Asia Pacific RAIL.

Preliminary Agenda

11 – 12 March 2020, HKCEC, Hong Kong

ASIA PACIFIC RAIL 2020 PRELIMINARY AGENDA

DAY ONE: WEDNESDAY 11th MARCH 2020

Time	
09:00	Welcome remarks
09:10	MTR Welcome Address
09:30	Rail Leader Interviews *Back by popular demand, we kick off Asia-Pacific Rail 2020 with a series of interviews with C-Level rail operator leaders. Don't miss these exclusive insights from some of the region's most forward-thinking executives.*
10:10	**Rail Leader Panel** **Moving beyond mass transit to personalised transit** - Why rail players must prioritise and speed up their digitalisation processes, and how they can do it - What are the long and short term digitalisation goals rail operators should be setting and where should they be investing to achieve them? - Multimodality: What does the future look like and what is rail's role? - How to adapt existing service-provider business models through data-sharing and standardization to accommodate MaaS - Finding cost efficiencies through digitalisation
10:40	Title Sponsor Address
11:00	Networking refreshments & exhibition visit

	DIGITAL RAIL	METRO PROJECTS	MAINLINE PROJECTS	INTELLIGENT INFRASTRUCTURE MANAGEMENT	SIGNALLING & COMMUNICATIONS	PASSENGER EXPERIENCE	TICKETING & PAYMENTS Chairperson: Paul Gwynn, Director International Business Development, INIT, Singapore	RAIL POWER
11:50	*Reserved for Siemens*	Sydney Metro Rail Project	Delhi–Meerut Regional Rapid Transit System	Maintaining and securing digitalised assets: Future-proofing your operations	*Reserved for TCT*	India's G Station Projects: Equipping 700 stations with free wireless internet to 8 million passengers a month	Combating fare evasion through AI	India's strategies for phasing out diesel: Electrification, bio-diesel and LNG
12:10	Organisation, assets and people: The building blocks of total system capability through digitalisation	Victoria Metro Tunnel Project	Gemas–Johor Bahru Rail project update	*Reserved for Bombardier*		Next generation connectivity: World's first 5G LAN providing passengers with in-station ultrahigh-speed connectivity at Hongqiao Station, Shanghai	Fast commuter verification to improve operational efficiency by over 50%: Singapore's first gateless hands-free automatic fare collection (AFC) system	Battery-powered trains / solutions for railways systems
12:30	Digital transformation strategy: Building a digitally based operating model that suits your organisation	Networking lunch & exhibition visit	Bangkok's Red Line Commuter Rail project update - State Railway of Thailand	Networking lunch & exhibition visit		Networking lunch & exhibition visit	Networking lunch & exhibition visit	Diesel-electric hybrid locomotives
12:50	Monetising digital services: Improving customer experience while creating new revenue streams		North-South Commuter Railway (NSCR) Philippines		Cross River Rail, Brisbane			*Reserved for ABB*

Time								
13:10	Networking lunch & exhibition visit	MTR's Masterplan for the future of rail in Hong Kong	Networking lunch & exhibition visit	Achieving predictive and preventative maintenance through intelligent infrastructure	Networking lunch & exhibition visit	On-board connectivity: Delivering high-speed mobile connectivity for passengers - Japan 5G on-train trials	Dealing with the challenges of deploying new systems: - Non-synchronisation between gates - Cost-efficiency measures of large-scale gate replacements - Introducing single mobility cards	Networking lunch & exhibition visit
13:30		Jakarta MRT East-West Line Phase 3 Extension Plans Invited: Anies Baswedan, Governor Jakarta City Government, Indonesia		Harnessing data to create asset management plans: Assessing asset condition and projected passenger and freight growth to identify renewals, refurbishments and maintenance		*Reserved for Axon Vibe*	Electronic fare collection systems: Calculating and applying lowest fares once route has been completed for ease of passenger use	

<p align="center" style="background-color:#B22222;color:white">KEYNOTE PLENARY</p>

Time	
13:50	**Multimodality: Mobility as a mindset** - Competing against digitally savvy newcomers by transforming and acquiring new digital competencies and talent - Forging partnerships with new and traditional transport providers - Collaborating with smart cities, a key application for multimodality platforms
14:10	Diamond sponsor address
14:30	**The Digital Present** - Digital is not in the future – it's right now - Why the most adaptable will succeed - How can rail can get up to speed with other industries

Time								
14:50	*Reserved for Thales*	Networking refreshments & exhibition visit	Bangkok's high-speed rail project: Linking three major airports - State Railway of Thailand	Networking refreshments & exhibition visit	Next generation CBTC: The future of signalling systems	Minimising planned disruptions and downtime with data	Contactless credit and debit cards for account-based fare payments	The procurement lifecycle of open market renewable energy purchases for railway operations
15:10	AI systems to predict mobility demand		Jakarta-Bandung high speed railway project update		Moving to digitally-enabled train control systems for a more failsafe system with ERTMS	Networking refreshments & exhibition visit	Networking refreshments & exhibition visit	Energy recovery: Generating electricity through three-phase traction motors to harness energy generated from operator-applied braking systems
15:30	Networking refreshments & exhibition visit	Perth Metronet	Networking refreshments & exhibition visit	Cost-effective and long-term renewal through efficiency enhancements such as regenerative braking and HVAC systems	Networking refreshments & exhibition visit			Networking refreshments & exhibition visit
15:50		Brisbane Cross River Rail		Using IoT capabilities to manage rail assets for		Empowering passengers to self-manage in event	Migrating to account-based ticketing:	

				optimal asset life extension		of an unplanned disruption: Providing accurate, real-time information and solutions to allow passengers to make decisions	Challenges of implementing and deploying new ticketing methods, and integrating new and legacy systems	
16:10	Neural network and deep reinforcement learning to combat train delays and optimise scheduling - Tokyo Railways Tech. Research Institute (RTRI)	Dongbu Light Rail Line – Northeast Busan City Railway, Seoul	Mumbai–Ahmedabad high speed rail corridor project update	Using technology to invest strategically in asset renewal: Pinpointing key areas of cost, risk and performance	The future of autonomous trains: Integrating GPS into signalling systems	Effectively managing planned disruptions: Adopting a passenger-oriented approach to planning	The next stage of account-based ticketing: What's after EMV ticketing?	Solar rooftop installations to meet electrification goals
16:30	AI powered video analytics for predictive and prescriptive maintenance	Bangkok's Pink and Yellow MRT Lines	Panel: The future of mainline projects in Asia - Designing and delivering cost-effective, timely projects - Investing in rail reliability in existing networks - Retrofit or replace?: The investment conundrum - Using big data, IoT and analytics for precision, time and cost efficiencies, and reliability in project delivery	Whole-life costing strategies: Designing out faults and failures and designing in future corrective works	Integrating scheduling with Traffic Management Systems: Real-time delay management	Building and deploying robust, seamless and easy-to-use customer interfaces within stations and on trains	The evolution of interoperable ticketing systems: What's next?	Reducing energy consumption by 27% with Permanent Magnet Synchronous Motors
16:50	Designing a robust fully-functioning data management and infrastructure protection system: Integrating cyber intelligence and analytics across a digitized operational technologies (OT) environment	Dongguan Line 3		Maximising investments: The decision-making process behind repairing or replacing an asset	Next Generation LTE Rail Communication Systems	Designing and launching passenger trials with public sector stakeholders to test complex passenger experience technology	Towards a frictionless ticketing experience through new pay-as-you-go (PAYG) technology	Using energy efficient power systems with real-time diagnostics data
17:10	Making the move to 5G: Ensuring protocols, procedures and standards to ensure accountability	Bangkok Monorail (NBM) and Eastern Bangkok Monorail		Enterprise Asset Management System: Developing a modern data-driven strategy	The future is 5G: Better-connected systems and communications for operational excellence -Huawei - Nokia - Hyundai etc	IoT and passenger experience through data sharing • Toilet availability and accessibility • Location of emptier carriages • Where to stand on the platform to board the train	Smart mobile ticketing systems: Card digitisation for an instant, secure and seamless ticketing experience	Developing an energy efficiency policy: Reducing demand for energy, using renewable energy, producing and using fossil energy as efficiently possible
17:30	Networking cocktail reception & close of day one							

DAY TWO: THURSDAY 12th MARCH 2020

OPENING KEYNOTE PLENARY: MAKING OPERATIONS SMARTER

09:00	Welcome remarks Systra
09:10	Keynote Address
09:30	**Keynote Operations Panel: Customer-centricity and operational efficiency: Where do they meet?** - What do passengers really want and how can operators deliver this? - With a myriad of new technology applications on the market, how can operators choose what delivers value to both passengers and the business? - What is the role of operators in driving innovation in technology to solve problems relating to the future of mobility? - The role of suburban and urban rail in meeting the urban mobility challenge - Strategic allocation of continual investment to meet needs of riders
10:10	Diamond Sponsor Address
10:30	Networking refreshments & exhibition visit

	DIGITAL RAIL Chairperson: Representative, Systra	METRO PROJECTS	MAINLINE PROJECTS	INTELLIGENT INFRASTRUCTURE MANAGEMENT	SIGNALLING & COMMUNICATIONS	PASSENGER EXPERIENCE	TICKETING & PAYMENTS	RAIL SECURITY
11:30	Security in the cloud: Knowing and managing your role in the Shared Responsibility Model – building in-house capability or using partners?	Mumbai Metro Line – Mumbai Metro Rail (MMRCL)	**Rail Freight Leaders' Panel: The rise of rail freight in Asia** - The outlook for rail in for Inter Asia-Europe logistics - The role of rail in developing intermodal hubs - Improving operational abilities of freight trains - Bringing investment levels in freight up to par with passenger - The impact of Chinas Belt & Road Strategy on Asia's rail freight industry	Remote condition monitoring (RCM) systems: Improving preventive maintenance of rolling stock assets to increase availability and reduce operational costs	CBTC implementation: Evaluating costs, complexity, added value and ROI	Passenger-focused apps for interoperability and intermodality: Combining route planning, best fare calculation and easy payment options	Integrating booking and payment for multimodal operators into one app or portal – Translink NL	From a reactive to a proactive cybersecurity strategy: Keeping your operations one step ahead of potential cyber attacks
11:50	Capitalising on big data and analytics: Investing intelligently by understanding your organisation's needs	Delhi Metro		New generation IoT rolling stock asset management solutions: Sensors for predictive maintenance	Delivering on-time, on-budget signalling systems: Effective procurement coordination	MaaS: The role of rail operators in funding and supporting innovation in apps that drive MaaS goals	Encouraging user uptake in contactless payments: Changing user habits and ensuring an enabling environment to grow user numbers	Fostering a cyber-security mindset in your organisation: Engaging and educating all stakeholders
12:10	Designing and deploying a rail enterprise management system: Towards data-driven just-in-time predictive maintenance and asset renewal	LTA's 2040 plan for Singapore		Real-time asset monitoring systems for rolling stock: Implementing scalable, end-to-end data platforms	Ensuring compatibility and shortening testing periods during CBTC migration	Integrating AI speech recognition system into ticketing apps to help customers book and pick up tickets	Making the transition from hardware to software: As ticketing options become virtualised, where is the tipping point for software becoming the new norm?	Investing wisely: Quantifying your cyber risk in economic terms to determine your "mission critical systems" and understand where to deploy security resources
12:30	Networking lunch & exhibition visit	Networking lunch & exhibition visit	Networking lunch & exhibition visit	Fostering collaboration between rail operators and software companies for innovative maintenance models	ETCS implementation in legacy signalling systems: Overcoming challenges – Indian Railways	Networking lunch & exhibition visit	The future of contactless open-loop ticketing: Reducing fare collection costs while increasing convenience for the customer	Policy, procedures, technology and training: Key elements of a robust security plan
12:50				Indoor geo-localization services, unified communication and AI for railway tunnel maintenance – RTRI (automatic tunnel lining crack detection)	CBTC and airwaves: Solving the frequency saturation problem through standardisation		Multi-format scanning device for contactless tap and ride ticketing	Combating terrorist threats through multi-layered and integrated security systems

Time								
13:10	Combining and analysing data from different sources: Extracting the best value through a coherent data strategy	Chennai Metro Phase II	Belt & Road Initiative	Networking lunch & exhibition visit	Networking lunch & exhibition visit	Personalised messaging: Conveying the right information to all passengers - FB Messenger "Alert Me", National Rail, UK Location-related real-time information to solve first- and last-mile issues • Updated timetables • Connections to other carriers • Vehicle sharing stations Providing information within and upon leaving stations	Networking lunch & exhibition visit	Networking lunch & exhibition visit
13:30	Cloud-based data analytics: Adapting solutions for rail	Namma Metro (Bangalore) Phase II	Mengxi-Huazong Freight Line					
13:50	Blockchain for train dispatch: Learnings from trials	Jakarta MRT North-South Line Phase 2	Cambodian Rail Projects Updates	Sensor-based maintenance and pattern analytics: Quick deployment and results	Employing a layered communications structure to maintain seamless communications	Integrating AI systems in customer call-centre systems, dynamic screens and humanoid robots in high-traffic stations	The future of contactless open-loop ticketing: Reducing fare collection costs while increasing convenience for the customer	Becoming a safety-critical organisation: Designing a system that engages employees and customers
14:10	Identity management: How blockchain can ensure accurate verification for passengers and staff	Kolkata Metro Extension Project	India's Dedicated Freight Corridor Programme	Implementing an Automatic Track Inspection System in an operational environment	Identifying the key pillars of a successful greenfield signalling project in Asia	Enhanced reputation management through customer data analysis • Improve communication • Optimise service delivery Manage expectations	Automatic journey detection with hands-free Bluetooth payment solution	Harnessing big data to improve real-time incident and emergency management
14:30	Blockchain-secured condition monitoring networks – a prototype - Trenitalia	MRT Sungai Buloh to Putrajaya (SSP) Line	Increasing the rate of new technology adoption in rail freight: Bringing rail up to speed to compete with road freight	The application of robotics in rail maintenance: Automating routine and repetitive tasks for greater reliability, safety, cost reduction and decreased downtime	Managing cybersecurity in the design of greenfield projects • Integrating information system security at project start • Technical audit • Identifying residual risks Developing a final case for security	Using social media for effective reputation management	Transitioning to a cashless payment environment: Driving adoption with e-payment technology	Coordinating with various external stakeholders to plan effective disaster preparedness drills
14:50	Applying Building Information Modelling (BIM) principles to rail projects: Increasing innovation in design and construction	Metro leaders' panel: Achieving operational excellence - Cost- and operationally-efficient methods of increasing capacity	Enabling collaboration for stakeholder data exchange in the rail freight logistics chain to drive efficiencies	Digital Twin Technology: Accelerating the adoption of IoT with OT platforms to enable use of "digital twins" to monitor and maintain assets	Closing security gaps: Identifying, assessing and consolidating risks in existing signalling systems	Corporate reputation as an asset: Managing and measuring its risk	Using AFC to allow multiple transport systems to share payment information across an entire network	Wireless solutions with online audit trails to track key access for infrastructure and station security
15:10	Collaborating with smart cities: Combining IoT with automated	- From off-the-shelf to collaborative solutions: Driving innovation to	New location intelligence technology for rail freight	Sensor-based technology innovation for optimising track	Developing a complete and robust continuity plan to guarantee continuity of the service	Enhanced reputation management through customer data analysis	Generating non-farebox revenue through integrating transport payments with non-	Harnessing big data to improve real-time incident and emergency management

	passenger for added benefit to your business • Passenger counts and pedestrian flow Vehicle counts and pollution monitoring	solve the problem of crowded lines – Identifying and addressing the barriers to efficient use of networks – New technology deployment in metro lines		utilisation on high-use networks	in event of a cyber attack	• Improve communication • Optimise service delivery Manage expectations	transport retail payments: Best practices for developing retail consumer payments and loyalty businesses with retail partners
15:30	Fully Automated Planning and Scheduling: Optimizing asset utilization through AI and complex network simulations		Increasing the rate of new technology adoption in rail freight: Bringing rail up to speed to compete with road freight				Are cloud-based mobile ticketing and ticketing-as-a-service solutions a better route to lower costs and simple operations while satisfying customers' need for innovative payment solutions?
15:50	Close of Asia Pacific Rail 2020. See you in 2021!						