

CONFERENCE DAY ONE | Tuesday 3rd December 2019

08:50 **Safety Briefing**

09:00 **Welcome to Country**

09:10 **ARA Welcome**

Danny Broad, *CEO, Australasian Railway Association*

09:20 **MINISTERIAL KEYNOTE | NSW Transport Outlook**

09:40 **INDUSTRY PANEL | Delivering Innovation in Industry Partnerships: Sydney Metro and North West Rail Link**

Peter Hynd, *Acting Project Director, Northwest, Sydney Metro*

David Jackson, *Project Director, CPB Contractors*

Ron Azzi, *General Manager, Engineering & Integration, John Holland*

Deva Mylvaganam, *Executive General Manager – Special Projects, UGL*

Steve Herman, *CEO, Northwest Rapid Transit*

10:20 **Morning Refreshments and Networking in the Exhibition Halls**

MAKING CITIES LIVEABLE

11:00 **Innovation in Integrated Transport**

Bernard Tabary, *CEO International, Keolis*

11:30 **NATION SHAPING RAIL PROJECTS**

Cross River Rail

Graeme Newton, *CEO, Cross River Rail Delivery Authority*

Melbourne Metro

Linda Cantan, *Package Director, Tunnel and Stations, Rail Projects Victoria*

NZ | City Rail Link

Dr Sean Sweeney, *CEO, City Rail Link Ltd*

12:10 2019 Young Rail Professionals Pitching Competition
Facilitator: Owen Plagens, **Downer, 2018 Pitching Competition Winner**

Industry judges:

Howard Collins OBE, *Chief Executive, Sydney Trains*
 Anna Squire, *Australasia Rail Business Leader, Arup*
 Caryn Anderson, *Executive General Manager, Port Growth and Planning, Port of Melbourne*
 Steve Butcher, *Executive General Manager, Rail Business Group, John Holland*

Finalists:

Jonathan Chan, *Permanent Way Engineer, WSP | #MakeARailDifference*
 Chuchao Liu, *PhD Candidate, Rail Manufacturing CRC & Centre for Geomechanics and Railway Engineering | A Sound-Based AI Track-Inspection System*
 Charlotte Moss, *Project Engineer | Innovation has no Barriers...Or Does it?*
 Nick Sargeant, *Production Analyst, Rail Logistics & Optimisation, Rio Tinto | Reducing Rail Communication Errors using Artificial Intelligence*
 Kate Selvaratnam, *Strategic Consultant, Jacobs | Personalised Disruption Communications via a Mobile Application*

13:00 Lunch and Networking in the Exhibition Halls

13:55 Afternoon Technical Sessions

TECHNICAL STREAMS				
RTSA Rail Infrastructure	RTAA Rail Asset Maintenance Developments	IRSE	RAIL SUPPLIERS	ONRSR
13:50 Technical speakers meeting – ALL STREAMS				
13:55 Opening remarks from the Chair Bill Laidlaw, <i>Rail Engineering Consultant</i>	13:55 Opening remarks from the Chair	13:55 Opening remarks from the Chair Trevor Moore, <i>Senior Signal Engineer, JMDR</i>	13:55 Opening remarks from the Chair	13:55 Opening remarks from the Chair
14:00 New Methods of Assessing Stray Current Interference using Simulation Software Rodney Urban, <i>Technical Director – Power, Beca</i>	14:00 Simulated Anneling to Optimise Track Maintenance Scheduling in Railroad Operations Plinio Vilela, <i>Consultant, CFlex MPC</i>	14:00 Digital Train Control and the Fourth Industrial Revolution David Milburn, <i>Global Director - Digital Train Control, GHD</i> and Bruce Parrey, <i>Electrical and Electronic Engineer, GHD</i>	14:00 Integrated Strategic Planning: How do we Take Advantage of a Golden Age in Rail Infrastructure Investment to Deliver on the Future of Mobility? Ben Tonges, <i>Partner Strategy – Growth & Transformation, Deloitte</i>	14:00 Update from the National Rail Safety Regulator Sue McCarrey, <i>Chief Executive, Office of the National Rail Safety Regulator</i>

<p>14:30 An Electrical Performance Comparison of 1500V DC and 2x25kV AC Traction Power Systems Dr Stephen Goh, <i>Technical Director – Traction Power, EMC, E&B, and</i> Caroline Phillips, <i>Director – Clients and Markets, Middleton Group</i></p>	<p>14:30 Leveraging Machine Learning & Bayesian Analysis: Designing New-age Asset Condition Assessments Nicola Belcher, <i>Director, Asset Management, Public Transport Victoria (PTV)</i> Julian Watts, <i>Director, Engineering & Asset Management Advisory, Management Consulting, KPMG</i></p>	<p>14:30 The Invisible Glue That Cements Digital Systems Success Nigel Fenn, <i>Director Project and Programme Management, Network Rail Consulting, Australia and New Zealand</i></p>	<p>14:30 Passenger Experience, Future of Mobility Trends Anne Bigand, <i>Director of Passenger Experience, Alstom</i></p>	<p>14:30 ONRSR Data and Value Adding for Industry Peter Doggett, <i>Chief Operating Officer, Office of the National Rail Safety Regulator</i></p>
<p>15:00 Rail Tunnel Cross Passage Spacing: Is There Any Room to Move? Bruce Kelly, <i>Principal Fire Safety Engineer, WSP Australia</i></p>	<p>15:00 Adopting Building Information Modeling - Asset Management (BIM-AM) to Enhance Railway Safety in Hong Kong CF Chau, <i>Assistant Director – Railways, Electrical and Mechanical Services Department, Government of HKSAR</i></p>	<p>15:00 Taking over from Thameslink: The Factors that will determine how Australia can lead the automation race Georgina Hartwell, <i>Associate Rail Systems Engineer, WSP</i></p>	<p>15:00 The Challenges of Delivering a High Speed Line Simon-Pierre Trezeguet, <i>Area Director – APA, ENGIE Ineo Rail</i></p>	<p>15:00 The National Rail Safety Data Strategy Julie Bullas, <i>Executive Director, Office of the National Rail Safety Regulator</i> Emma Woods, <i>General Manager - Passenger and Corporate Services, Australasian Railway Association</i></p>

15:30 Afternoon tea served within the exhibition

RTSA Rolling Stock and Maintenance	RTAA Track Construction and Operation	IRSE	RAIL SUPPLIERS	ONRSR
15:50 Technical speakers meeting – ALL STREAMS				
<p>15:55 Opening remarks from the Chair Barry Lovat, <i>Rail Engineering Consultant</i></p>	<p>15:55 Opening remarks from the Chair</p>	<p>15:55 Opening remarks from the Chair Phil Baker, <i>Head of Testing and Commissioning, Infrastructure Nation</i></p>	<p>15:55 Opening remarks from the Chair</p>	<p>15:55 Opening remarks from the Chair</p>
<p>16:00 Best Practices for Rolling Stock Mid-life Overhaul Flavien Berthold, <i>Global Product Manager, ABB</i></p>	<p>16:00 Viaduct Track Construction Jarod Wakefield, <i>Senior Project Engineer – Rail Projects NSW, John Holland</i></p>	<p>16:00 New ETCS Level 1 architecture Peter Laumen, <i>Research Associate, RWTH Aachen University</i></p>	<p>16:00 Sustainability in mega infrastructure projects, an aspirational fad or a steady state deliverable? Traditional challenges, fresh approach and early successes on the Inland Rail Program</p>	<p>16:00 Next Generation Major Projects Simon Foster, <i>Executive Director, Office of the National Rail Safety Regulator</i></p>

			Georgia Gosse, <i>Sustainability Manager and</i> Ilan Sagi, <i>Head of Engineering and Value Creation, ARTC Inland Rail</i>	
16:30 Understanding the Impact of High Traction Hybrid Locomotive Designs on Heavy Haul Train Performance Prof Maksym Spiryagin, <i>Deputy Director of the Centre for Railway Engineering and</i> Dr Qing Wu, <i>Research Fellow, Centre for Railway Engineering, CQUniversity</i>	16:30 Operational Limits Driving 42t axle loads on Heavy Haul Turnouts Uwe Ossberger, <i>R&D Engineer, voestalpine VAE GmbH and</i> An-Thieng, <i>Rail Superintendent, Fortescue Metals Group</i>	16:30 From impossible to possible: innovations that make the Digital Systems project deliverable Bill Palazzi, <i>Director, palazzirail</i>	16:30 Planning for operational readiness Charlotte Stanfield, <i>Technical Director – Transport and Transport Infrastructure, Calibre</i>	16:30 TBC
17:00 Tackling Predictive Maintenance: A Project Management Perspective Louisa de Vries, <i>Program Manager and</i> Bertha Wai, <i>Asset Strategy Analyst, Downer Group</i>	17:00 Challenging ARTC's Current Network Offering for Over Size and Unique Loads Richard Potts, <i>Manager Procedures Development, Corporate Services & Safety, ARTC</i>	17:00 Real Time Passenger Demand Based Traffic Regulation for CBTC Olivier Leveque, <i>Technical Business Development Director, Alstom</i>	17:00 TasRail Transforms its Operation by Using Algorithms to Develop its Master Service Designs George Bradley, <i>Chief Operating Officer, Biarri Rail and</i> James Macartney, <i>Commercial & Business Planning Manager, TasRail</i>	17:00 TBC
17:30 Closing remarks from the Chair				

17:30 Exhibition Networking Drinks | Exhibition Halls, ICC Sydney

CONFERENCE DAY TWO | Wednesday 4th December 2019

08:50 Safety Briefing

09:00 ARA Welcome
Danny Broad, *CEO, Australasian Railway Association*

CONNECTING OUR REGIONS

09:05 Inland Rail
Richard Wankmuller, *CEO, Inland Rail*

09:30 A Fast Rail Future for NSW

10:00 KEYNOTE | The Future of High-Speed Rail
Masafuni Shukuri, *Chairman, International High-Speed Rail Association*

10:30 Morning Refreshments and Networking in the Exhibition Halls

SUPPORTING EMPLOYMENT

11:10 **INDUSTRY PANEL | Training Initiatives to Address Immediate Challenges**

- Ensuring industry has the skills needed for project delivery and growth
- Empowering your workforce

Rick Naylor, *Director, Rail Technology Campus, Sydney Trains*

Claire Parry, *Managing Director, Infrastructure Skills Advisory*

Fiona Love, *Associate Director, Engineering & Digital Programs, Learning & Development, P&C, Transport for NSW*

More panellists to be announced

11:50 **INDUSTRY PANEL | Planning for Future Workforce Trends**

- Strategic workforce planning for the future
- Automation and AI
- The importance of creating a talent pipeline for the organisation through reskilling

Alison Pennington, *Economist, Centre for Future Work, Australia Institute*

More panellists to be announced

12:30 ARA Future Leaders

13:00 Lunch and Networking in the Exhibition Halls

13:55 Afternoon Technical Sessions

TECHNICAL STREAMS			
RTSA Regional Rail	RTAA Turnouts and Safety	IRSE	RAIL SUPPLIERS
13:50 Technical speakers meeting – ALL STREAMS			
13:55 Opening remarks from the Chair <i>John Watsford, Rail Engineering Consultant</i>	13:55 Opening remarks from the Chair	13:55 Opening remarks from the Chair <i>Brian Luber, Business Development Manager, Downer Group</i>	13:55 Opening remarks from the Chair
14:00 Embracing Drone Surveying Technology to Deliver Projects in Regional New South Wales <i>Jorge Martin Gistau, Project Manager, Transport for NSW and Nicholas Smith, CEO, Airsight Australia</i>	14:00 The Development of Manganese Steel Laser Additive Welding as a Means of Special Trackwork Repair <i>Paul Lindemulder, Director, R&D and New Product Development, Holland L.P.</i>	14:00 Digital: The Great Divide in Rail <i>John Gude, Senior Principal Engineer – Rail and Digital Engineering, WSP</i>	14:00 Digital Engineering: Beyond the Curve – Rail Design Reimagined <i>Devon Middleditch, Director Digital Transformation ANZ, AECOM</i>
14:30 Introducing the Regional Rail Project	14:30 Progress in Non-Destructive Testing of Manganese Steel Crossings	14:30 Increasing Capacity & Efficiency of the Main West Corridor	14:30 Can I Trust Machine Learning Analytics? Downer's Approach to Predictive Maintenance

Guy Collishaw, <i>Project Director, Transport for NSW and Philip Pearce, Technical Director, Momentum Trains</i>	Jonathan Barnes, <i>Senior Wheel & Rail Engineer, Track and Maintenance, Sydney Trains</i>	Tim Halloran, <i>Signal Maintenance Engineer, John Holland</i>	Jacky Chen, <i>Data Scientist, and Himanshu Jindal, Project Manager - Analytics, Transport and Infrastructure, Downer</i>
15:00 Speeding up NSW Main West Transit Times Prof Philip Laird, <i>Associate Professor, University of Wollongong</i> and Max Mitchell	15:00 Worksite Protection in an Urban Rail Environment: Are the Humans in the System Beyond Capacity to Manage the Safety Risk? Craig Fletcher, <i>Director, Ergonomie Australia</i> and Bruce Butt, <i>Manager Network Rules, Sydney Trains</i>	15:00 Interface Management, who is to be blamed? Dr Hadi Sanei, <i>Global Technology Director - Systems Engineering, Jacobs</i>	15:00 Taking Advantage of the Digital Opportunity: How to Guarantee Profitable Investments in Digital Railways Alvaro Jose Zevallos Roman, <i>Chief Business Development Officer, NEM SOLUTIONS</i>

15:30 Afternoon tea served within the exhibition

RTSA Light Rail	RTAA Rail Head Management	IRSE	RAIL SUPPLIERS
15:50 Technical speakers meeting – ALL STREAMS			
15:55 Opening remarks from the Chair Maneesh Gupta, <i>Technical Director and Team Leader – Rail, AECOM</i>	15:55 Opening remarks from the Chair	15:55 Opening remarks from the Chair Georgina Hartwell, <i>Associate Rail Systems Engineer, WSP</i>	15:55 Opening remarks from the Chair
16:00 ABB Onboard Energy Storage System as an Upgrade Solution for DMUs and Catenary-Free Tram Operation Dr Ali Parvizi, <i>National Marketing & Sales, Traction, ABB Australia</i>	16:00 Strategic Rail Reprofitting for Squat Mitigation Dr Richard Stock, <i>Milling Technology Manager, LINMAG</i>	16:00 BIM enhanced Metro Operations reduce rail operations' risks, OPEX and CAPEX Christopher Whiteside, <i>Head of Digital Services, Siemens</i> Andrew Lamb, <i>Engineering Business Development Manager - East Coast, I&E Systems</i>	16:00 More than just Technology: How the Digital Systems Program will Drive a Digital Revolution for Sydney's Rail Network Stephen Lemon, <i>Program Director Digital Systems, Transport for NSW</i> and Warwick Talbot, <i>Chief Transformation Officer, Sydney Trains</i>
16:30 How New Technologies can Improve the Melbourne Tram Network David Anderson, <i>Senior Project Manager Rolling Stock, Department of Transport (Victoria)</i> Alain Croset, <i>Principal Consultant, Transport – Asia Pacific, SNC-Lavalin</i>	16:30 Wayside Top of Rail Friction Control: An Embedded Track Solution in a High Density Tram Network Matthew Kwong, <i>Engineer, Track, Yarra Trams (Keolis Downer) and Tony Makowsky, Regional Manager - Australasia Field Service and Customer Support, LB Foster Rail Technologies</i>	16:00 Considerations for cybersecurity in the digital railways of today David Soldani, <i>Chief Technology Officer, Huawei</i>	16:30 Using Artificial Intelligence and Computer Vision to Automate Corridor Inspections and Predict Rail Maintenance Nicholas Smith, <i>CEO, Corridor Insights</i>
17:00 Greener and Smarter LRT: Looking back at the Dijon Project Salvatore Sinapi, <i>VP Transport – International, Engie Ineo</i>	17:00 Advancements in Squats Management: A Queensland Rail Experience Carlos Valente, <i>Rail Asset Integrity Leader, Queensland Rail</i>	17:00 Improvements in Modelling Electromagnetic Interference between Power and Signalling Systems Daniel Yuen, <i>Associate – Power Systems Engineer, Beca</i>	17:00 Practical Applications of Artificial intelligence in Delivering Rail Services Cameron Collie, <i>Global Industry Expert – Rail, Dassault Systems</i>

19:00 RTAA Yellow Tie Dinner | ICC Sydney (*Pre-dinner drinks served from 18.30*)

CONFERENCE DAY THREE | Thursday 5th December 2019

08:50 Safety Briefing

09:00 **ARA Chairman's Address**
Bob Herbert AM, *Chair, Australasian Railway Association*

09:20 **GOVERNMENT PANEL | Developing Australia's Rail Needs**

09:50 Young Leaders Advisory Board (Y-LAB) Update

10:05 **Challenges and Case Studies | The Benefits of Digital Transformation for Rail Freight**
Sascha Fey, *Project Leader, Digital Transformation, Deutsche Bahn*

10:40 Morning Refreshments and Networking in the Exhibition Halls

11:20 **INDUSTRY PANEL | Working with Customers to Make Rail More Competitive**
Brendan Bourke, *CEO, Port of Melbourne*
Jodie Winnett, *Head of Commercial & Regulatory, Arc Infrastructure*
Peter Keyte, *Chief Operating Officer, Port of Brisbane Pty Ltd*
Jonathan Lafforgue, *General Manager Operations and Environment, NSW Ports*

12:10 **INDUSTRY PANEL | Investment: What's needed for continue to fund rail infrastructure for the future?**

- Getting best value and returns on the current 'once-a-generation' investment levels
- What's needed for rail to deliver better infrastructure for the future?
- The role of customer stewardship and social licence

Emma Thomas, *Partner, Infrastructure and Urban Renewal, PwC*
Marion Terrill, *Transport and Cities Program Director, Grattan Institute*
Garry Bowditch, *Co-Founder & Chair, Customer Stewardship Australia*
More panellists to be announced

12:50 Lunch and Networking in the Exhibition Halls

TECHNOLOGY FOR THE FUTURE

14:20 **KEYNOTE | Rail's Role in Keeping the Economy on Track: Update on how Technology Fuels the American Rail Network**
Ian Jefferies, *President & CEO, Association of American Railroads (AAR)* (*subject to final confirmation*)

15:05 **Charting Rail's Course Towards a Zero-Emission Future**
Adam Williams, *General Manager Rolling Stock Asset Services, KiwiRail*

15:40 INDUSTRY PANEL | Digital and Communication Technology for the Future

- Smart Rail Route Map
- Working with industry to transform data collection and traceability

Prof Doug Creighton, *Deputy Director, Institute for Intelligent Systems Research and Innovation (IISRI)*

Bonnie Ryan, *Senior Manager – Freight, Logistics & Industrial Sectors, GS1 Australia*

Stephen Baker, *Head Product Innovation, Siemens*

16:20 Close of AusRAIL PLUS 2019

19:00 Gala Dinner | Luna Park Sydney

Pre-dinner drinks served from 18.30