



CELEBRATING 20 YEARS

Asia Pacific Rail 2018

20-21 March 2018

Hong Kong Convention & Exhibition Centre

Preliminary Agenda



AGENDA AT A GLANCE

Day One: Tuesday 20 March, 2018			
Opening Keynote Plenary			
Exhibition Visit & Networking Refreshments			
Metro Project Updates <i>Project leaders share updates on upcoming metro projects in Asia-Pacific</i>	Signalling & Communications <i>Learn more about CBTC best practices and the latest communication technologies</i>	Asset Management & Rolling Stock <i>Managing your ageing assets with big data and condition monitoring</i>	Rail Freight <i>Improving the competitiveness of rail freight through new freight corridors and efficiency measures</i>
Southeast Asia	Latest Technologies in Signalling	Innovation in Asset Management	New Freight Corridors
Networking Lunch & Exhibition Visit			
China	Communications	Asset Renewal	Rail Freight Efficiency
India	Rail Systems & Communications	Rolling Stock	Rail Freight Leaders Panel
Exhibition Visit & Networking Refreshments			
Keynote Plenary			
Networking Drinks Reception			
Day Two: Wednesday 21 March, 2018			
Keynote Plenary			
Exhibition Visit & Networking Refreshments			
Operations & Maintenance <i>Best practices in achieving operational excellence and the use of sensors, IoT and big data in rail maintenance</i>	Signalling & Communications <i>Learn more about CBTC best practices and the latest communication technologies</i>	Passenger Experience <i>Learn more about the digital transformation of passenger experience and how to engage your commuters in a digital age</i>	Mainline <i>Enhancing regional connectivity with new HSR and intercity developments</i>
Operational Efficiency	Resignalling Best Practices	Digitalisation of passenger experience	New High Speed Rail Corridors
Networking Lunch & Exhibition Visit			
Rail Maintenance: Latest Technologies & Best Practices	Resignalling Best Practices	Smart passenger experience	High Speed Rail Sustainability
Best Practices in Operations	Communications Security		Intercity
Close of Asia Pacific Rail 2018			

CONFIRMED SPEAKERS FOR 2018 INCLUDE:

1. **Syahrudin Sofyan**, Design, Civil Engineering & Trackwork Manager, LRT Department, **Adhi Karya**
2. **Jim Baker**, Program Manager, Next Generation Networks, **Amtrak**
3. **Greg Yager (Senior VP)/Diane Kemp (VP)**, **CallisonRTKL**
4. **Chao Liu**, Chief Engineer, **Traffic Control Technology**
5. **Shaun Kenny**, President – Asia Pacific, **Bechtel**
6. **Andreas Willich**, Head of Passenger Transport, Member of the Executive Board, **BLS AG**
7. **Juergen Maier-Gyomlay**, Head of International Affairs and Projects, **BLS Cargo AG**
8. **Liu Chiu Liang**, Director of Systemwide E&M Project Office, **Department of Rapid Transit Systems, Taipei City Government**
9. **Prof Lee Kang Kuen**, Professor of Transportation Practice, Department of Electrical Engineering, **Hong Kong Polytechnic University**
10. **Hermanto Dwiatmoko**, Chairman, **Indonesian Railway Society (MASKA)**
11. **Dr. Prodyut Dutt**, Chief Development Officer, **Land Public Transport Commission (SPAD)**
12. **Silvester Prakasam**, Senior Advisor, Fare System, **Land Transport Authority**
13. **Dr. Jorge Yebra**, Principal Manager, EAMS Development & Applications (Rail Asset, Operations & Maintenance Group), **Land Transport Authority**
14. **Kelvin Li**, Director, **Leigh & Orange**
15. **Randy Sac**, Head – Information Management & Technology, **Light Rail Manila Corporation**
16. **Dr. Somprasong Suttayamully**, Director, Fare Media Office, **Mass Rapid Transit Authority of Thailand**
17. **Jayantha Gunathilake**, Additional Secretary (Engineering), **Ministry of Highways & Higher Education, Sri Lanka**
18. **Dr. Pichet Kunadhamraks**, Director, Bureau of Rail System Development Office, Office of Transport and Traffic Policy and Planning, **Ministry of Transport Thailand**
19. **Dr. Padet Praditphet**, Director, Common Ticketing Office, Office of the Transport & Traffic Policy & Planning (OTP), **Ministry of Transport Thailand**
20. **Sung Hung Kung**, Chief of Section, Bureau of High Speed Rail, **Ministry of Transportation & Communications Taiwan**
21. **Roland Chan**, Rail Architect, **MOXA Inc**
22. **Calvin Chuko**, Product Manager, **MOXA Inc**
23. **Lincoln Leong**, Chief Executive Officer, **MTR Corporation**
24. **Dr. Jacob Kam**, Managing Director – Operations & Mainland Business, **MTR Corporation**
25. **Adi Lau**, Operations Director, **MTR Corporation**
26. **Dr. Philco Wong**, Projects Director, **MTR Corporation**
27. **Dr. Tony Lee**, Chief of Operations Engineering, **MTR Corporation**
28. **Wilson Shao**, General Manager – Beijing & Tianjin, China & International Business, **MTR Corporation**
29. **Richard Keefe**, General Manager – Rolling Stock Fleet, **MTR Corporation**
30. **Andrew Mead**, Chief Architect, **MTR Corporation**
31. **Dr. Lawrence Lee**, Senior Construction Engineer, **MTR Corporation**
32. **Philip Wong**, Chief Signal Engineer (Operations), **MTR Corporation**
33. **Stanley Wong**, Permanent Way Integrity Manager, **MTR Corporation**
34. **C.C Chang**, Committee Member, **New Taipei City Light Rail System**; Professor, Department of Transportation & Logistics Management, **Chung Hua University**
35. **Ahmad Nizam Mohamed Amin**, Chief Infra Services Officer, **Prasarana**
36. **Malcolm D'Cruz**, Project Manager, **Public Transport Authority of Western Australia**
37. **Jeroen Weimar**, Chief Executive Officer, **Public Transport Victoria**
38. **Len Neist**, Chief Engineer, **Public Transport Victoria**
39. **Richard Anderson**, Managing Director, **Railway and Transport Strategy Centre, Imperial College London**
40. **Lim Thiam Siew**, Assistant Vice President, **SBS Transit DTL**
41. **Quek Chin Hock**, Assistant Vice-President (Rail Engineering) & Head of Permanent Way & CS Department, **SBS Transit DTL**
42. **Dr. Chia Wee Lee**, Deputy Director, Rolling Stock Workshop, **SMRT Trains**
43. **Stewart Mills**, Executive Director – Engineering and Maintenance, **Sydney Trains**
44. **Kuo Tsair-Ming**, Vice President, **Taipei Rapid Transit Corporation**
45. **James Shi**, Assistant Vice President, Head of Operation Sub-Division, **Taiwan High Speed Rail**
46. **Steven Lai**, Director, Infrastructure, China Region,

DAY ONE: TUESDAY 20 MARCH 2018

Opening Keynote Plenary				
08:45	Organiser's Welcome Remarks			
09:00	Chair's Opening Remarks			
09:10	<p>Keynote Interviews With the urbanization of cities, public transport needs continue to be dominant. Rapid transit systems remain the most effective, cost-efficient and environmentally sustainable solution for cities. In this age of increasing passenger and operational demands, how are rail operators navigating these challenges? We hear from them in this series of exclusive interviews.</p> <p>09:10-09:25: Interview with Lincoln Leong, Chief Executive Officer, MTR Corporation 09:25-09:40: Interview with Jeroen Weimar, Chief Executive Officer, Public Transport Victoria</p>			
09:40	<p>Rail Leaders' Panel: Following their interviews, our rail leaders will gather on a panel to explore the big issues affecting rail operators all around the world. Issues for discussion include:</p> <ul style="list-style-type: none"> • How can rail authorities and operators work more closely with each other to enhance service reliability and passenger satisfaction? • What is a sustainable and profitable model to manage rail development and daily operations? • With the expansion of rail networks in the next decade, what can be done to build up our rail engineering capabilities and workforce? • How can we deliver more capacity through the effective use of staff, assets and systems? • The urban mobility landscape is evolving with on-mobility demand services and new technologies, how can rail operators respond to this changing landscape? <p>PANELLISTS: Lincoln Leong, Chief Executive Officer, MTR Corporation Jeroen Weimar, Chief Executive Officer, Public Transport Victoria</p>			
10:10	<p>Financing One Belt One Road The One Belt, One Road initiative refers to the Silk Road Economic Belt and 21st Century Maritime Silk Road development strategy launched by the Chinese Government, with the aim of connecting 65 countries across three continents to China. The Asian Infrastructure Investment Bank (AIIB) was set up to finance the building of infrastructure in economies along the trade routes. Join us in this session as we explore the role of AIIB in bridging the financing and connectivity gap and identify the upcoming opportunities for infrastructure development in the rail industry.</p>			
10:30	Title Sponsor Address			
10:45	Exhibition Visit & Networking Refreshments			
	Metro Project Updates	Signalling & Communications	Asset Management & Rolling Stock	Rail Freight
		Conference Chair: Chao Liu , Chief Engineer, Traffic Control Technology	Conference Chair: Prof Lee Kang Kuen , Professor of Transportation Practice, Department of Electrical Engineering, Hong Kong Polytechnic University	
	Southeast Asia	Latest technologies in Signalling	Innovation in Asset Management	New Freight Corridors
11:30	<p>Klang Valley MRT: Boosting connectivity in Kuala Lumpur Metropolitan Area</p> <ul style="list-style-type: none"> • How will KVMRT shape the urban mobility landscape and boost efficiency of public transport in Greater KL? • MRT Line 2: Key construction and operational timelines • MRT Line 3: Opportunities for collaboration 	<p>Urban Rail Transportation Signalling System</p> <ul style="list-style-type: none"> • Integrating with the characteristics of CBTC system and operational needs • Meeting requirements of operation that is safe, reliable and energy-saving • Providing a variety of combination of control levels with multiple driving modes 	<p>Foresighted Asset Management Strategy</p> <ul style="list-style-type: none"> • Creating accurate long-term forecasts of asset condition by analysing historical and current data • Achieving foresight in asset management through novel prognostic technologies • Equipping rail operators the ability to make decisions on optimal asset deployment and maintenance planning 	<p>Cementing India's freight future: Dedicated Freight Corridor Corporation of India</p> <ul style="list-style-type: none"> • How will this project shape freight transportation in India? • Where are we now with this ambitious project? • Overcoming challenges with land acquisition

		Reserved for Traffic Control Technology	Dr. Tony Lee, Chief of Operations Engineering, MTR Corporation	
11:50	Overcoming capacity challenge in Bangkok: An update on the Mass Transit Master Plan <ul style="list-style-type: none"> As Bangkok's metro network is set for expansion, what are the new projects planned for development under the Mass Transit Master Plan? Exploring opportunities for collaboration in the delivery of new lines What's the progress of lines under construction - - Blue Line, Sukhumvit Line, Dark & Light Red Lines Dr. Somprasong Suttayamully, Director, Fare Media Office, Mass Rapid Transit Authority of Thailand	Fault analysis of CBTC systems Reserved for Traffic Control Technology	Extending life cycle of assets with condition monitoring and predictive analytics <ul style="list-style-type: none"> Identifying high risk stages in rail asset life cycle using big data How can we ensure the quality and reliability of insights from predictive analytics? Extending life cycle of assets through preventive digital monitoring Dr. Jorge Yebra, Principal Manager, EAMS Development & Applications (Rail Asset, Operations & Maintenance Group), Land Transport Authority	Modernisation of Indonesia's railways to drive economic development <ul style="list-style-type: none"> Key projects and timelines in upgrading and building new freight lines to expand capacity? Collaboration opportunities with the private sector Hermanto Dwiatmoko, Chairman, Indonesian Railway Society (MASKA)
12:10	Building a sustainable urban transport system in Philippines <ul style="list-style-type: none"> An introduction to the current urban transport situation in the Philippines What are the new plans and development to enhance urban mobility in the Philippines? Collaboration with private sector in infrastructure building 	Confidence assessment on safety case of high speed rail signalling systems Reserved for Traffic Control Technology	Asset Optimisation and Management Reserved for ABB	Myanmar's rail modernization journey <ul style="list-style-type: none"> What plans have been identified to upgrade Myanmar's rail infrastructure to cope with increasing freight demand? How will such upgrades be financed? What are the challenges involved?
12:30	Delivering Phase Two of Jakarta MRT <ul style="list-style-type: none"> Building seven underground stations along 8.3km of track Overcoming the construction challenges in less favourable soil conditions Measures put in place to protect heritage buildings 	Managing operational challenges in migration Reserved for Traffic Control Technology	Defining transport capability using systems engineering to assure asset integrity <i>Applying a system of systems approach to whole of life asset management of transport capabilities ensures new technologies and changing transport assets can be assured and accepted without compromising transport network integrity. This presentation will discuss how these disciplines are being introduced into the Victorian public transport sector to assure the significant infrastructure projects under development.</i> Len Neist, Chief Engineer, Public Transport Victoria	
12:50	Networking Lunch & Exhibition Visit			

	China	Communications	Asset Renewal	Rail Freight Efficiency
14:00	<p>Guangzhou Metro’s Expansion Plans</p> <ul style="list-style-type: none"> Building 15 new lines and adding a total of 413.5km to the current network Overcoming challenges encountered in the construction of new lines Implementation of new technologies on new lines to achieve high service reliability 	<p>Wireless networks for passenger rail – A U.S Perspective</p> <ul style="list-style-type: none"> How US rail operators are keeping pace with real-time communication demand Finding the best broadband wireless technology for a rail system Case studies of cutting-edge deployments in the United States <p>Jim Baker, Program Manager, Next Generation Networks, Amtrak</p>	<p>Developing a robust RAMS management system: A case study on Taipei Metro</p> <ul style="list-style-type: none"> Designing and implementing a comprehensive asset management system Managing asset renewal cycles for shorter life assets vs. longer life assets Strategic organization planning to ensure high quality asset management <p>C.C Chang, New Taipei City Light Rail System Committee Member; Professor, Department of Transportation & Logistics Management, Chung Hua University</p>	<p>Towards sustainable rail freight operations: A case study on BLS Cargo</p> <ul style="list-style-type: none"> What political and strategical initiatives have been put in place to improve operations and efficiency? Raising freight volumes to maximise value and customer satisfaction delivered from freight service How has technology and process help to improve performance, productivity and profitability? <p>Juergen Maier-Gyomlay, Head of International Affairs and Projects, BLS Cargo AG</p>
14:20	<p>Expanding Shenzhen’s metro infrastructure</p> <ul style="list-style-type: none"> Practical challenges in expanding 187km of operating lines by an additional 211km Creating a true subway network: Constructing 4 new subway lines What are the short, medium and long term plans? 	<p>Challenges and Solutions for re-signalling a CBTC WLAN Radio</p> <ul style="list-style-type: none"> Challenges in re-signaling a CBTC radio system Optimized solutions to overcome packet loss and frequency hopping Real case sharing <p>Calvin Chuko, Product Manager, MOXA Inc</p>	<p>PANEL: Key considerations in Asset Renewal – Balancing Investment, Risk and Cost</p> <ul style="list-style-type: none"> As mature rail operators in the region are facing the issue of aging rail assets, a decision has to be made between refurbishment and replacement of assets. What are the key factors that need to be taken into account before a decision is made? What are the best practices in life cycle costing and asset renewal planning? How do we structure cost, funding and investment effectively to ensure the sustainability of rail assets? How will rail asset management evolve with the application of new technology in the next 5-10 years? <p>MODERATOR: Prof Lee Kang Kuen, Professor of Transportation Practice, Department of Electrical Engineering, Hong Kong Polytechnic University</p> <p>PANELLISTS:</p> <ul style="list-style-type: none"> Dr. Tony Lee, Chief of Operations Engineering, MTR Corporation C.C Chang, New Taipei City Light Rail System Committee Member; Professor, 	<p>Meeting the rising demand of Asia’s freight industry</p> <ul style="list-style-type: none"> Tapping on opportunities to establish greater intermodal and border connectivity Meeting the growth of Asian import and export demands Plans for system improvement, upgrading and modernizing of locomotives fleet
14:40	<p>Developing Chengdu’s metro network to meet increasing passenger demand</p> <ul style="list-style-type: none"> Rapid expansion of Chengdu’s network with 350km of subway lines under construction Key completion timelines and collaboration opportunities What are the latest technologies implemented on these new lines? 	<p>More than simple LTE: Next generation communications for your rail projects</p> <ul style="list-style-type: none"> How does LTE benefit rail communications and operations? Supporting mission-critical applications permanently, under all circumstances (extreme radio coverage conditions or when train is running at full speed) Tackling migration challenges during LTE platform integration 	<p>MODERATOR: Prof Lee Kang Kuen, Professor of Transportation Practice, Department of Electrical Engineering, Hong Kong Polytechnic University</p> <p>PANELLISTS:</p> <ul style="list-style-type: none"> Dr. Tony Lee, Chief of Operations Engineering, MTR Corporation C.C Chang, New Taipei City Light Rail System Committee Member; Professor, 	<p>Increasing the competitiveness of rail freight through a strategic freight network</p> <ul style="list-style-type: none"> Optimising the freight performance of intensively utilized mixed-traffic rail network to facilitate efficient operations How can freight trunk routings be optimized to minimise passenger/freight conflicts? Upgrading network capability to increase freight capacity

			Department of Transportation & Logistics Management, Chung Hua University <ul style="list-style-type: none"> • Dr. Jorge Yebra, Principal Manager, EAMS Development & Applications (Rail Asset, Operations & Maintenance Group), Land Transport Authority • Len Neist, Chief Engineer, Public Transport Victoria 	
	India	Rail Systems & Communications	Rolling Stock	Rail Freight Leaders Panel
15:00	Shaping the public transport landscape in Chennai: Expansion plans for Chennai Metro <ul style="list-style-type: none"> • With rapid urbanization and increasing traffic congestion in the city, how can the metro project change the urban mobility landscape in Chennai? • Key timelines for Chennai Metro Phase 2 • First metro project in India to integrate other transport modes 	Advanced systems integration in major rail projects <ul style="list-style-type: none"> • What is the systems integration management process for design and construction for major rapid transit systems? • Main challenges in managing a structured interface design and integration process • How can we ensure cooperation among different interfacing parties? <p>Liu Chiu Liang, Director of Systemwide E&M Project Office, Department of Rapid Transit Systems, Taipei City Government</p>	Improving performance and cost-effectiveness of rolling stock fleets with condition-based monitoring <ul style="list-style-type: none"> • What are the latest condition-based monitoring tools? • Adopting condition monitoring and predictive maintenance to improve fleet reliability and safety • How do they help in reducing life cycle costs? <p>Richard Keefe, General Manager – Rolling Stock Fleet, MTR Corporation</p>	Rail Freight Leaders Panel: Perspectives into industry dynamics and global emerging trends <ul style="list-style-type: none"> • What role does rail play in intermodal freight? • How should authorities, operators and other stakeholders be collaborating to deliver end-to-end freight services? • Accelerating the rail freight network in the region to gain greater market share • What are the key challenges towards achieving sustainable development? <p>PANELLISTS: Juergen Maier-Gyomlay, Head of International Affairs and Projects, BLS Cargo AG</p>
15:20	Improving urban mobility in Kochi: An update on Kochi Metro Phase II <ul style="list-style-type: none"> • Building a 11.2km extension from the existing metro line • Project funding – How will this US\$400 million project be funded? • Key timelines & collaboration opportunities 	Practices in System Transfer and Commissioning <ul style="list-style-type: none"> • Establishing a systematic systems integration process to meet time and budget constraints • Strategies for managing interface design and systems transfer • Commissioning of systems: Challenges encountered and solutions development <p>Reserved for Teltronic</p>	Adopting IEC 61375 in IP train communication networks <ul style="list-style-type: none"> • Benefits of adopting IEC 61375 technologies • Real case sharing <ul style="list-style-type: none"> ○ Case 1: Applying ETBN in onboard multimedia and train to ground systems ○ Case 2: Applying ETBN in separate TCMS and multimedia systems <p>Roland Chan, Rail Architect, MOXA Inc</p>	
15:40	Improving urban mobility in Gujarat: Construction progress of Ahmedabad Metro (MEGA) <ul style="list-style-type: none"> - Constructing a mass-transit rail system for the cities of Ahmedabad and Gandhinagar - Construction progress – towards a completion target of 2020 - Financing the project by JICA 	Interface Integration and System Integration Testing <ul style="list-style-type: none"> • How to integrate various system interfaces and enforce a universal verification system to ensure that the entire metro system is up to operational standards • Nurturing a strong technical team to carry out system integration 	Data Analytics for Train Fleet Reliability <p>Dr. Chia Wee Lee, Deputy Director, Rolling Stock Workshop, SMRT Trains</p>	

		<ul style="list-style-type: none"> Sharing of knowledge in assessment analysis and risk warnings from planning stage to on-site testing 		
16:00	Exhibition Visit & Networking Refreshments			
Closing Keynote Plenary				
16:40	Driving cost-effective growth in metro networks <ul style="list-style-type: none"> What are the factors that affect metro costs within and outside operator control? With the data on key cost drivers of operating costs, how can metro operators best target performance improvement initiatives? How can funding be optimised to generate maximum value? <p>Richard Anderson, Managing Director, Railway and Transport Strategy Centre, Imperial College London</p>			
17:00	Delivering a seamless travel experience with technology <i>Almost every industry across the world is being disrupted. So what of the rail industry? This session will explore the disruptive forces affecting the railway industry. Some key issues discussed include:</i> <ul style="list-style-type: none"> How can IT innovations be harnessed to create a seamless passenger experience? How can emerging technologies like IoT, AI and big data analytics ensure optimal performance of rail assets? How has technological innovation remodeled established rail industry practices? How can technology be used to move the industry forward while not undermining the fundamentals of sound railway practice? 			
17:20	Networking Drinks Reception			

DAY TWO: WEDNESDAY 21 MARCH 2018

Opening Keynote Plenary	
08:45	Organiser's Welcome Remarks
09:00	Chair's Opening Remarks Reserved for Systra
09:10	A Rail Transport Perspective of the Guangzhou-HK-Macau Greater Bay Area Development <ul style="list-style-type: none"> Development of a city cluster in the Guangdong- Hong Kong-Macau Greater Bay Area Boosting urban connectivity and economic cooperation between Hong Kong, Macau and 9 cities in Guangdong province Tapping into opportunities: What is MTR's expansion strategy into Mainland China? <p>Dr. Jacob Kam, Managing Director – Operations & Mainland Business, MTR Corporation</p>
09:30	Keynote Panel: Towards long-term sustainability of railway operations <ul style="list-style-type: none"> How can modern metros ensure financial sustainability and sufficient funds for asset upgrade and renewal? As labour costs increase, how can rail operators offset rising costs with revenue growth and increased productivity? How can rail authorities and operators work more closely together in ensuring long-term financial and quality sustainability? Building 'liveable' communities: Building railways that connect with and complement the urban development of a city <p>PANELLISTS: Adi Lau, Operations Director, MTR Corporation Dr. Prodyut Dutt, Chief Development Officer, Land Public Transport Commission (SPAD) Stewart Mills, Executive Director – Engineering and Maintenance, Sydney Trains</p> <p>MODERATOR: Richard Anderson, Managing Director, Railway and Transport Strategy Centre, Imperial College London</p>
10:10	Platinum Sponsor Address
10:30	Exhibition Visit & Networking Refreshments

	Operations & Maintenance	Signalling & Communications	Passenger Experience	Mainline
	Operational Efficiency	Resignalling Best Practices	Digitalisation of Passenger Experience	New High Speed Rail Corridors
11:30	<p>Enhancing the operational efficiency of Sydney's rail systems</p> <ul style="list-style-type: none"> Adopting Advanced Train Control systems and technologies on the Sydney Trains network Delivering cost-effective operations and safety improvements Technology initiatives to reduce lifecycle costs and improve reliability <p>Stewart Mills, Executive Director – Engineering and Maintenance, Sydney Trains</p>	<p>Navigating operational risks in resignalling of high-capacity metros</p> <ul style="list-style-type: none"> How to ensure uninterrupted daily operations during in-progress updates Measures taken during construction and trial period Updating staff's knowledge of both new and existing systems for operation and maintenance How to resolve system instabilities <p>Philip Wong, Chief Signal Engineer (Operations), MTR Corporation</p>	<p>Engaging commuters in a digital age</p> <ul style="list-style-type: none"> How can rail operators leverage on social media as an asset to communicate their messages effectively? Dealing with negative comments – What's the best approach? Are social media sentiments a true indication of on-ground sentiments? <p>Andreas Willich, Head of Passenger Transport, Member of the Executive Board, BLS AG</p>	<p>Connecting Hong Kong to China's national high speed rail network: An update on Express Rail Link</p> <ul style="list-style-type: none"> Launching the Express Rail Link in the 3rd quarter of 2018 What are the key construction challenges and how were they overcome? Integrated testing and cross-boundary dynamic testing of train sets <p>Dr. Philco Wong, Projects Director, MTR Corporation</p>
11:50	<p>Enhancing the operational efficiency of Bangkok's rail systems</p> <ul style="list-style-type: none"> Adopting Advanced Train Control systems and technologies on Bangkok's metro network Delivering cost-effective operations and safety improvements Reducing lifecycle costs and improving service reliability 	<p>Signalling Experts Panel: Best Practices in upgrading to CBTC Systems</p> <ul style="list-style-type: none"> As CBTC is becoming one of the standard systems in the world, how can we ensure that the system is reliable, secure and can withstand interferences? Strategies to manage disruption to passenger services during the testing phase How can we overcome the challenge of limited engineering hours in testing the new system? <p>PANELLISTS:</p> <ul style="list-style-type: none"> Malcolm D'Cruz, Project Manager, Public Transport Authority of Western Australia Philip Wong, Chief Signal Engineer (Operations), MTR Corporation 	<p>Delight your passengers – Providing a seamless and contextual mobile experience</p> <ul style="list-style-type: none"> Understand how to orchestrate the passenger's door-to-door mobility based on user insights gained through smart location analytics Bringing AI powered travel assistance to rail operators mobile applications to reduce friction along the passenger's individual journeys <p>Reserved for Axon Vibe</p>	<p>Thailand's high speed rail ambitions – Connecting Bangkok to Nakhon Ratchasima</p> <ul style="list-style-type: none"> Building Thailand's first high-speed rail link with a target operation date in 2020 Project timelines and collaboration opportunities Future expansion plans – vision of linking with China- Laos Railway <p>Dr. Pichet Kunadhamraks, Director, Bureau of Rail System Development Office, Office of Transport and Traffic Policy and Planning, Ministry of Transport Thailand</p>
12:10	<p>Driving innovation in O&M management: A case study on Taiwan HSR</p> <ul style="list-style-type: none"> Introduction of innovative initiatives in operation, maintenance, contingency and depot management How has the introduction of smart railway systems improve operational efficiency for Taiwan HSR? Benefits gained in adopting smart practices <p>James Shi, Assistant Vice President, Head of Operation Sub-Division, Taiwan High Speed Rail</p>	<p>PANELLISTS:</p> <ul style="list-style-type: none"> Malcolm D'Cruz, Project Manager, Public Transport Authority of Western Australia Philip Wong, Chief Signal Engineer (Operations), MTR Corporation 	<p>A rainbow connection - Differentiating Hong Kong's MTR stations with a palette of colours</p> <ul style="list-style-type: none"> Why is every Hong Kong MTR station a different colour? Curating the station experience – Integrating functional artwork and meaningful colours Visioning stations of the future <p>Andrew Mead, Chief Architect, MTR Corporation</p>	<p>Kuala Lumpur-Singapore High Speed Rail: Project Updates</p> <ul style="list-style-type: none"> Tender timeline: What are the opportunities for collaboration? Managing large-scale land acquisition: What are the key challenges? Community engagement: How do we manage stakeholders who will be affected by the land acquisition and construction?
12:30	Networking Lunch & Exhibition Visit			

	Rail Maintenance: Latest Technologies & Best Practices	Resignalling Best Practices	Smart Passenger Experience	High Speed Rail Sustainability
14:00	<p>Asset Maintenance: In-house or outsourced?</p> <ul style="list-style-type: none"> What are the key factors to be considered when contracting out? Evaluating financial sustainability and tangible benefits in outsourcing asset maintenance How can contractors' efficiency for cost cutting and performance improvements be tapped upon? <p>Ahmad Nizam Mohamed Amin, Chief Infra Services Officer, Prasarana</p>	<p>Integration and upgrading of Taipei Metro's signalling system</p> <p>Kuo Tsair-Ming, Vice President, Taipei Rapid Transit Corporation</p>	<p>Enhancing passenger mobility with big data</p> <ul style="list-style-type: none"> How can different modes of public transportation be seamlessly integrated to provide smoother commuter journeys? Providing developers free access to public transport data to create useful apps for passengers Future outlook: How can transport authorities utilise big data to develop a smart transport system? <p>Dr. Prodyut Dutt, Chief Development Officer, Land Public Transport Commission (SPAD)</p>	<p>Operational & Financial Sustainability of South Korea's High Speed Rail Network</p> <ul style="list-style-type: none"> What are the key lessons gained from Korea's experience with high speed rail? How has HSR helped South Korea to achieve greater balance in its socio-economic development? Plans for network expansion
14:20	<p>Rail Maintenance: A paradigm shift from preventive to predictive</p> <ul style="list-style-type: none"> Moving from preventive to predictive approach – achieving cost-savings over routine or time-based preventive maintenance With infrastructure constantly ageing, what strategies can be adopted to achieve maintenance optimization? How can sensor technology and big data analytics be utilised effectively to reduce maintenance costs? 	<p>Re-signalling of Singapore's oldest lines: Lessons learnt</p> <ul style="list-style-type: none"> What is the status of re-signalling work on the North-South Line and East-West Line? Strategies for minimizing impact on commuters during upgrading How to ensure seamless integration with existing networks Key takeaways for other rail operations implementing re-signalling projects 	<p>Improving customer satisfaction with digital technology</p> <ul style="list-style-type: none"> Providing real-time information to customers What are the latest technologies implemented in the reporting and monitoring of passenger numbers? How can data analytics help in making short and long term operational and customer experience improvements? 	<p>Lessons from Taiwan High Speed Railway – Strategies to promote sustainable growth</p> <p>The Taiwan High Speed Railway Project is one of the largest privately managed and funded Build-Operate-Transport projects in the world.</p> <ul style="list-style-type: none"> BOT financial model and its application in the railway Overcoming the legal, administration and financial issues in the collaboration What can other emerging high speed rail projects learn from the Taiwan HSR experience? <p>Sung Hung Kung, Chief of Section, Bureau of High Speed Rail, Ministry of Transportation & Communications Taiwan</p>
14:40	<p>Computerised Maintenance Management Systems for Railways using Big Data</p> <p><i>One of the main issues with predictive maintenance packages is the disparate types of data sources and hence the need of data aggregation of existing data sources inside an "eMaintenance Cloud". Instead of looking at predictive maintenance as a collection of data with software analytics, this presentation will demonstrate the advantages of analysing the company culture, identifying goals and building requirements for a complete computerised maintenance management system to automate the maintenance workflow.</i></p> <p>Malcolm D'Cruz, Project Manager, Public Transport Authority, Perth</p>	<p>Integrating CBTC into the Melbourne Rail Network</p> <ul style="list-style-type: none"> Updating staff's knowledge of both new and existing systems for operation and maintenance Designing for replacement the real "whole of life" – What are the key considerations? How can CBTC system performance be resolved early and what are the costs of not doing so? 	<p>Meeting the expectations of today's connected passengers</p>	<p>Accelerating China's High-Speed Rail development</p> <p><i>By 2020, China plans to increase its high-speed rail network to 30,000km, connecting more than 80% of China's major cities.</i></p> <ul style="list-style-type: none"> What is China's high-speed rail connectivity vision? Best practices on efficient implementation and management of mega projects

	Best Practices in Operations	Communications Security	Smart Passenger Experience	Intercity
15:00	<p>Lessons learnt from investing and operating in Mainland China</p> <ul style="list-style-type: none"> • Opportunities arising from the metro boom in China • What are the challenges of investing and operating in China? • Achieving high operational reliability and customer satisfaction <p>Wilson Shao, General Manager – Beijing & Tianjin, China & International Business, MTR Corporation</p>	<p>Managing and implementing practical information technology security in railway communications system</p> <ul style="list-style-type: none"> • Introduction to the risk and security vulnerabilities in rail systems • Creating a railway IT security management framework for communications system • Managing vulnerabilities in OT system • Sharing of best practices in IT security <p>Lim Thiam Siew, Assistant Vice President, SBS Transit DTL</p>	<p>PANEL: Creating a seamless passenger experience through digital innovation</p> <ul style="list-style-type: none"> • How can we meet the expectations of today's connected passenger and enable them to be always connected on the journey? • How can mobility analytics be mobilized for operational planning, resource optimisation and real-time planning to facilitate the passenger experience? • What are the opportunities and challenges associated with the use of open data? • Visioning the passenger experience of the future 	<p>Modernisation and expansion of Sri Lanka's railways</p> <ul style="list-style-type: none"> • Upcoming developments in Sri Lanka – Proposed Railway Electrification Project & Light Rail Transit in Colombo • Optimising existing resources to improve mainline efficiency • How will Sri Lanka Railways continue to modernize the railways and raise passenger and freight volumes? <p>Jayantha Gunathilake, Additional Secretary (Engineering), Ministry of Highways & Higher Education, Sri Lanka</p>
15:20	<p>Big data methodology for operation and infrastructure design</p> <ul style="list-style-type: none"> • Using big data analysis to test timetables compatibility with infrastructure design • How can big data help in improving the robustness of operations planning? • Overcoming challenges in working with big data – in terms of data processing and analysis 	<p>Implementing information security in railway communications systems</p> <ul style="list-style-type: none"> • What are the unique challenges that rail operators face in relation to cyber security? • How can we protect systems from attacks across different silos? • Understanding the continued difficulties in an increasingly digitalized network <p>Randy Sac, Head – Information Management & Technology, Light Rail Manila Corporation</p>	<p>PANELLISTS: Andreas Willich, Head of Passenger Transport, Member of the Executive Board, BLS AG</p>	<p>Expanding intercity connectivity in Malaysia</p> <ul style="list-style-type: none"> • What are the current and planned railway upgrading works in Malaysia? • Connecting suburbs in Klang Valley without going through the city centre • Upgrading and modernization of infrastructure
15:40	<p>Optimising reliability and return of investment through efficient operations</p> <ul style="list-style-type: none"> • What are the best practices in maximising operational efficiency, asset life and tackling bottlenecks • Increasing cost efficiencies in operations – How do you minimise operational costs with the latest technologies? • What are the key success factors in efficient operations management? 	<p>Prioritising cybersecurity threats to rail systems</p> <ul style="list-style-type: none"> • What is the security threat landscape and malicious threat actors penetrating rail systems? • What are the key defences in depth architecture, security operations and people approach? • How can we prepare and mitigate the risk of future threats? 		<p>Modernisation and expansion of Philippines National Railway</p> <ul style="list-style-type: none"> • Opportunities to meet Philippines' transport connectivity requirements • Optimising existing resources to improve mainline efficiency • How will Philippines Railways continue to modernize the railways and raise passenger volumes?
16:00	Close of Asia Pacific Rail 2018 – See you next year!			

On-Floor Seminar Agenda (open to trade visitors) Day One – Tuesday, 20 March 2018			
Time/ Track	Seminar Theatre 1 – Track Infrastructure	Seminar Theatre 2 - Rail revenue & ticketing	Seminar Theatre 3: Construction, Tunnelling & Project Management
1100	SBS Transit's best practices in track inspection and maintenance Quek Chin Hock , Assistant Vice-President (Rail Engineering) & Head of Permanent Way & CS Department, SBS Transit DTL	Innovative smart ticketing to improve passenger experience Silvester Prakasam , Senior Advisor, Fare System, Land Transport Authority	Mitigating construction challenges in building Jakarta's first LRT line Syahrudin Sofyan , Design, Civil Engineering & Trackwork Manager, LRT Department, Adhi Karya
1130	Optimising track maintenance in limited maintenance windows Reserved for Wilson Acoustics	The future of smart ticketing Reserved for INIT	
1200	Maintenance and renewal of legacy tracks Stanley Wong , Permanent Way Integrity Manager, MTR Corporation	Overview and updates of Thailand's common ticketing system Dr. Padet Praditphet , Director, Common Ticketing Office, Office of the Transport & Traffic Policy & Planning (OTP), Ministry of Transport Thailand	Establishing a robust framework of supervision for construction of major infrastructure projects Reserved for Systra
1230	Track maintenance requirements during design, construction phase and before operations Reserved for SUNDV	Key considerations in replacement and upgrading of fare collection systems Reserved for ACCESS IS	
1300	Designing and engineering permanent ways to handle increased traffic	Development of mobile ticketing - A practical case study on Taiwan HSR	Development of an Artificial Neural Network for Optimization of Tunnel Blasting Design <ul style="list-style-type: none"> - Using multi-layers perception (MLP) to analyse and predict tunnel blast vibration using past blasting records - Application of Genetic Algorithm (GA) to optimise blasting parameters and improve blast performance
1330	Implementation of track-based sensors Reserved for Linsinger	Facilitating end-to-end travel capability for the traveller	Dr. Lawrence Lee , Senior Construction Engineer, MTR Corporation
1400	New innovations and measures to slow down track degradation	Achieving seamless intermodality between all modes of transport	120 years of project management & construction lessons
1430	Designing railway tracks for an enhanced life cycle operation	Mobility-as-a-service through account-based ticketing Reserved for Bytemark	Shaun Kenny , President, Asia Pacific, Bechtel
1500	Optimising heavy haul track approaches to minimise degradation at increased axle loads	Future of ticketing – moving from smart cards to the cloud	Mitigating risks in underground construction and enhancing tunnel lifecycle
1530	Designing and engineering of tracks to handle increased traffic and axle loads	Towards an integrated ticketing system	
1600	Use of geosynthetics to mitigate track degradation	Seamless and contextual mobile experience	Best practices in effective ground consolidation and tunnelling techniques
1630	Enhancing life cycle of track assets through re-sleepering	Understanding travel patterns through ticketing analytics	
1700	End of Day One		

On-Floor Seminar Agenda (open to trade visitors) Day Two – Wednesday, 21 March 2018			
Time/ Track	Seminar Theatre 1 – Track Infrastructure	Seminar Theatre 2 - Rail revenue & ticketing	Seminar Theatre 3: Project Management, Tunnelling & Station Design
1100	Investigation of squeal noise and rail damper effect	Driving rail revenue with big data analytics	Best practices in designing mixed-use transit hubs Greg Yager (Senior VP)/Diane Kemp (VP), CallisonRTKL
1130	Measures to mitigate rail traffic noise and vibration	Improving revenue management through customer loyalty programmes	
1200	Use of noise and vibration for condition monitoring of track centric assets	Safety, Reliability and Disruption Management of High Speed Rail and Metro Systems	Planning, methodologies, design and implementation behind TOD: China Case Studies Kelvin Li, Director, Leigh & Orange
1230	Using primary suspension data for track condition assessment	Reserved for City University of Hong Kong	
1300	Automatic track inspection system		Rail and Metro Tunnel Ventilation System <i>This session will cover the introduction of design parameters, design criteria, various tunnel ventilation system concepts, latest trends and challenges.</i> Steven Lai, Director, Infrastructure, China Region, WSP
1330	Innovations in track maintenance machinery		Overhead construction and maintenance: how to lay the foundations for effective asset management?
1400	Dampening elements in ballastless track construction		
1430	Rail corrugation monitoring and management		
1500	Rail maintenance by milling technology		Establishing a robust framework of supervision for construction of major infrastructure projects
1530	Reinforcing a culture of workplace safety for track maintenance workers		
1600	End of Day Two		