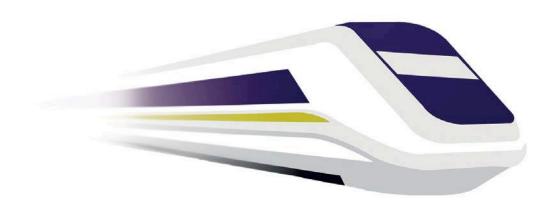
AsiaPacificRail 2017



Innovation, technology & strategy for Asia Pacific's rail industry

DATES

VENUE

21–22
March 2017

Hong Kong Convention & Exhibition Centre

www.terrapinn.com/aprail

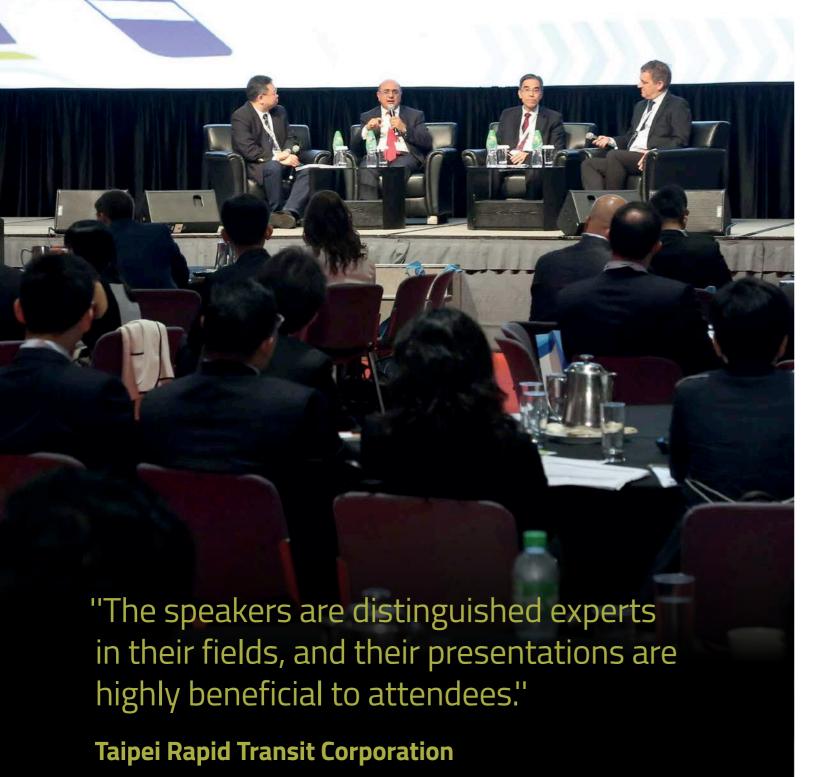
OPERATIONS EXCELLENCE PANEL

Delivering operations excellence and redefining rail standard future

Dr. Simon C.M. Yu, Professor and Programme Director, Sustainable Infrastructure Engineering (Land & Buil Institute of Technology

PANELLISTS:

Adi Lau, Deputy Director - Operating, MTR Corporation Tony Eid, Executive Director, Future Network Delivery Operations Director, Sydney Trains Michael Harrison, Vice President (Rail Operations), SBS Transit Ltd



Foreword from MTR

Dear Colleagues,

As the Managing Director – Operations & Mainland Business of MTR Corporation Limited, I want to welcome you to Hong Kong. We are pleased to once again be the host network for Asia Pacific Rail, a highly important event to Asia Pacific's metro and rail community. Now in its 19th year, the show continues to bring together leading rail experts from across Asia and the world to share best practices with each other and address the key challenges we are all facing.

With so much investment into rail infrastructure, both here in Hong Kong and in many cities across the world, as we move towards an increasingly smart, technology-enabled future, this event comes at an important time. We are proud to showcase some of the most forward-thinking technologies and operations & maintenance strategies that are being developed, and to explore some of Asia's most exciting rail investment opportunities.

Asia Pacific Rail 2017 will once again feature the most exciting project updates from both metro and mainline projects across Asia Pacific. The expanded 2017 agenda will explore major issues affecting all of us across the digital railway, rolling stock, asset management, high speed rail, freight, finance & investment, power & energy, safety and more, ensuring we are truly addressing the needs of the entire rail community.

We are pleased to give our support to the 19th Asia Pacific Rail and would be delighted to see you in Hong Kong in March.

Yours sincerely,



DR. IACOB KAM Managing Director – Operations & Mainland Business MTR Corporation Limited



Our Story

AS WE ENTER THE AGE OF THE DIGITAL RAILWAY, OUR INDUSTRY IS CHANGING.

Technology is playing a more important role than ever before in ensuring efficient operation management. Passenger expectations are changing — they no longer simply want to get from A to B, but want a connected and comfortable experience. Even traditional asset management strategies are becoming increasingly digital, with the deployment of sophisticated predictive maintenance techniques.

Besides that, our industry still faces tough high-speed construction challenges, tough operational efficiency targets and demanding timelines for new construction projects. What better way to overcome these challenges and to ensure you're at the top of your game than two days of knowledge sharing and networking with your peers?

Welcome to Asia Pacific Rail.

The most exclusive and influential railway gathering in the region, the Asia Pacific Rail premium conference attracts over 800 senior rail executives from Asia and across the globe each year. In 2017, we bring you more content than ever before, with 4 tracks and 4 technology theatres. The 4 tracks will feature exciting innovations in signalling, communications, asset management, passenger experience, rail financing models and more, all focused on how you can improve your bottom line.

Visionary keynotes will lay the foundations for two days of intensive learning, discussion and networking. Leading C-Level executives will share case studies from across the world, ensuring you can learn from the best of the best. Once you've heard from them, you can spend time debating with them during the small-group roundtable sessions, allowing you to foster relationships and make new business contacts.

Whether you're a railway operator, railway authority or a solution provider to the global railway industry, you need to join us as we lay the foundations for Asia's rail future.

"SOUTHEAST ASIA IS A VERY IMPORTANT MARKET FOR US. THIS CONFERENCE ATTRACTS MAINLY THE OPERATORS FROM THIS REGION, WHICH ARE THE PEOPLE WE WOULD LIKE TO MEET. ASIA PACIFIC RAIL IS A VERY SUITABLE PLATFORM FOR US TO INTRODUCE OURSELVES TO THESE OPERATORS AND TO DISCUSS BUSINESS OPPORTUNITIES."

TOSHIBA



The Conference

This is a strategic, two day conference. Designed to address the key challenges and opportunities in both mainline and metro that are key to building a smart, efficient and sustainable railway system in Asia Pacific.

Key Themes:

Asset Management	Safety
Signalling & Communications Strategy	Financing Rail Projects
Rolling Stock	Energy & Sustainability
Passenger Experience	Mainline & Rail Freight
Operational Excellence	New Project Showcase
Improving Profitability	System Improvement & Modernisation

Plus we bring you a whole day of the latest project updates from across Asia and beyond.

Asia Pacific Rail 2017 will be a key gathering of rail authorities and operators in Asia Pacific and the region.

ENGAGE WITH OVER 800 DECISION MAKERS ACROSS JUST TWO DAYS.

We bring together key stakeholders across mainline, metro, freight and more, providing you with the perfect platform to connect and engage with your key prospects. It's a highly cost and time efficient platform to generate new leads and reinforce your leadership position in the market.

Major operator insights



LINCOLN LEONG
Chief Executive Officer
MTR Corporation

In a climate of increasing passenger capacity and operational demands, there is a greater need than ever before to invest in the future, to maintain operational efficiency and passenger satisfaction. Join us as we sit down with Lincoln Leong, CEO of MTR Corporation, one of the most well-respected and successful operators in the world, for an exclusive keynote interview on the morning of the first day of the event, exploring the major game changers in the next few years and what MTR Corporation is doing to prepare for the digital railway of the future.



DESMOND KUEKPresident and Group Chief Executive Officer **SMRT Corporation**

Singapore's North-South and East-West lines (NSEWL), its oldest, longest and most heavily-utilized MRT lines are undergoing a tremendous amount of work. The current modernization efforts mark the biggest transformation of the lines since they were built in the 1980s. Join Desmond Kuek for this exclusive keynote interview as he shares more about SMRT's progress on its multi-year reliability enhancement programme and explores what the future holds for SMRT in this new digital age.



ASHWINI BHIDE

Managing Director

Mumbai Metro Rail Corporation

The Mumbai government has grand plans to expand the metro network in India's most populous city, with a total of eight rail corridors to be built. As the first entirely underground corridor in Mumbai, Mumbai Metro Line 3 is groundbreaking for the city. Ashwini Bhide is tasked with the huge role of bringing this project from blueprint to reality. She will be sharing her perspective on the challenges encountered in the construction of Mumbai Metro Line 3 and the solutions that MMRC has adopted to overcome them



DR. JACOB KAMManaging Director — Operations and Mainland Business **MTR Corporation**

Increasing passenger demands combined with a maturing and expanding network will inevitably place greater strain on rail assets and the ability to meet important safety and service criteria in transport operations. With this in mind, it is important for rail operators to optimise their assets and plan for the future. Learn from Dr. Jacob Kam as he shares more about MTR's future railway development blueprint and driving innovation in service operations. Dr. Kam is responsible for overseeing MTR's transport operations in Hong Kong and its rail and property businesses in Mainland China.



AZMI ABDUL AZIZPresident & Group Chief Executive Officer **Prasarana Malaysia Berhad**

Kuala Lumpur's ambitious urban rail plan is starting to take shape. The Klang Valley MRT project, Malaysia's largest infrastructure development and backbone of the city's public transportation network, is on schedule for completion, and within the targeted costs. On top of that, extensions on the Ampang and Kelana lines were completed earlier this year. In his keynote interview session, Azmi will share more about his vision for Malaysia's rail industry in the next decade and how he plans to get there.



CHUNG LI-JUNG
Deputy Director General
Kaohsiung Mass Rapid Transit Bureau

Kaohsiung's light rail system is the world's first light rail vehicle system on a fully catenary-free route, that is, there are no unsightly power wires hanging over the tracks. One of the most innovative transport systems in Asia, it will rely on rapid charge capacitors and batteries to power the trains from station to station. Join Li-Jung in this exciting session as he shares a construction update and talks you through how they are minimizing energy consumption through effective electricity usage design.

Over 100 Confirmed Speakers:



LAKTHAN
THONGNOPAKOON
Assistant Managing
Director, Project
Engineering Group,
Bangkok
Expressway and
Metro Public
Company Limited



HE CHEN
Engineering Design
Center General
Manager,
Traffic Control
Technology



DR. TSAY HUEL-SHENG
Professor,
Graduate School
of Transportation
Management,
Central Police
University, Taiwan



DR. PADET
PRADITPHET
Director,
Common Ticketing
Office, Office of
Transport and Traffic
Policy and Planning
(OTP), Ministry of
Transport Thailand



TOM CHANG Commissioner, Department of Rapid Transit Systems, Taipei City Government



LIU CHIU-LIANG
Director, Systemwide
E&M Project Office,
Department of
Rapid Transit
Systems, Taipei City
Government



DR. K.M. LEUNG Assistant Director/ Railways, Electrical and Mechanical Services Department, Government of Hong Kong SAR



DR. NOORMAH MOHD NOOR CEO, Express Rail Link



EMMANUEL VIVANT Managing Director, Hong Kong Tramways & CEO, RATP Dev Transdev Asia



ZHU XIANYUAN
Deputy Country
Director,
Institute for
Transportation
Development Policy
(China)



ISABEL
CHATTERTON
Asia Pacific Regional
Manager, Public Private
Partnership Transaction
Advisory Services,
International
Financial Corporation



SANJAY KUMAR Chief Engineer (Signal & Telecom) Kolkata Metro Rail Corporation



SILVESTER PRAKASAM Director Fare Systems, Land Transport Authority Singapore



KULDEEP GHARATYA Head of Technical Strategy, Systems Performance, Innovation, London Underground



DR. SOMPRASONG SUTTAYAMULLY Director, Business Development Department, Mass Rapid Transit Authority of Thailand



C C CHANG

Airport Line Metro
Project E&M System
Integration Committee
Member,
Ministry of
Transportation and
Communication
Taiwan



LEO MAKDirector of Systems for KVMRT Project,
MMC Gamuda



ADI LAU
Operations Director,
MTR Corporation



DR. TONY LEEChief of Operations
Engineering,
MTR Corporation



DAVID TANGProperty Director,
MTR Corporation



RICHARD KEEFE
General Manager –
Rolling Stock Fleet,
MTR Corporation



TERRY WONG
General Manager
– Infrastructure
Maintenance,
MTR Corporation



MARK ELLIOTT CEO, Northwest Rapid Transit



ANDY YIP
General Manager –
International Business
Octopus Holdings



SUE MCCARREY CEO, Office of the National Rail Safety Regulator



OLIVER REDRUP
Director, Capital
Projects &
infrastructure,
PwC



HERMANTO DWIATMOKO Commissioner, PT. Kereta Api Indonesia



PETER LUNDEN-WELDEN Chief Executive Officer, Seoul Line 9 Operation Company



LIU KADING
Chief Planner,
Shenzhen Metro



VINCENT TAN
Senior Vice President,
Rail Operations/
International
Engagement
SMRT Trains Ltd



SIU YOW WEE
Director of Station
Operations, Rail
Operations Division,
SMRT Trains



NATHAN
Vice President,
Corporate Information
and Communications
SMRT Corporation

PATRICK



Head of Power & Infrastructure Advisory, Investment Banking Department Asia, Sumitomo Mitsui Banking Corporation

VALERY TUBBAX



DR. YANG HANWEI
Engineering Director,
Facility Engineering
Department,
Taiwan High Speed
Rail



JAMES SHI Head of Maintenance Sub-Division, Railway Operations Division, Taiwan High Speed Rail



MARTHA LAWRENCE Sr. Railway Specialist & Leader, Railways Community of Practice, World Bank

Over 100 Confirmed Speakers:



DR. JOHN ENDICOTT Fellow/Geotechnical & Underground Engineering Expert AECOM



COLIN STEWARTGlobal Rail Leader **Arup**



CHAO LIU
Chief Engineer
Traffic Control
Technology



ADESH SHARMA
Managing Director
Dedicated Freight
Corridor Corporation
Limited



TAKAO NISHIYAMA Executive Director — Overseas Related Affairs East Japan Railway Company



MUKUL JAIN
Director
High Speed Rail
Corporation of
India/Rail Vikas
Nigam Limited



PROF LEE KANG-KUEN

Professor of
Transportation Practice
Department of
Electrical Engineering
Hong Kong
Polytechnic
University



RAMA VENKTA
Project Director, High
Speed Roil Group
Land Transport
Authority Singapore



PARITOSH GARGA General Manager IIFCL Projects Limited



ASHWANI SAXENA Director (Projects) Jaipur Metro



DR. SAMUEL CHAN
Director, Systems
& Chief Systems
Specialist
Land Transport
Authority Singapore



LEOW MENG FAI
Director — Asset
Condition, Standards
and Renewal
Land Transport
Authority Singapore



HENRY FOO Director, Thomson-Eost Coost Line Land Transport Authority Singapore



RANDY SAMOY SAC Head – Information Management & Technology Light Rail Manila Corporation



CATHERINE P. LOPEZ Division Manager, Automated Fare Collection System Services Light Rail Transit Authority



PRAVIN DARADE -ADDL. Metropolitan Commissioner, MMRDA & CEO Metro PIU



ENZO CHEN
Solution Architect
Moxa Inc.



CALVIN CHUKO
Product Manager
MOXA Inc.



WILLIAM SABANDAR President Director MRT Jakarta



YI MIN
Chief Advisor China
Business
MTR Corporation



PHILIP WONG
Chief Signal Engineer
(Operations)
MTR Corporation



DR. LAWRENCE LEE Senior Construction Engineer – Civil MTR Corporation Limited



BRIJESH DIXIT
Monoging Director
Nagpur Metro Rail
Corporation



NORLIA NOAH
LRT3 Project Directo
Prasarana Rail
& Infrastructure
Projects Sdn. Bhd
(PRAISE)



YUSLIZAR DAUD
Head of Rail Division
Public Transport
Commission
Malaysia (SPAD)



IR CS CHANG Chief Executive Officer Pypun-KD & Associates Limited



HIROFUMI TANAKA

Assistant Senior Researcher, Track Geometry and Maintenance, Track Technology Division Railway Technical Research Institute



TC CHEW
President, Global
Business &
Operations
Samsung C&T
Corporation



FOO JANG KAE
Vice President – Rai
Engineering
SBS Transit



JEAN-FRANCOIS CHASSIN Vice President, Permanent Way & Engineering Trains SMRT Trains



KUO TSAIR-MING Vice President Taipei Rapid Transit Corporation



NAOTO KIMURA
Director, International
Relations Department,
Corporate Planning
Headquarters
Tokyo Metro



RAHEEL QURESHI
Chief Information
Security Officer (CISO)
& Cyber Security
Design Authority
Thales



SIMON SHIAO-LIEN CHAO Commissioner Transportation Bureau, New Taipei City Government



LUVSANDAGVA
PUREVBAATAR
Advisor to the
Chairman & Mega
Projects Leader
UBTZ



VORAVUTH MALA
Deputy Governor of
Administration
State Railway of
Thailand



Agenda at a Glance

Day 1 - Tuesday 21 st March, 2017						
Opening	g Keynote Plenary: Rail Le	eadership & New Digital Pa	radigms			
	Exhibition Visit & Net	working Refreshments				
Plenary Theatre Signalling & Mainline & Rail Freight National Plenary Theatre National Plenary Theatre						
Driving Efficiency with New Technology	Brownfield Signalling	High-Speed Rail Projects	Intermodality & Integration			
	Networking Lunch	a & Exhibition Visit				
New Metro Project Showcase	Rail Systems & Communications	Rail Freight	Power & Energy			
	Exhibition Visit & Net	working Refreshments				
	ROUNDTABLE DIS	CUSSION SESSION				
Р	lenary Keynote Session:	Operational Reliability Pan	el			
	Networking Dr	inks Reception				
	Day 2 - Wednesda	y 22 nd March, 2017				
Key	note Plenary: The future	of rail and One Belt, One Ro	oad			
	Exhibition Visit & Netv	working Refreshments				
Plenary Theatre	Signalling & Communications Theatre	Finance & Funding	Light Rail & Safety			
Rolling Stock	Signalling Best Practices	Rail Financing Models	Light Rail			
	Networking Lunch	a & Exhibition Visit				
Defining your Asset Management Strategy	Communications	PPPs	Safety & Emergency Response			
Passenger Experience	Workshop	Managing Risk & Attracting Investment	Emergency Response			
Networking Refreshments & Close of Asia Pacific Rail 2017						

If you have an interesting case study to share, contact **YunXuan Koh** on **Yunxuan.koh@terrapinn.com** or **+65 6322 2703**



Tuesday 21st March, 2017

Highlights

Rail Leaders Panel

Hear from top rail leaders on their plans to keep up with the competition in a climate of increasing passenger capacity and operational demands

Digital Railway of the Future

Explore how the digital railway of the future will look like as the rail industry adapt to new trends and market conditions

Driving efficiency with new technology

Find out how IT innovations can be harnessed to improve rail operations and how to secure your rail systems with a robust cyber security strategy

High Speed & Metro Project Showcase

Explore opportunities in the most exciting metro and high-speed rail projects from across Asia Pacific

Operation Reliability Panel

Learn from rail leaders as they share strategies and challenges in maintaining high operational reliability standards



OPENING KEYNOTE PLENARY: RAIL LEADERSHIP & NEW DIGITAL PARADIGMS

8:45

ORGANISER'S WEI COME REMARK

8:50

CHAIR'S OPENING REMARKS

KEYNOTE INTERVIEWS

Join us for a series of exclusive interviews, where leaders of major rail operators share their plans to cope with increasing passenger capacity and operational demands. Hear their thoughts on what the major game changers in the next few years will be and what they are doing to keep up with the competition.

INTERVIEWER:

Colin Stewart, Global Rail Leader, Arup

INTERVIEW 1

Interview with Lincoln Leong, CEO, MTR Corporation

INTERVIEW 2

Interview with **Desmond Kuek,** President & Group CEO, **SMRT Corporation**

INTERVIEW 3

Interview with Azmi Abdul Aziz, President & Group CEO, Prasarana Malaysia Berhad

RAIL LEADERS' PANEL

Following their interviews, our rail leaders will be joined by other special guests to explore the big issues affecting rail operators throughout Asia and beyond. Issues for discussion include:

- How can we balance the pressure to increase passenger capacity with cost constraints?
- How can we overcome funding challenges for new projects and project upgrades? What potential is there in increased use of PPPs and the capital markets?
- With assets working harder and longer, what are the big picture asset management issues that we need to be aware of?
- What are the real disruptive forces in the rail industry?
- What's the number one priority issue in your operator boardroom right now?

MODERATOR:

Colin Stewart, Global Rail Leader, Arup

PANELLISTS:

Lincoln Leong, CEO, MTR Corporation

Desmond Kuek, President & Group CEO, **SMRT Corporation**

Azmi Abdul Aziz, President & Group CEO, Prasarana Malaysia Berhad

Peter Lunden-Welden, Chief Executive Officer, Seoul Line 9 Operation Company

KEYNOTE: The Digital Railway of the Future

The rail industry isn't traditionally known for being a first-adopter or quick to adapt to new trends and market conditions, but in the digital future, that needs to change. Join us for this exciting keynote session as we explore what the digital railway of the future will look like, from both operator & passenger perspectives. We'll consider the impact of emerging technologies such as IoT and artificial intelligence, imagine the physical train of the future and its journey times, and also how the traditional station could change to become a connected lifestyle hub for both business and leisure.

Colin Stewart, Global Rail Leader, Arup

0.30

HUAWEI KEYNOTE ADDRESS

A keynote address from our 2017 Title Sponsor

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EXHIBITION VISIT & NETWORKING REFRESHMEN

Dr. Park Byung Joon, Senior Lecturer, Logistics and Urban Transport Program, SIM University

Enhancing the resilience of power

Conference Chair:

DRIVING EFFICIENCY WITH NEW TECHNOLOGY	SIGNALLING & COMMUNICATIONS	MAINLINE & RAIL FREIGHT	INTERMODALITY & INTEGRATION	
	Brownfield Signalling	High-Speed Rail Projects	INTEGRATION	
Conference Chair: Vincent Tan, Senior Vice-President - Rail Operations/International Engagement, SMRT Trains	Conference Chair: Ir CS Chang, Chief Executive Officer, Pypun-KD Associates Limited		Conference Chair: Dr. Park Byung Joon, Senior Lecturer, Logistics and Urban Transport Program, SIM University	
Future development roadmap of railway engineering and technology What are the major advances we can expect in the rail industry? How will infrastructure and rail systems cope with increasing passenger demand? How can innovations in the railway engineering lead to greater operational reliability and performance? TC Chew, President, Global Business & Operations, Samsung C&T Corporation	Brownfield CBTC Implementation Issues Designing for replacement the real "whole of life" — What should we consider? How can CBTC system performance issues be resolved early? What is the cost of not doing so?	A 2026 target: Singapore-Malaysia High Speed Rail moves forward From MOU towards bilateral agreement: Current project development status Key considerations in selecting a tendering model that suits the operating environments and expectations of both countries Tender timeline: What opportunities for collaboration are we expecting?	Integrating tramways into dense urban networks: A case study on Hong Kong's "Ding Dings" What role do trams plan in Hong Kong's efficient public transport system? Overcoming challenges with legacy systems Staying ahead of the competitio and the journey towards modernization Emmanuel Vivant, Managing Director, Hong Kong Tramways & CEO, RATP Dev Transdev Asia	
How loT technology is changing the game in rail operations Train Management Systems applications for loT technology How loT is enabling more effective maintenance Connecting unconnected systems: loT applications for legacy systems and operations Kuldeep Gharatya, Head of Technical Strategy, Systems Performance & Innovation, London Underground	Rail transit signalling system history & development trend in China Meeting increased operational and capacity demands Automating operations: How far can CBTC technology take you? How will the latest CBTC technology improve reliability and maintainability of rail systems? Chao Liu, Chief Engineer, Traffic Control Technology	Growing Korea's High Speed Rail Network What is the vision of high speed rail network in Korea? How has KTX service increase the railway demand? How has the paradigm shift to green public transport impact rail investment? Lee Minseok, Senior Manager, Beijing office, KORAIL	Establishing a reliable air-rail connection: A case study on KLIA Express Rail Link How does KLIA Express Rail Link distinguish its services amongst other modes of transport betwee the city and airport? Digitalisation of ticketing system to bring greater convenience to passengers Future outlook: How to ensure lor term sustainability of air-rail links? Noormah Mohd Noor, CEO, Express Rail Link	
Deploying artificial intelligence to manage complex maintenance schedules: A case study on HK's MTR How can Al be effectively deployed in managing complex asset maintenance schedules? Challenges in design & implementation of Al on rail systems Key takeaways for other metros in implementing Al on their own systems Terry Wong, General Manager — Infrastructure Maintenance, MTR Corporation	Innovations in brownfield signalling: A Chongqing Metro case study Implementation of intelligent & interoperable train control system Ensuring seamless integration with existing networks Key takeaways for other rail operators Jun Zhang, Operations Director, Chongqing Metro	India Case Study: The Mumbai-Ahmedabad HSR corridor Challenges in planning and constructing India's first HSR project and lessons learned so far What are the technical challenges involved in constructing a 21km undersea tunnel? Key project timelines Opportunities for collaboration Mukul Jain, Director, High Speed Rail Corporation	Promoting sustainable transport- oriented development in China Promoting Bus Rapid Transit (BRT) as an affordable solution of keeping up with urban growth Encouraging pedestrian and transoriented real estate development near metro & BRT stations Shaping and assessing urban development with the TOD standor Zhu Xianyuan, Deputy Country Director, Institute for Transportation & Development Policy (China)	
Evolution of Cyber Threat in the Digital World — Past versus Future Learn about the dark side of the underground world, cyber security threat landscape and malicious threat actors penetrating urban rail systems What are key Defense in Depth architecture, security operations and people approach? Overview of technical and administrative controls solutions and conclusion Raheel Qureshi, Chief Information Security Officer (CISO) & Cyber Security Design Authority, Thales	Large-scale CBTC Migration: A MTR Case Study Resignalling and upgrading the signalling systems of 7 metro lines Strategies for minimising impact on commuters during upgrading Ensuring seamless integration with existing networks Philip Wong, Chief Signal Engineer (Operations), MTR Corporation Limited	Thailand's High Speed Rail ambitions Plans for 165km Bangkok-Hua Hin high speed rail International collaboration: Establishing rail links to neighbouring countries Project timelines and collaboration opportunities Voravuth Mala, Deputy Governor of Administration, State Railway of Thailand	Planning for Expeditious Implementation of Elevated Metro Corridors and Opportunities for O&M in Mumbai Region Integrating the elevated metro corridors with other modes of transport Opportunities for O&M arrangements of running an approximately 190km network. Pravin Darade - Addl., Metropolitan Commissioner, MMRI & CEO, Metro PIU	

	NEW ME
	Conference Cha Vincent Tan, S - Rail Operation Engagement, SI
14;20	Expansion of Sinetwork What is the varial network? What are the benchmarking evaluated on The changing metro system
14:40	Building Mumb corridor Constructing Line 3 – the underground Challenges et construction Line 3 Solutions add Mrs Ashwini E Director, Mumb Corporation
15:00	Digitalisation of Asset Manageria How does the maintenance of vehicles are maintenance operation Björn Lundber Engineering Services
15:20	Insights into Market Link A RM55 billic linking Port k Increasing raunlocking the of communit Collaboration partners to fir rail link Yuslizar Daud, Public Transport Malaysia (SPA)
15:40	Building Jakarts system: A 2019 Project statu opportunities Preparations operations in Future expan Establishing 2020 William Sabar Director, MRT Ja
	of vehicles at maintenance operation Björn Lundber Engineering Ser Insights into M Rail Link A RM55 billing linking Port Holman Increasing rounlocking the of communities Collaboration partners to froil link Yuslizar Daud, Public Transpo Malaysia (SPA) Building Jakart system: A 2019 Project statu opportunities Preparations operations in Future exparestablishing 2020 William Sabar

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	NEW METRO PROJECT SHOWCASE	RAIL SYSTEMS & COMMUNICATIONS	RAIL FREIGHT
	Conference Chair: Vincent Tan, Senior Vice-President - Rail Operations/International Engagement, SMRT Trains	Conference Chair: Ir CS Chang, Pypun-KD Associates Limited	
14:20	Expansion of Singapore's MRT network What is the vision for Singapore's rail network? What are the innovations and benchmarking best practices being evaluated on this project? The changing model of Singapore's metro system	More than simple LTE: Next generation communications for your rail projects How does LTE benefit rail communications and operations? Overcoming the limitations of previous LTE technologies 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 Reserved for Huawei	One Belt, One Road Stakeholder Panel: Construction Progress, Future Plans & Challenges Managing risk: Meeting the challenge of uniting 60 countries behind a common goal Financing OBOR: Meeting the challenge of combining money from Asian Infrastructure Investment Bank, the Silk Road Fund, other multilaterals, private sector financing and other methods for this multi-trillion dollar project Practical challenges: Overcoming differences in rail gauge
14:40	Building Mumbai's longest rail corridor Constructing Mumbai Metro Line 3 – the city's first entirely underground corridor Challenges encountered in the construction of Mumbai Metro Line 3 Solutions adopted by MMRC Mrs Ashwini Bhide, IAS, Managing Director, Mumbai Metro Rail Corporation	Managing systems integration on rail transit projects Establishing a systematic systems integration process to meet time and budget constraints Adoption of Model Based Systems Engineering(MBSE) to ease implementation Building Competent Systems Engineers Dr. Samuel Chan, Director, Systems & Chief Systems Specialist, Land Transport Authority	across Eurasia & different rail infrastructure standards Creating incentives: Will we see other constituent countries of OBOR creating incentives like China is doing within its cities? What next? PANELISTS: Luvsandagva Purevbaatar, Advisor to the Chairman & Mega Projects Leader, UBTZ Yi Min, Chief Advisor, China Business, MTR Corporation Voravuth Mala, Deputy Governor of Administration, State Railway of Thailand
15:00	Digitalisation of Infrastructure and Asset Management Integration How does the future of fleet maintenance look like? Enhancing active management of vehicles and infrastructure maintenance, performance and operation Björn Lundberg, Head of Engineering Services, Bombardier	Safety First: Delivering Smart CBTC with Tailored Wi-Fi Providing a reliable backbone for railway operations Constructing a smooth Wi-Fi experience for infotainment demands Securing Wi-Fi access Calvin Chuko, Product Manager, Moxa Inc	Inland Rail: Building a freight network linking Melbourne and Brisbane • A \$10bn project to build a freight rail corridor traversing Victoria, New South Wales & Queensland to cope with anticipated growth in freight volumes • Making the business case • What are the engineering challenges and how to overcome them? • Opportunities for collaboration
15:20	Insights into Malaysia's East Coast Rail Link A RM55 billion, 620km project linking Port Klang to Kelantan Increasing rail connectivity and unlocking the economic potential of communities along the rail line Collaboration with Chinese partners to finance and build the rail link Yuslizar Daud, Head of Rail Division, Public Transport Commission Malaysia (SPAD)	Towards an "always-connected" passenger journey Assessing the feasibility of rolling out Wi-Fi across railway networks Will a free Wi-Fi service ever be a sustainable model? Challenges of constructing a smooth Wi-Fi experience and maintaining good network speeds C C Chang, Airport Line Metro Project E&M System Integration Committee Member, Ministry of Transportation and Communication Taiwan	Insights into the Trans Sulawesi Railway Building a 1600km track network on the island of Sulawesi Providing a modern rail service for freight and passenger by 2019 Opportunities for business collaboration Hermanto Dwiatmoko, Commissioner, PT Kereta Api Indonesia
15:40	Building Jakarta's first MRT rail system: A 2019 target Project status and upcoming opportunities Preparations for trial run operations in 2018 Future expansion plans — Establishing a 112km network by 2020 William Sabandar, President Director, MRT Jakarta	Evolution of Systems Integration Management: Case Study on KVMRT Line 2 Evolution of standards on KVMRT Line 2 How effective are these new technologies in overcoming challenges in system and interface integration? Leo Mak, Director of Systems for KVMRT Project, MMC Gamuda	Modernising Ulaanbataar Railway What are the mega projects in process to upgrade Ulaanbataar Railways? Moderning rail infrastructure to cope with increasing passenger and freight volume Project timelines and milestones Luvsandagva Purevbaatar, Advisor to the Chairman & Mega Projects Leader, UBTZ

infrastructure standards Creating incentives: Will we see other constituent countries of OBOR creating incentives like China is doing within its cities? What next? PANELISTS: Luvsandagva Purevbaatar, Advisor to the Chairman & Mega Projects Leader, UBTZ Yi Min, Chief Advisor, China Business, MTR Corporation Voravuth Mala, Deputy Governor	nd nce ail
of Administration, State Railway of Thailand	1
Inland Rail: Building a freight network linking Melbourne and Brisbane A \$ 10bn project to build a freight rail corridor traversing Victoria, New South Wales & Queensland to cope with anticipated growth in freight volumes Making the business case What are the engineering challenges and how to overcome them? Opportunities for collaboration Nagpur Metro's Green Initiatives Adopting and integrating solar energy generation from project planning and design stage Installation of "Bio Digester Technology" Green Building norms for environmental protection in building design & construction Brijesh Dixit, Managing Director, Nagpur Metro Rail Corporation	
Insights into the Trans Sulawesi Railway Building a 1600km track network on the island of Sulawesi Providing a modern rail service for freight and passenger by 2019 Opportunities for business collaboration Hermanto Dwiatmoko, Commissioner, PT Kereta Api Indonesia Aspiring to be a more energy-friendl railway: Environmental innovations recently developed by Tokyo Metro Tokyo Metro's Environmental Strategy and sample station Renewable energy usage by Tokyo Metro Measures to improve energy efficiency Naoto Kimura, Director, International Relations Department, Corporate Planning Headquarters, Tokyo Metro	kyo
Modernising Ulaanbataar Railway What are the mega projects in process to upgrade Ulaanbataar Railways? Moderning rail infrastructure to cope with increasing passenger and freight volume Project timelines and milestones Luvsandagva Purevbaatar, Advisor to the Chairman & Mega Projects Leader, UBTZ	S

PLENARY SESSION

ROUNDTABLE DISCUSSION SESSION

Now's your chance to get really interactive! Simply pick a table and join the debate. Each roundtable discussion group will focus on an issue affecting rail operation in Asia Pacific. Spend time with your peers debating the challenge and perhaps you'll find a solution together.

	in As				
	AUSTRALIA	CHINA	INDIA Brijesh Dixit, Managing Director, Nagpur Metro Rail Corporation Ashwini Bhide, IAS, Managing Director, Mumbai Metro Rail Corporation	MALAYSIA Yuslizar Daud, Head of Rail Division, Public Transport Commission Malaysia (SPAD)	
08:55	SINGAPORE	TAIWAN C C Chang, Airport Line Metro Project E&M System Integration Committee Member, Ministry of Transportation and Communication Taiwan Kuo Tsair-Ming, Vice President, Taipei Rapid Transit Corporation	THAILAND Dr. Somprasong Suttayamully, Director, Business Development Department, Mass Rapid Transit Authority of Thailand	INDONESIA Hermanto Dwiatmoko, Commissioner, Kereta Api Indonesia	50 MINS COMMUNICATIONS WORKSHOP BY NOKIA (Held at Signalling & Communications theatre)
	HOW CAN IOT RESHAPE THE RAIL INDUSTRY Kuldeep Gharatya, Kuldeep Gharatya, Head of Technical Strategy, Systems Performance, Innovation, London Underground	RAILWAY FINANCING Martha Lawrence, Sr. Railway Specialist, Leader of Railways Community of Practice, World Bank	Managing real-time information and maintenance Björn Lundberg, Head of Engineering Services, Bombardier	Singapore-Malaysia High Speed Rail Rama Venkta, Project Director, High Speed Roil Group, Land Transport Authority Singapore	

BUILDING OPERATIONAL EXCELLENCE COMPETENCY: Supporting knowledge & skills sharing Morris Cheung, President, MTR Academy

OPERATIONS RELIABILITY PANEL:

Join us for this panel discussion to round out the first day of Asia Pacific Rail 2017, as rail leaders share their strategies and challenges in maintaining high operational reliability standards. Some key issues for debate include:

- How can we maintain high reliability standards while managing the growing demand for rail services?
- How can we ensure service reliability amidst ongoing asset renewal and maintenance?
- How can IT innovations be harnessed to improve rail reliability and operational performance?
- How can technology be used to move the industry forward while not undermining the fundamentals of sound railway practice?

MODEDATOD.

TC Chew, President, Global Business & Operations, **Samsung C&T Corporation**

PANELLISTS:

Adi Lau, Operations Director, MTR Corporation

Dr. Tsay Huel-Sheng, Professor, Graduate School of Transportation Management, **Central Police University, Taiwan Peter Lunden-Welden,** Chief Executive Officer, **Seoul Line 9 Operation Company**

NETWORKING DRINKS RECEPTION

Join us for a drink at the end of day one and catch-up with old friends whilst also making lucrative new contacts.



DAY

Wednesday 22nd March, 2017

Highlights

One Belt One Road

Find out the latest updates on this ambitious project, hear from key stakeholders and identify the upcoming opportunities for the rail industry

Huawei Communications Workshop

Learn and share communication strategies, advancements and ideas from attendees all over Asia

Rail Financing

Gain insights into innovative rail project funding strategies, the future of PPPs in Asian rail projects and strategies for attracting capital

Asset Management

Develop strategies to optimize and maximise the lifecyle of your rail assets, from rolling stock to track infrastructure



OPENING KEYNOTE PLENARY: THE FUTURE OF RAIL AND ONE BELT, ONE ROAD

ORGANISER'S WELCOME REMARKS

CHAIR'S OPENING REMARK

KEYNOTE: THE FUTURE OF RAIL: What does it look like?

- Urbanisation and the changing rail industry
- Investing in the future: What is MTR's future railway development blueprint?
- Going global: MTR's expansion strategy into Mainland China and other overseas markets
- Driving innovation in service operations

Dr. Jacob Kam, Managing Director – Operations & Mainland Business, **MTR Corporation Limited**

KEYNOTE: ONE BELT, ONE ROAD - Building an integrated rail network across Europe and Asia

China's OBOR strategy offers extraordinary opportunities for all 60 countries that it will pass through, and of course for rail and freight businesses. The creation of the six planned economic corridors will open up more economic and efficient trade routes and the creation of new free trade zones, such as the Fujian FTZ, offering their own incentives to drive business. Join us as we explore the status of this ambitious project and identify the upcoming opportunities for the rail industry

Yi Min, Chief Advisor China Business, MTR Corporation

KEYNOTE: SIGNAL IMPROVEMENT PROJECT: INNOVATION & PRACTICE

He Chen, Engineering Design Centre General Manager, **Traffic Control Technology**

EXHIBITION VISIT & NETWORKING REEDESHMENTS



Bureau, New Taipei City

Government

			Wednesday 22nd March, 2017	
	ROLLING STOCK	SIGNALLING & COMMUNICATIONS	FINANCE & FUNDING	LIGHT RAIL
	Conference Chair: Prof Lee Kang-kuen, Professor of Transportation Practice, Department of Electrical Engineering, Hong Kong Polytechnic University	Signalling Best Practices Conference Chair: Ir CS Chang, Chief Executive Officer, Pypun-KD Associates Limited	Conference Chair: Oliver Redrup, Director, Capital Projects & infrastructure, PwC	
11:00	Integrating new rolling stock into existing infrastructure: Challenges & strategies Key considerations when integrating new rolling stock into your operations Workshop modifications & new design features to ease integration into maintenance plans Managing the transition — what are the impacts on existing infrastructure Richard Keefe, General Manager Rolling Stock Fleet, MTR Corporation	PANEL: Best practices in managing resignalling projects Migrating legacy systems to new systems Determining system and infrastructure compatibility Minimising disruption to service operations during testing Training staff to operate on new control systems MODERATOR: Ir CS Chang, Chief Executive Officer, Pypun-KD Associates Limited PANELLISTS: Liu Chiu-Liang, Director,	Financing Asia's Rail Projects: A World Bank Perspective Key elements for a railway project to be eligible to receive funding What projects are most obvious candidates for funding and where are they located? Partnering with Indian Railways to set up Railways Development fund Martha Lawrence, Sr. Railway Specialist, Leader of Railways Community of Practice, World Bank	Innovations on Kaohsiung Light Rail network Building the world's first light rail vehicle system on a fully catenary-free route Minimising energy consumption through effective design of electricity usage Phase 1 & 2 updates Chung Li-Jung, Deputy Director-General, Kaohsiung Mass Rapid Transit Bureau (KMRT)
11:20	Maintenance & engineering strategies to extend lifespan of aging fleet Re-engineering strategies for extending the life of rolling stock assets Building in safety and ensuring reliability of ageing fleet to prevent failures when in service Planning and budgeting for increased maintenance costs Dr. Tsay Huel-Sheng, Professor, Graduate School of Transportation Management, Central Police University, Taiwan	Systemwide E&M Project Office, Department of Rapid Transit Systems, Taipei City Government Sanjay Kumar, Chief Engineer (Signal & Telecom), Kolkata Metro Rail Philip Wong, Chief Signal Engineer (Operations), MTR Corporation Limited	 Rail & Real Estate: Hong Kong MTR's successful value capture financing formula Thinking about financing in a new way Underwriting construction projects with other revenue streams Becoming a part of the community through multiple avenues What lessons can other cities draw from this model? David Tang, Property Director, MTR Corporation 	Enhancing Manila Light Rail Transit System with IT Innovations Integrating rail systems into a single platform Renewal of rail infrastructure Transition of SDH to MPLS technology Randy Samoy Sac, Head — Information Management & Technology, Light Rail Manila Corporation
11:40	Reinforcing and upgrading rolling stock to increase capacity Devising a maintenance strategy to maximise availability of existing rolling stock Strategies to predict failure and prevent them before they happen Harnessing data to plan better maintenance Om Hari Pande, Executive Director (Rolling Stock), Delhi Metro	Developing a system integration strategy for driverless CBTC system Addressing the vulnerabilities of CBTC system Reducing risk of downtime in operations Strengthening backbone of communications Looking ahead to system expansion in future Liu Chiu-Liang, Director, Systemwide E&M Project Office, Department of Rapid Transit Systems, Taipei City Government	Trends in India's rail financing How does the India Infrastructure Finance Company support India's rail boom? Moving from state funded projects to developing projects under JV/ PPP model Practical aspects, challenges and opportunities Paritosh Garga, General Manager, IIFCL Projects Limited	LRT3 – Extending the frontiers of connectivity to Western Klang Valley A 2020 target: Project timeline and key milestones First rail project with green technology in Malaysia Collaboration opportunities Norlia Noah, LRT3 Project Director, Prasarana Rail & Infrastructure Projects Sdn. Bhd (PRAISE)
12:00	Trending: Challenges and Practical Onboard IP Network Maximising the value of Ethernet Technology in multimedia train backbone Delivering a high level of bandwidth and availability Maintaining a reasonable total cost of ownership Enzo Chen, Solution Architect, Moxa Inc	An approach towards CBTC – Case study of Kolkata East-West Metro Brief about geographical location with the need for MTP Key features of CBTC system Challenges for incorporating CBTC system Details of mandatory approvals for metro system from various government authorities Sanjay Kumar, Chief Engineer	International Experiences with Urban Rail Funding, Institutional Frameworks and Private Sector Participation How to establish, govern, fund and finance operators so that they can achieve desired performance? Involving private sector participation in financing or operating metro	New Taipei City Danshui Light Rail: Project Updates Phase 1 and 2: Key timelines Extending the network to accommodate increasing passenger demand What are the key challenges in construction? Innovations in tracks and vehicles Simon Shiao-Lien Chao, Commissioner, Transportation

DEFINING YOUR ASSET MANAGEMENT STRATEGY	HUAWEI COMMUNICATIONS WORKSHOP	PPPS
Future of Rail Asset Management: MTR's Vision Using forecasting trends for predictive maintenance of rail assets How will rail asset management evolve with the application of new technology in the next decade? How will smart maintenance technology impact infrastructure and maintenance processes? Dr Tony Lee, Chief of Operations Engineering, MTR Corporation	A special addition to Asia Pacific Rail 2017, join our Huawei Communications Workshop for a chance to share communications strategies, advancements and ideas with attendees from across Asia Pacific and beyond, helping you to better connect your business.	An assessment of the PPP model Key drivers for the use of PPPs in rail development Will we see increasing popularity of the PPP model across Asia? How much investor and operator appetite is there for PPP model in developing countries? What are the different contract structures for PPPs in the region? Case Studies Oliver Redrup, Director, Capital Projects & infrastructure, PwC
Developing and Delivering the LTA's Rail Asset Management Framework Development of an asset management framework and roadmap to deliver on desired outcomes Identifying key challenges and strategies adopted Initiatives and innovations in asset management capabilities to facilitate reliability improvements, renewal planning and asset upkeep Leow Meng Fai, Director — Asset Condition, Standards and Renewal, Land Transport Authority		Sydney Metro Northwest — Managing the largest PPP project in the history of NSW How is the PPP structured? What are the key risks and mitigation? How are the risks allocated between public and private partners? Challenges in managing a large- scale PPP Mark Elliott, CEO, Northwest Rapid Transit
Applying asset management to new metro systems Developing asset management systems while building the Purple Line Challenges in asset management planning for the Blue Line What are the technologies used to optimise maintenance works? Lakthan Thongnopakoon, Assistant Managing Director (Project Engineering Group), Bangkok Expressway and Metro		Understanding the rail PPP landscape in China: A case study on Shenzhen Metro Line 6 Key criteria in assessing the feasibility of the project What should other rail operators consider when establishing a rail PPP project? Why wasn't the PPP model adopted eventually? Liu Kading, Chief Planner, Shenzhen Metro
Effective asset management in ensuring operational reliability Setting up an effective asset management framework What are the strategies to ensure asset service life extension? Setting up a budget for asset renewal and replacement Takao Nishiyama, Executive Director — Overseas Related Affairs, East Japan Railway Company		PPP for urban mass transit in Thailand: Case study of Pink and Yellow Line Project What steps were taken to create an attractive environment for both foreign and domestic investors? What are the latest PPP rail projects in the pipeline? Mitigating risks and challenges in rail PPPs Successful case studies

DAY 2 | Wednesday 22nd March, 2017 SAFETY & EMERGENCY PP model Enforcing high standards of safety through government regulations of PPPs in What are the major railway safety concerns? popularity Strategies adopted to enforce and oss Asia? maintain high safety standards nd operator PP model in Adopting a stringent regime to enforce rail safety **Dr. K.M. Leung,** Assistant Director/ contract Railways, Electrical and Mechanical the region? Services Department, **Government** of Hong Kong SAR Capital , PwC Developing an effective crisis PP project in management strategy How can rail operators rebuild ured? public trust after a major disruption? and Collecting and disseminating accurate information within a cated short timeframe rivate Leveraging on traditional and social media to reach commuters ng a largeat all touch points Patrick Nathan, Vice President, hwest Corporate Information and Communications, **SMRT** Corporation рр Establishing a national approach to se study on rail regulation What are ONRSR's key priorities in ng the the next few years? Pressures faced by national regulators and how to overcome loperators shing a rail them? How can rail operators build nodel a safety culture within their organization? **Sue McCarrey,** Chief Executive, Office of the National Rail Safety Regulator (ONRSR) nsit in Enhancing safety of railway Pink and maintenance vehicles Understanding the challenges for railway maintenance vehicles and en to create nent for both how they lead to high accident

- Implementation of a vehicle positioning and routing system to enhance safety of railway maintenance vehicles
- Benefits on operational performance

James Shi, Head of Maintenance Sub-Division, Operations Railway Division, Taiwan HSR

Dr. Kerati Kijmanawat, President,

PSK Consultants Co. Ltd

(Signal & Telecom), Kolkata Metro

Rail Corporation

PASSENGER EXPERIENCE

Hyperloop: Reimagining The Future Of Transportation

- Our vision for a new freedom of mobility
- An update on our engineering progress
- The impact on society, economy and the environment

Nick Earle, SVP of Field Operations, **Hyperloop One**

SMRT's journey to achieving service excellence

- What are the customer service improvement initiatives introduced by SMRT? How effective have these approaches been?
- Adopting industry best practices and innovative use of technology to serve commuters better
- Gathering feedback using omnichannel data

Siu Yow Wee, Director of Station Operations, Rail Operations Division, **SMRT Trains**

Using open data to improve information for passengers

- Providing developers free access to data to create useful apps for passengers
- Why do it? How will it benefit passengers and how will it enhance the passenger experience?
- Future outlook: Why open data will become the new normal in the roll industry

Improving end-to-end passenger

- Understand what the end-to-end journey really means
- Identify pain points in the customer journey and minimising
- How much more thought should we be giving this as an industry?

MANAGING RISK & ATTRACTING INVESTMENT

Risk mitigation in rail infrastructure projects

- What are the factors causing capital project risk?
- How can corporate and project goals be better aligned to reduce risk?
- How to efficiently structure a rail infrastructure project to minimise risk

Valery Tubbax, Head of Power & Infrastructure Advisory, Investment Banking Department Asia, Sumitomo Mitsui Banking Corporation

Attracting private investment in rail infrastructure development

- What can rail authorities do to establish more partnerships with the private sector? What are the barriers?
- How can rail authorities make their projects more attractive to private investors?
- How can projects be better structured to attract investors?
- How can rail authorities ensure a level playing field for the private

Isabel Chatterton, Asia Pacific Regional Manager, Public Private Partnerships Transaction Advisory Services, International Finance Corporation

PANEL: The future of rail infrastructure financing across Asia

- Can we expect to see increased private sector participation in Asian rail infrastructure projects?
- How can Asian countries mitigate risk to open up rail projects to the capital markets?
- As governments try to bring their finances under control, what alternative financing strategies will they pursue?

MODERATOR:

Isabel Chatterton, Asia Pacific Regional Manager, Public Private Partnerships Transaction Advisory Services, International Finance Corporation

PANELISTS:

Mark Elliott, CEO, Northwest Rapid Transit

Emmanuel Vivant, Managing Director, Hong Kong Tramways & CEO, RATP Dev Transdev Asia

Paritosh Garga, General Manager, IIFCL Projects Limited

CLOSE OF ASIA PACIFIC RAIL 2017

If you have an interesting case study to share, contact **YunXuan Koh** on **Yunxuan.koh@terrapinn.com** or **+65 6322 2703**

LAST 10 PLACES AVAILABLE!

Asia Pacific Rail 2017: MTR Site Visit to South Island Line

Preliminary Programme

20 March 2017

The South Island Line (SIL) train service officially started operations on 28 December 2016, bringing the MTR network into the Southern District and extending the convenience of MTR railway service across all 18 districts in Hong Kong. With this new rail service, passengers can save time on their journeys to and from the Southern District and arrive at their destinations much faster.

The 7-kilometre South Island Line uses Fully Automatic Operation. This means that it differs from the existing railway lines in various aspects including the train design, signalling system as well as the way it is operated. With four new stations, Ocean Park, Wong Chuk Hang, Lei Tung and South Horizons connecting to the existing Admiralty Station, the SIL extends MTR's reliable and efficient service to 350,000 people living and working in the Southern District.

Programme 2:00 pm Guests arrive at MTR Admiralty Station (Meet outside the Station Control Room of MTR Admiralty Station) 2:05 pm Welcome Remarks 2:10 pm Presentation on MTR South Island Line 2:30 pm Q&A 2:50 pm Refreshment 3:05 pm A Tour of Admiralty Station 3:15 pm Take MTR from Admiralty Station to Wong Chuk Hang Station 3:25 pm A Tour of Wong Chuk Hang Station and Depot 4:30 pm Closing Remarks 4:35 pm Take MTR from Wong Chuk Hang Station to Wanchai Station End of the tour

Want to get involved?

Contact Kym Chua on Kym.chua@terrapinn.com or +65 63222702



TRACK, TICKETING, LATEST TECHNOLOGIES THEATRE & UNIVERSITY AGENDAS



DAY 1 - Tuesday 21st March, 2017

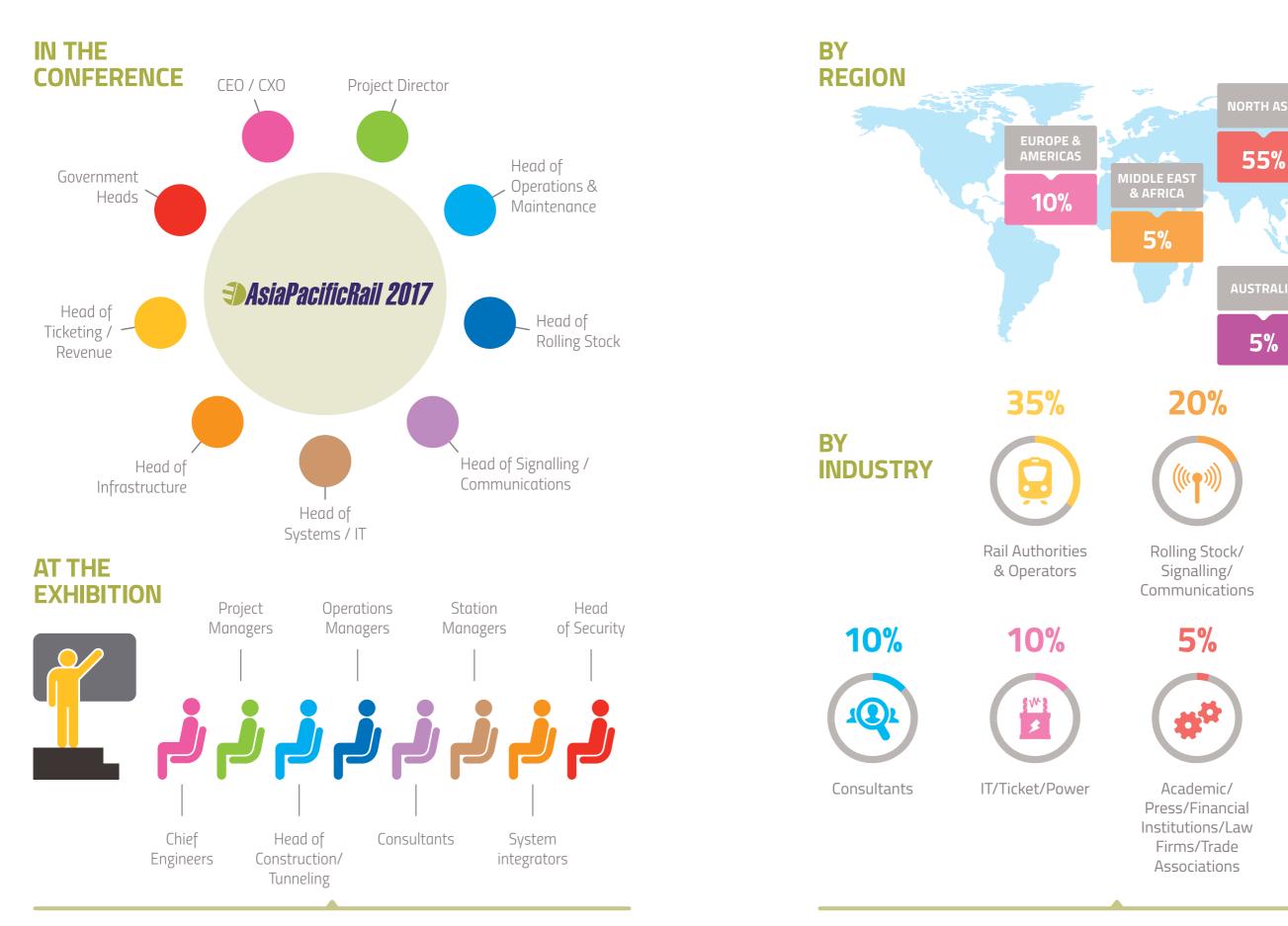
	DAY 1 - Tuesday 2 1st March, 20 1				
	PERMANENT WAY/TRACK INFRASTRUCTURE SEMINAR THEATRE	RAIL REVENUE & TICKETING SEMINAR THEATRE	LATEST TECHNOLOGIES SEMINAR THEATRE	OVERGROUND & UNDERGROUND UNIVERSITY	
11:00	Big Data & Predicative Maintenance for HSR Infrastructure Safety in Taiwan Dr. Yang Hanwei , PhD, Engineering Director, Facility Engineering Dept, Taiwan High Speed Rail	A pilot case study on account-based ticketing in Singapore Silvester Prakasam, Director – Fare Systems, Land Transport Authority Singapore	We can't prevent if we can't predict Condition Monitoring and big data analysis for railway application KingWu Tseng, Vice GM, TÜV Rheinland Nick Wong, Sales Engineering Manager, Splunk	Constructing metro within the heritage city of Jaipur – How to navigate underground construction challenges Ashwani Saxena, Director (Projects), Jaipur Metro	
11:30	Investigation of squeal noise reduction by rail damper Wilson Ho, Director, Wilson Acoustics Limited End-to-end travel capability for the traveler: the future of rail Pierre-Yves Guillaume, Head of Rail - Asia Pacific, Amadeus		How to speed up the daily cleaning process of a passenger train at the end of a journey? Railway wastewater systems Luc Kuysters, General Manager, LaborexRail		
12:00	Rail Corrugation Monitoring and Management Hirofumi Tanaka, Assistant Senior Researcher, Track Geometry and Maintenance, Track Technology Division, Rail Technical Research Institute Development of Thailand's first common ticketing system Dr. Padet Praditphet, Director, Common Ticketing Office of Transport and Traffic Policy and Planning (OTP), Ministry of Transport of Thailand		Thermal Imaging Technology is the Sixth Sense Koen Soenens, Business Development Director, ITS Asia Pacific – Middle East, FLIR Systems, Inc.	Development of an artificial neural network for optimisation of tunnel blasting design Dr. Lawrence TH Lee, Senior Construction Engineer — SCL-NSL, MTR Corporation Limited	
12:30	BR	PEAK	Scientific, systematic and optimal security solution to meet with rapid increase of urban population Jason Chan, Technical Manager, Zhejiang Dahua Technology Co. Ltd.		
13:00	Getting smart with track maintenance through condition monitoring: A SMRT case study Jean-Francois Chassin, Vice President, Permanent Way & Engineering Trains	Towards an integrated ticketing system Catherine P. Lopez, Division Manager, Automated Fare Collection System Services, Light Rail Transit Authority	TOD & importance of grand policy Hiroyuki Takeshima, Director, East Japan Railway Company Singapore Branch	Urban tunneling excellence: Ensure success in urban tunneling projects with minimal disruption to passengers Prof John Endicott, Fellow/ Geotechnical & Underground Engineering Expert, AECOM	
13:30	Rail maintenance by milling technology Elvis Kozica, Int. Sales Manager, LINSINGER	Realizing Mobility as a Service through account-based ticketing Paul Gwynn, Managing Director, INIT Asia-Pacific	Digital Railways - Tradition meets modernity Sven Nowak, Vice President, Digital Service and Railway Signalling, TÜV SÜD Asia Pacific Pte Ltd	Engineering Expert, AECOM	
14:00	Wheel rail interface management Transitioning to smart ticketing Reserved for Baoruh		Stay connected with era-transceiver®, an Ethernet Upgrade Solution Zhong Bao Hong, Director of Business Unit, Railway & Electrical System, era contact	Overcoming Challenges for Better Underground Connectivity to Singapore MRT Stations - Singapore's First Rectangular Tunnel Boring Machine Henry Foo, Director, Thomson-	
14:30	BR	PEAK	How Hyperloop Can Transform Asian Economies Nick Earle, Senior Vice President Field Operations, Hyperloop One	East Coast Line, Land Transport Authority Singapore	
15:00	Track maintenance goes online Isa Tang, Permanent Way Works Manager, MTR Corporation	Account-based ticketing Andy Yip, General Manager — International Business, Octopus Holdings	Flywheel Energy Storage for Rail Venkateshwaran "Venky" Krishnan, Director of Business Development and special Programs, Calnetix Technologies	Methodology & Principles of Designing Stations of the Future Jason Hutchings, Senior Design Director, Atkins	
15.30	Properties of dampening elements in ballastless tracks constructions Claus Wrana, Research and Development, Rex Articoli Tecnici SA	A diversified investment approach for sustainable revenue	PIES®- Platform Safety, Preventive vs Reactive Systems -The Most Reliable. Longest Operating Track Record Globally. William Foo, CEO, AZTI Technology		
16:00	Designing railway tracks for extended and efficient life cycles	Delivering smart ticketing projects	Demonstrating Fast Simulation for Stations Operations with MassMotion Erin Morrow, Product Director MassMotion, Arup	Innovation in boring & tunneling technologies	
End of Permanent Way/Track Infrastructure Seminar Theatre		End of Rail Revenue & Ticketing Seminar Theatre	Soft Innovation and competition: The business case from the first high speed rail private operator in the World. Andrea Giuricin, Managing Director, CRIET-Transport, University of Milan Bicocca		

DAY 2 - Wednesday 22nd March, 2017

	PERMANENT WAY/TRACK INFRASTRUCTURE SEMINAR THEATRE	RAIL REVENUE & TICKETING SEMINAR THEATRE	LATEST TECHNOLOGIES SEMINAR THEATRE	OVERGROUND & UNDERGROUND UNIVERSITY	
11:00	Innovations in track maintenance	Big Data in Rail Revenue and Ticketing	Simplified Networks for Reliability in Mission Critical Applications Parthiban Narayanan, Sales Director-Asia Pacific, OTN Systems NV	Planning for the expansion of Admiralty Station Jack Li, Technical Director, AECOM	
11.30	Innovation is available TODAY! Richard Aaroe, CEO, NGRT				
12:00	Track Geometry & Stability	Big Data in Rail Freight Revenue Management	Benefits of using commercial off- the-shelf (COTS) Safety Controller for Rail Applications Sedat Sezgün, Head of Rail Segment, HIMA Paul Hildebrandt GmbH	Research development of fire and ventilation systems to improve tunnel safety Steven Lai, Director, Infrastructure, China Region, Parsons Brinckerhoff	
12.30	Designing for speed: Key considerations for high-speed track design	Making your asset work for you: Realising the lucrative opportunity in advertising revenue	Cyber Security – More important than ever Kaebin Tan, Cyber Security Assessor, TUV Rheinland		
13:00	End of Permanent Way/Track Infrastructure Seminar Theatre	End of Rail Revenue & Ticketing Seminar Theatre	Report of JR East technical and education support to foreign railway companies Hiroshi Takayasu, Assistant Manager, Transport and Rolling Stock Department, East Japan Railway Company	Slurry MixShield for Tunnelling in Undulating Bukit Timah Granite Rock-Soil Interface Dr Yong Deung Ming, Managing Director, JIB Specialist Consultants Pte Ltd	
13:30			Remote Management of Critical Information for Command and Control Centre Senior Manager, Datumstruct		
14:00			Seamless and contextual travel solutions powered by Al Roman Oberli, CEO, Axon Vibe	Station Design: Maximising efficient transfer, functionality and commuters' comfort	
14:30			Enabling connected transportation for enhanced train safety		
15:00 14:30			Breakthrough in management of railways and metros	End of Overground & Underground University	

Want to get involved?
Contact **Kym Chua** on **Kym.chua@terrapinn.com** or **+65 63222702**

Who Attends



SE ASIA

25%

15%

Rail Component

Manufacturers

5%

Independent

Assurance/ Testing &

Certification

Just some of our 2016 attendees:

Aarvee Associates ABB Access IS Acciona Infrastructure Achilles Information Limited AD+RG Architecture Design and Research Group Ltd. AECOM AGM Power Ltd. AIM Group Alipay Allied Telesis al-mihrab ALPHA DATA L.L.C Alstom Amey Amsted Rail Ansaldo STS Apex ARA Group Arabian Railway Company Architectural Services Department, The Government of Hong Kong Special Adminstrative Region Arthur D. Little Asia Pacific Arup Asia High Power Limited Asia Pacific RIM (China) Limited Asian Development Bank ASL Atkins China Ltd Auckland Transport B.B.M. S.P.A. B.L.S. Ag Bangkok Expressway and Metro Public Company Limited Bangkok Payment Solutions Company Limited BARAT BDO Limited Beijing Jiaxun Feihong Electrical Beijing JTV Science & Technology Development Co., Ltd Beijing Landscape Railway Signal Beijing Traffic Control Technology Co. Ltd. Beijing Yan Hong Da Railway Equipment Co Ltd Belden Belimo BMT Asia Pacific Limited Bombardier Transportation Booking.com Ltd Bumiputra Manufacturers & Services Industry Bureau Veritas Quality Services CAPTRON Electronic Co., Ltd. CCT InfoTech (Hong Kong) Ltd. Celex LED Technology Ltd. CH2M HILL Chamunda Trans Rail Infrastructure Pvt.Ltd. Charmtop Consultants Limited Chennai Metro Rail Limited Chew Transit Consultancy Limited/Samsung C&T China Railway Construction Corporation Limited China Railway First Group China Railway Shanhaiguan Bridge China Railways China Signalling & Communications China State Construction (HK) Ltd Chongging Rail Transit Chun Wo Construction & Engineering Co., Ltd. Chun Wo E&M Engineering Limited Chung Hua University CI Tech Components AG City University of Hong Kong CKM Landas MRO Sdn. Bhd. CLP Engineering Clyde and Co CMC Engineering Coin-Tech Services (HK) Ltd Colas Rail Common Ticketing Office, Office of Transport and Traffic Policy and Planning (OTP), Ministry of Transport of Thailand Consulate General of Malaysia Consulate General of the Netherlands Consulate-General of Singapore, Hong Kong CRCC Creative Consulting Group Cwsst Cyber On-Air (Asia) Limited Dahua Tech Dai-ichi Shoji Co. Ltd Dallmeier Datumstruct Dawonsys DB International GmbH - Beijing Representative Office Dedicated Freight Corridor Corporation of India Delhi Metro Rail Corporation Dell Department of Rapid Transit Systems New Taipei City Government Deutsche Bahn Dhaka Mass Transit Company Limited Earth Products China Co Ltd East Japan Railway Company EASY BEST INT'L LTD Easyway Company Limited Ee - Systems Ltd EGIS Eiffage Rail Tak Yue Joint Venture Elephant Technology Eliron Logistics Elis Engineering & System (HK) Ltd Eltek Energy Use Strategy Advisors EPSA India Projects, Pvt Ltd Ericsson Ernst and Young Esme One Asia Ltd Etihad Rail European Union Academic Programme Hong Kong Faigle Engineering Plastics, China Faiveley Transport Filmbankmedia Finmeccanica Flex Inc. FLIR Systems Japan K K FLIR Systems, Ltd. FPT Information System Fracht (Hong Kong) Ltd. Freeman Consultants French Trade Commission Gallop Info Comm C.O. GE Transportation Genuine Engineering Solutions Limited George Kent German Industry and Commerce Ltd GNTEL Goal Systems Goldare Engineering Ltd GR Softer GRC GSE H3C Technologies Co., Limited Hassell Hirschmann Automation And Control GmbH Hitachi Hket HKIVE Hodapp GmbH & Co. KG HollySys Asia Pacific Pte Ltd Honeywell Regelsysteme Gmbh Hong Kong Economic Times Hong Kong Tramways Hoppecke Battery Systems HSBC Huawei Technologies Hubner Interface Systems (Shanghai) Co., Ltd. Hyperloop Transportation Technologies Inc Hyundai Rotem Hyundai Rotem Company I.V.U. Traffic Technologies Ag Icomera Ab IDOM Ihi Corporation Images In Motion (L) Inc. Inframation Group INIT Institute of Transport Administration Institution of Occupational Safety and Health Institution of Railway Signal Engineers (Hong Kong) Intelligent Essence Sdn Bhd International Cooperation Department, MOT Itochu Corporation Jacobs Engineering Group Malaysia Sdn Bhd Jaipur Metro Rail Corporation Ltd Japan International Cooperation Agency Jardine Engineering Corporation Jebsen & Jessen Technology (S) Pte Ltd JITEX JLC.LTD JSC RZDstroy Kaba & Cambaum Security Keolis S.A. KML Engineering Limited Knorr-Bremse KONE Public Company Limited Koontech Korea Rail Network Authority (KRNA) Kowloon Motor Bus (KMB) Kuehne and Nagel Kusieog Kyosan Electric Mfg Co Ltd Kyriacou Architects L.A. Enterprises LaborexRail Land Public Transport Commission, Malaysia (SPAD) Land Transport Authority, Singapore Langdon & Seah Hong Kong Limited Lao Railways Legion LG CNS LILEE Systems Linsinger Liufeng Trading Co Ltd Lucknow Metro Rail Corporation M&I Corporation M.T.U. Hong Kong Ltd Mabey Bridge Maestronic LTD MAFEX Magnet Control Systems Management Authority For Urban Railways Marine Department - Hong Kong Marubeni Thailand Co., Ltd. Mass Rapid Transit Authority of Thailand Mass Rapid Transit Corporation Sdn Bhd (MRT Corp) Masstron Pte Ltd Maybank MDS Ministry of Transport, Indonesia Ministry of Transportation and Communications R.O.C MIRAIZO Group Inc Mitsubishi Corp Mitsubishi Heavy Industries, Ltd. MMC-Gamuda KVMRT (PDP SSP) Sdn Bhd Moody's Moxa MRAIL, INC. MTR Corporation MVA Hong Kong Limited Myanmar Railways- Ministry Of Rail Transportation Myanmar Technical and Power Services co. Ltd Nabarro LLP NACE International NARI Technology Co., Ltd. NCR National Corporate Research (HK) Ltd. NEO TRANS Co., Ltd. New Effort Limited New Taipei City Department of Transport Nippon Koei Co., Ltd. Nokia Nova Tech O.V.E. Arup and Partners Ltd Oasys Ltd Octopus Holdings Limited Olympus Capital Asia Optix Solutions Limited Orange Business Services OSMOS Hong Kong Limited OTN Systems P.T. Waskita Karya Pacific Power Development Pacific Ocean Group Panasonic Pinestreet Infra co., Planning and Investment Department, MOT Polartech Co. Limited Prasarana Malaysia Berhad PricewaterhouseCoopers Primasil Silicones Ltd Project 3 Construction & Investment Joint Stock Company PS IGC TRACECA PT. LEN PT. Perentjana Djaya Public Transport Authority of Western Australia Public Transport Victoria Pypun-KD & Associates Limited QMPartners Asia Ltd Questex Media Radio Television Hong Kong Railise Rajant Corporation Rapid Rail Sdn Bhd Rasma Corporation Sdn Bhd Ricardo Royal Thai Air Force Rudy Petroleum S ABBOTT S.S.Enterprise (HK) Ltd. Sanya International (Hong Kong) Ltd. SBFI SBS Transit Ltd SCC LTD Schaltbau Asia Pacific Limited Schenker China Ltd. Schneider Electric Schrey and Veit Science and Technology Department, MOT SEI Identification Solutions Seoul Line 9 Operation Company SETEC FERROVIAIRE SETEX ITS Shenyangruntong Shenzhen Logistics and Supply Chain Management Association Shenzhen Metro Shun Hing Systems Integration Co., Ltd Sichuan Guoruan Science & Technology Development Co., Ltd Siemens Singapore Institute of Technology Singapore Polytechnic, School Of EEE Singapore Technologies Electronics Limited Sinopec SMRT Trains Ltd SOPRA STERIA ASIA PTE LTD South China Morning Post Spark Limited Sqiva Sistem Standard Rubber Products Star Plus Global Limited Star Publications (Malaysia) Ltd State Railway of Thailand Strukton International Sumitomo Electric Sumitomo Mitsui Banking Corporation Sun Hung Kai Financial Suzhou Huagi Intelligent Technology Sydney Trains Synergies Limited Systech International SZ Logistics and Suppy Chain Management Assc Taichung City

Sun Hung Kai Financial Suzhou Huaqi Intelligent Technology Sydney Trains Synergies Limited Systech International SZ Logistics and Suppy Chain Management Assc Taichung City Government Transportation Bureau Taipei Rapid Transit Corporation Taiwan High Speed Rail Corporation Taiwan Railways Administration Taylor And Francis Asia Pacific Thales The India Thermit Corporation The Innovation Enterprise Ltd The Jardine Engineering Corporation, Limited The Office of the National Rail Safety Regulator The Sepura Group The University of Hong Kong Tiong Seng Contractors (Pte) Ltd TMI Top Express Rail Solutions Toshiba Transport for London Transport for New South Wales Ltd Transportation Infrastructure Office (GIT) Ttillines Cruie Travel Entertainment Limited TÜV Rheinland TUV SUD Rail UESTC UI International Limited UK Trade & Investment Union Park Company Limited University of Hong Kong University of Milan Bicocca Vietnam Railway Vincent Asia Pacific Ltd Vitzrosys Vix Technology Voith Turbo Rail Wah Hing Trading Co Waksman Engineering & Co Weltronics Willowglen (Malaysia) Sdn Bhd Wilson Acoustics Ltd Xerox IT Services Ltd Yardway Industrial Limited Zhejiang Dahua Technology Co., Ltd Zhongguo Powerplus Industries Limited.



The Exhibition

With over 80 exhibitors and 1,000 attendees, this is your one-stop shop for product demonstrations and networking.

If you provide any of the below solutions, our buyers want to meet you. Get in touch with **Kym Chua** at **+65 6322 2702** or **kym.chua@terrapinn.com** for more information.

The exhibition will feature leading solution providers from:

- Air conditioning systems
- Bogies
- Cables & lines
- Communications & network solutions
- Consultancy
- Fire protection
- Flooring coverings
- Infotainment systems
- Interior design systems
- LCD systems
- Lighting systems
- Location & navigation systems
- Locomotives
- Maintenance
- Monitoring systems
- Passenger services information, fare collection, ticketing, data

- Platform screen doors
- Power & electrification
- Sensors
- Signalling & train control
- Steel manufacturers
- Sound insulation materials
- Wheelset diagnostics systems
- Testing & certification
- Traction motors
- Safety & control
- Rail fastening equipment
- Rolling stocks
- System Integrators
- Track infrastructure
- Track Infrastructure
- Vibration & isolation

Asia Pacific Rail 2017 is the perfect place for companies wishing to:

- Gain exclusive access to decision makers in the industry
- Meet industry leaders, understand their needs and develop business relationships
- Expand to a new market that is difficult to break into
- Showcase leading solutions to prospective customers
- Raise awareness of your solutions and track record amongst your prospective clients
- Launch new products, generate leads and make sales

Sponsorship Opportunities

BENEFITS	SOLD	DIA HOUR SOLD	PLATINUM SPONSOR (4 slots) 2 slots left	GOLD SPONSOR (5 slots) 1 slots left	Roundtable/Panel Workship (16 s 6 ts)
Presentation at joint keynote plenary session	Day 1 morning	Day 2 morning			
Presentation at Technical Conference Tracks	1	1	1	1	
Lead a roundtable/panel/ workshop	1	1	1	1	1
Conference Passes	20	15	10	7	3
Facilitated Introductions	10	7	5	3	
Exhibition Stand	108sqm	72sqm	54sqm	36sqm	18sqm
Speaking slot in the technology theathre	1	1	1	1	
Exclusive lanyard sponsor	Yes				
Seat drop of company brochure	Day 1 morning	Day 1 afternoon	Day 1 afternoon		

Floor Plan





STAND NUMBER	COMPANY NAME
A01	OTN SYSTEMS
A02	CONNECTAR
A03	LINMAG
A04	EMSD
A05	MASABI
A06	OASYS
A07	KANGWEI TONGCHUANG GROUP
A08	WUXI TDK-LAMBDA ELECTRONICS
A09	AXON VIBE
B03	SEPURA
B04	TÜV SÜD
B05	LINSINGER
B06	HIMA
C01	CRRC
C03	ERA CONTACT
C07	RITTER STARKSTROMTECHNIK
C08	SYSTRA
C10	NORA SYSTEMS
C11	ACCESS-IS
C12	HYPERLOOP ONE
C14	IPPF
C15	MEDIA STAND
D01	MTR CORPORATION
D03	THALES
D05	NGRT
D06	LABOREX
D07	TÜV RHEINLAND
D08	ЕМКА
D10	IRMIE IMPIANTI
D12	BEENA VISION
D13	RAIL PERSONNEL
D14	AMADEUS
D15	CMC ENGINEERING
E01	HUAWEI
E06	BOMBARDIER
E09	VYCON
E10	MOXA
E11	EAST JAPAN RAILWAY
E12	FLIR SYSTEMS
E13	SCHREY AND VEIT
E15	AZTI
F01	TRAFFIC CONTROL TECHNOLOGY
F05	ZHEJIANG DAHUA TECHNOLOGY CO.
F07	BEIJING YHD RAILWAY EQUIPMENT
F08	SHANGHAI GINO TELEMA RESISTORS
F09	DATUMSTRUCT
F10	LANTECH COMMUNICATIONS GLOBAL
F11	REX ARTICOLI TECNICI
F12	NOKIA
F14	BAORUH
F16	INIT
G03	BEIJING JIAXUN FEIHONG
G04	WILSON ACOUSTICS
G06	SCHNEIDER ELECTRIC

Partner with us

Looking to expand your market share in Asia? Let us work with you to achieve your business priorities in 2017 by positioning your brand in front of the decision makers of the Asia Pacific railway industry. Beyond a simple exhibition stand, our partnership opportunities allow you to:

GENERATE LEADS, LEADS AND MORE LEADS!

Give us your wish list of the regional clients and prospects that you would like us to invite so that you can meet them at the event. We ask for this list at least 6 weeks out to give our team the lead time to do what they do best - deliver you your wish list.

MEET THE **BUYERS** (GUARANTEED!) Our 1-2-1 partnering program (available to sponsors only) means that you get to arrive at the event knowing exactly who your top sales guys will be sitting down with over the next two days. We match our buyers with the sponsors who have the solutions they are looking to invest in, it really is that simple.

BE SEEN AS **A THOUGHT** LEADER

Cement your position as an industry thought leader by delivering your strategic offerings to an audience of up to 1000+ qualified rail decision makers across Asia.

CREATE BRAND **AWARENESS**

Need to do more to reinforce your brand presence in the region? Enjoy extensive branding exposure not just over the 2-day event but from the day you sign up. The earlier you join the more exposure you will get, via our website and other digital channels, print media and online community.

Sponsors & Exhibitors

Title Sponsor



Diamond sponsor



Platinum sponsor



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THALES

Workshop Sponsor

Official Bag sponsor

Registration counter sponsor







Associate Sponsor











Meeting Area sponsor

Rail Freight Sponsor

Lunch Sponsor

Exclusive Hyperloop Partner



Amsted Rail

CMC

hyperloop one

Exhibitors









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Get involved

If you'd like to become an exhibitor, sponsor or speaker at the event contact

Kym at kym.chua@terrapinn.com
or +65 6322 2702