste MG,<br>Minas Gerais, Brazil                       | <b>Reliability Growth Demonstration as a Decision Tool for Operational Readiness of Complex Rail Projects: Lessons from Melbourne's Metro Tunnel</b><br><b>Adam Versteeg</b> ,<br>Vida Metro,<br>VIC, Australia |

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| 1400        | <b>A Dynamic Laser-Based System for Track Geometry And Rail Wear Monitoring</b><br><b>Armin Ehrampoosh,</b><br>Monash University Institute of Railway Technology,<br>VIC, Australia | <b>Mitigating Vibration-Induced Failures in Locomotive OPG Brackets Through Vibration Analysis, FEA Correlation and Field Validation</b><br><b>Ramsha Asif,</b><br>Siemens Mobility,<br>VIC, Australia | <b>Managing Subsurface Erosion and Drainage-Induced Instability in Operational Rail Corridors: Lessons from Keswick Systems</b><br><b>Loc Ha</b><br>Keolis,<br>SA, Australia                                  | <b>E-Mobility Devices on Rail: An International Review of Risks, Controls and Emerging Practice</b><br><b>Lauren Fraser,</b><br>GHD,<br>ACT, Australia                          | <b>A Systematic Approach to Standards for Railway Modernisation</b><br><b>Michael Paul,</b><br>Network Rail Consulting,<br>VIC, Australia |
| 1430        |                                                                                                                                                                                     | <b>Variation of Residual Stresses in Railway Wheels Leading to Potential Hot Spots</b><br><b>Lily Tran</b><br>Monash University Institute of Railway Technology,<br>VIC, Australia                     | <b>Managing Scour Risk on Rail Bridges during Extreme Weather: Lessons from the Rangitata Bridge Collapse</b><br><b>Michael McKay,</b><br>Transport Accident Investigation Commission NZ, WLG,<br>New Zealand | <b>Rethinking Rail Network Planning: Incorporating the Strategic Integrated Method in New Zealand</b><br><b>Michael van Drogenbroek,</b> Heriot-Edievale Ltd, VIC,<br>Australia |                                                                                                                                           |
| 1500 – 1515 | <b>Afternoon Tea</b> served in Exhibition Hall                                                                                                                                      |                                                                                                                                                                                                        |                                                                                                                                                                                                               |                                                                                                                                                                                 |                                                                                                                                           |
| 1515 – 1630 | <b>Closing Session</b>                                                                                                                                                              |                                                                                                                                                                                                        |                                                                                                                                                                                                               |                                                                                                                                                                                 |                                                                                                                                           |
|             | <b>Keynote Speaker: Ed Galton,</b> General Manager - Technical and Design, High Speed Rail Authority                                                                                |                                                                                                                                                                                                        |                                                                                                                                                                                                               |                                                                                                                                                                                 |                                                                                                                                           |

The Organising Committee reserves the right to alter the program as circumstances dictate.