



SIGNALLING AND TELECOMMUNICATIONS: ASIA

2012

16 – 18 May 2012 • Bangkok, Thailand

The dedicated main line and mass transit signalling and telecommunications event for Asia

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SIGNALLING AND TELECOMMUNICATIONS: ASIA 2012 SPEAKERS

Confirmed:

Ankala Saibaba, Deputy Chief Engineer, **Indian Railways**

Oravit Hemechudha, Deputy Director-General of Traffic and Transportation Department, **Bangkok Metropolitan Administration**

Markus Zachmeier, Senior Vice President, Mobility Singapore, and Division Cluster Lead ASEAN, **Siemens**

David Kerr, CEO, **Toll Royal Cambodia Railways**

Pierre Chartier, Economic Affairs Officer, Transport and Tourism Division, **UNESCAP**

Satoru Masutani, Senior Engineer, Electrical and Signal Network System Department, **East Japan Railway Company**

Tao Tang, Professor, School of Electronics and Information Engineering, **Beijing Jiaotong University**

Cyrille Fague, Vice President of Sales, **Esterel Technologies**

Oranuch Jetwattana, Senior Project Officer, **Asian Development Bank**

Phan Hoa Binh, Deputy Director, Science and Technology, **Vietnam Railways**

Padet Praditphet, Policy and Plan Analyst, **Ministry of Transport, Bangkok**

Supachai Tantikon, Expert Advisor, Governor of Bangkok, **Bangkok Metropolitan Administration**

Pichet Kunadhamraks, Senior Engineer, **Office of Transport and Traffic Policy and Planning, Bangkok**

Lakthan Thongnopakoon, Deputy Operations Director, **Bangkok Metro**

Joffrey Lauthier, Head of Sales, Asia Pacific, Rail Control Solutions, **Bombardier Transportation**

Thomas Godfrey, Director, Product Management, Rail Control Solutions, **Bombardier Transportation**

Don Sambandaraksa, Southeast Asia Correspondent, **Telecom Asia**

Somprasong Suttayamully, Technical Director, **MRTA**

Rommel Gavieta, Vice President, **Metro Rail Transit Corporation (Manila Metro)**

Marta Fontecha, Business Development Transport Division, **Teltronic**

Anthony Arokianathan, Signalling and Telecommunications Manager, **Express Rail Link (Kila Ekspres)**

Po-Ying Chen, Head of Signalling System, Electrical and Mechanical Division, **Taipei Rapid Transit System**

Anjum Pervaiz, Additional General Manager, **Pakistan Railways**

Arnaud Besse, Bids and Strategy Director, **Thales Solutions Asia**

Prashant Rao, Chief Signal and Telecom Engineer, **Delhi Metro**

Sandy Yu, Head of Operations, **Bangkok Mass Transit System**

Ingo Hoffmann, Head of international Business Development, metro signalling systems, **Siemens**

Pierre-Damien Jourdain, Business Development Director, **Alstom Transport**



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WEDNESDAY 16 MAY 2012: CONFERENCE DAY ONE

08:00 Networking breakfast and registration

OPENING

08:55 Global Transport Forum welcome address and introductory remarks
Alex Williamson, Managing Director, Global Transport Forum

KEYNOTE SESSION

1: MEETING DEMAND AND FINANCING CAPACITY

Session Moderator: Pichet Kunadhamraks, Senior Engineer, Office of Transport and Traffic Policy and Planning, Bangkok

Session overview:

Demand is outstripping capacity and the limited rail and metro networks across Asia are stretched. There's a need for mass transit systems to limit urban congestion and for rail networks to transfer growing passengers and freight volumes between cities. Signalling and telecoms technologies can increase capacity in a cost effective manner. But how are these projects to be funded? India, China and Japan have funds to invest in projects but need models that give maximum ROI. Likewise, the ASEAN nations need cost effective models for attracting investment and maximizing ROI.

Session themes:

Demand, capacity, requirements, politics, regulations and finance / PPP, (attracting) foreign investment, meeting project requirements technology selection, tendering and procurement process

Session topics:

- From India to China, Japan to Korea and South East Asia to Australia – individual project requirements
- Covering the cost – CAPEX strategies, long-term visions and the potential of utilizing PPPs vs. alternatives
- Leveraging Chinese and Japanese credit and the impact on the tendering process
- Going from limited systems to high tech, high capacity and reliable systems in a cost efficient manner
- Meeting government's, operator's and passenger's operational requirements whilst planning / delivering upgrades

Insights:

Speakers will address the core options available for funding a rail signalling and telecoms network in order to demonstrate models for maximum ROI and revenue potential

09:00 **Political insight:**
Planning for and maximising the value of major railway and metro development projects in Thailand

Oravit Hemechudha, Deputy Director-General of Traffic and Transportation Department, Bangkok Metropolitan Administration

09:15 **Financial insight:**
Mainstreaming PPPs and Infrastructure Development: Thailand's Railway Modernization Project in the 2011-2013 COBP

Oranuch Jetwattana, Senior Project Officer, Asian Development Bank

09:30 **Operator insight:**
Effectively upgrading signalling and telecommunication infrastructures to meet increasing demand

Anjum Pervaiz, Additional General Manager, Pakistan Railways



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Panel:

Panellists will address strategies for taking a holistic view of rail and metro signalling and telecoms networks in order to create financial models that meet the needs of government, railways and financiers.

10:00 **Panel session:**

Addressing the unique needs of individual countries and projects to define applicable funding models

Lakthan Thongnopakoon, Deputy Operations Director, **Bangkok Metro**

Oravit Hemechudha, Deputy Director-General of Traffic and Transportation Department, **Bangkok Metropolitan Administration**

Anjum Pervaiz, Acting General Manager, **Pakistan Railways**

10:30 **Morning coffee**



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TECHNICAL SESSION

2: PROJECT PLANNING AND PROCUREMENT

Session moderator: Tao Tang, Professor School of Electronics and Information Engineering, Beijing Jiaotong University

Session overview:

To deliver successful projects, all stakeholders must work collaboratively to efficiently manage the on time on budget delivery. This starts at the planning and procurement phase. Railways and metros must clearly define project requirements to meet demand / capacity needs and enable suppliers (both international and local) to propose the optimum solution to these needs. Short-term costs are important and so is technology selection due to the long-term impact on operational rules, lifecycle costs and obsolescence. Each project is unique: how does one balance short vs. long-term costs?

Session themes:

Project planning / requirements, procurement / tendering, technology selection, specifications, standards, system interfaces, implementation strategy, project management, operational rules, lifecycle costs, obsolescence management

Session topics:

- Defining project requirements – is there a need for advanced technology or can a simpler solution meet the needs?
- Selecting a solution that meets available operational experience and minimizes lifecycle costs and obsolescence
- Developing standards, interfaces and interoperability to simplify the tendering process and build long-term value
- Best practices in understanding and managing procurement, safety approval and implementation / migration
- Taking a coordinated, collaborative and flexible approach to avoid impact on short and long-term costs

Insights:

Speakers will address the challenges involved in the delivery of new signalling and telecoms systems and the need for collaboration to ensure that the project is delivered on-time and on-budget and meets the initial aims

11:15 **Main line rail operator insight:**
Enhance performance and minimise lifecycle costs: meeting the needs of Indian railway operators

Ankala Saibaba, Deputy Chief Engineer, Indian Railways

11:30 **Mass transit operator insight:**
Is CBTC always the answer or can a simpler system meet mid-term aims with less complexity?

Lakthan Thongnopakoon, Deputy Operations Director, Bangkok Metro

11:45 **Industry insight:**
Collaborative success from global experience: unlocking operational savings through real time train runs optimization

Ingo Hoffmann, Head of international Business Development, metro signalling systems, Siemens

Panel:

Panellists will address the key measures that can be taken during the planning and procurement phase to minimise cost, avoid unnecessary service disruptions and deliver on original project aims

12:00 **Panel session:**
Collaborating effectively during planning and procurement to select the right technology

Ankala Saibaba, Deputy Chief Engineer, Indian Railways

Ingo Hoffmann, Head of international Business Development, metro signalling systems, Siemens

Lakthan Thongnopakoon, Deputy Operations Director, Bangkok Metro

Sandy Yu, Head of Operations, BTS

12:45 **Networking lunch**



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TECHNICAL SESSION

3: UPGRADES AND ONGOING OPERATIONS

Session moderator: Padet Praditphet, Policy and Plan Analyst, **Ministry of Transport, Bangkok**

Session overview:

Due to the unprecedented increase in demand the main challenge for main line rail and mass transit operators is to increase capacity with a minimal impact on existing operations. This has a number of implications across project planning, managing works on new and existing lines, maintaining network safety and security, overlaying new systems with existing systems, running both in parallel and planning for a cut over. In many cases operators will be going from a basic system to a far more complex computerized system and will also need to introduce new standards and operational rules.

Session themes:

Demand, capacity, planning, delivery, safety, security, migration, fixed block systems, moving block systems, advanced telecoms infrastructure, operations / operational rules.

Session topics:

- Developing a solid but flexible migration strategy to minimize risks, delays and project overruns
- Following the migration strategy across safety, costs, testing and deadlines to ensure successful delivery
- Taking a coordinated approach between operator and supplier to avoid increases to costs and project time
- Managing operational rules and staff training when migrating to advanced technologies
- Managing passenger expectations and minimizing disruptions to existing peak services during migration

Insights: Speakers will address the challenges involved in the migration to new signalling and telecoms systems and methods of minimising the impact on existing operations

14:00 **Main line rail operator insight:**
Cambodia's railways rehabilitation: enhance operational efficiency and advance the country's infrastructure development and future growth

Anthony Arokianathan, Signalling and Telecommunications Manager, **Express Rail Link (Kila Ekspres)**

14:30 **Mass transit operator insight:**
CBTC system in practice: enhance service quality, journey capability and assessing its impact on ROI

Po-Ying Chen, Head of Signalling System, Electrical and Mechanical Design Division, **Taipei Rapid Transit System**

14:45 **Industry Insight:**
Improving operational performance through CBTC migration

Joffrey Lauthier, Head of Sales, Asia Pacific, Rail Control Solutions, **Bombardier Transportation**

Panel:
Panellists will address the key measures taken to minimise cost, avoid unnecessary service disruptions and delivery on original project during migration.

14:45 **Panel session:**
Minimising costs and service disruptions and delivering on the original operational aims

David Kerr, CEO, **Toll Royal Cambodia Railways**

Thomas Godfrey, Director, Product Management, Rail Control Solutions, **Bombardier Transportation**

Po-Ying Chen, Head of Signalling System, Electrical and Mechanical Design Division, **Taipei Rapid Transit System**



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15:30 Afternoon coffee



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BREAKOUT SESSIONS

The breakout sessions offer the ideal platform to engage, examine and exchange views on key industry challenges. Moderated by subject matter experts, these interactive sessions allow participants an opportunity for in-depth, honest discussion and learning in a small, informal setting. With the audience divided into four separate breakout areas, hosted on tables of no more than 10, participants will deliberate on the topics detailed below.

4A: SIGNALLING SYSTEMS AND CONTROLS

4B: TELECOMS SYSTEMS

Session moderator:

Cyrille Fague, Vice President of Sales, **EstereI Technology**

Session themes:

Interlockings, signalling systems, interoperability, upgrades, capacity, safety, operations, maintenance, control centres, systems management, training, ATP technological options

Session topics:

- Utilising interlockings
- Effective control centers
- Systems management
- Staff Training
- ATP technological options

Session moderator:

Session themes:

GSM-R, LTE, alternative technologies, bandwidth, safety / non-safety critical applications

Session topics:

- Maximizing telecoms ROI
- GSM-R to LTE vs. alternatives
- Meeting bandwidth challenges
- Safety vs. non-safety critical
- New revenue streams

Breakout:

In these breakout sessions the participants will address the specific, niche, technical topics outlined above. **The format and timings are outlined below.** The findings of the individual breakout sessions will be presented back to the entire audience by the moderators at the end of the session.

16:15 **Moderator's introductory presentation**

16:30 **Open discussion**

17:30 **Moderator's concluding remarks**



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CLOSING

17:45 Global Transport Forum closing remarks and close of day one
Dan Loosemore, Head of Production Global Transport Forum

DRINKS RECEPTION

18:00 Signalling and Telecommunications: Asia 2012 networking drinks reception



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WEDNESDAY 16 MAY 2012: CONFERENCE DAY TWO

08:00 Networking breakfast and registration

OPENING

09:00 Global Transport Forum welcome address and introductory remarks
Dan Loosemore, Head of Production Global Transport Forum

TECHNICAL SESSION

5. SAFETY AND SECURITY

Session moderator: Supachai Tantikon, Expert Advisor, Governor of Bangkok, Bangkok Metropolitan Administration

Session overview:

Standards are key to enabling a clearer more competitive tendering process and lower system lifecycle costs. Asia is currently not weighed down by the standards that complicate matters in Europe and the US and has the potential to be an early adopter of innovative technologies. However, with this comes the responsibility to ensure a clear safety certification process to ensure that such technologies can get to market / implementation in a timely manner without compromising on passenger safety or system security

Session themes:

ERTMS, CTC, CBTC, GSM-R, LTE, SCADA, new technologies, standardisation, interoperability, safety case, regulations, certification process / bodies, system security, industry / regional collaboration,

Session topics:

- Measuring economic implications and safety performance of different signalling, communications and control systems
- Ensuring regulator, operator and supplier collaboration to encourage standardisation and maximise safety
- Evaluating the Asian certification approach and ensuring all technologies meet the requirements of the safety case
- Integrating successful European practices with Asian practices to create uniformity across safety and certification
- Minimising safety risks during delivery of a new signalling, communications and control system (e.g. in tunnels etc.)

Insights:

Each speaker will address how standardisation, certification, new technologies and improvements in systems management can help to define standards and the safety case and to reduce risks and improve overall safety and security

09:00 **international organisation insight:**
Working towards pan-Asian certification practices and developing partnerships and economic integration.

Pierre Chartier, Economic Affairs Officer, Transport and Tourism Division, **UNESCAP**

09:20 **Mass transit operator insight:**
Aligning an efficient and advanced signalling system with the highest safety and security requirements

Thomas Baake, CEO Express Rail Link (Kila Ekspres)

09:35 **Industry insight:**
Integrating the successful elements of European practices to aid product development in Asia

Pierre-Damien Jourdain, Business Development Director, **Alstom Transport**



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Panel:

Panellists will address strategies for taking a holistic view of Asian rail and metro signalling and telecoms networks in order to create a unified view on standardisation, interoperability and certification processes.

09:50 Panel session:

Developing pan-Asian standards and safety processes to reduce time and costs and to encourage interoperability

Pierre Chartier, Economic Affairs Officer, Transport and Tourism Division, **UNESCAP**

Pierre-Damien Jourdain, Business Development Director, **Alstom Transport**

Thomas Baake, CEO Express Rail Link (Kila Ekspres)

10:30 Morning coffee



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TECHNICAL SESSION

6: SYSTEMS INTEGRATION AND INTEROPERABILITY

Session Moderator: Pierre Chartier, Economic Affairs Officer, Transport and Tourism Division, UNESCAP

Session overview:

In addition to safety and security, to ensure smooth operations to optimize the additional available benefits of advanced signaling and telecoms systems, collaborative design strategies, standardized interfaces and interoperability testing must be developed. A coordinated Asian approach is required both to reduce costs and accelerate deployments. Collaboration and communication is crucial in establishing interoperability (potentially cross-border but specifically “cross-supplier”) and in ensuring the implementation of timely, cost effective solutions.

Session themes:

Interoperability, collaborative design, implementation strategies, standardization, system integration, interfaces / overlays, testing and commissioning, GSM-R, LTE standardizing processes, guaranteeing compatibility

Session topics:

- Defining interoperable standards and increasing standardization to ensure smooth operations
- System integration challenges and developing technological interchangeability
- Ensuring clear channels of communications between operators and international and local suppliers
- Developing a consensus on system architecture and specifications to drive system efficiencies
- Ensuring the Asian railways and metros are equipped to harness the full potential of advanced systems

Insights:

Speakers will address the challenge of establishing interoperable system interfaces and developing best-practice strategies for harnessing the full potential of advanced systems in a cost effective and efficient manner.

11:15 Main line rail operator insight:

Laying the interoperable foundations and interfaces for a pan-Asian rail network
Phan Hoa Binh, Deputy Director, Science and Technology, Vietnam Railways

11:30 Mass transit operator insight:

Setting up your system to optimise operations and maximize additional benefits to improve the passenger experience.
Somprasong Suttayamully, Technical Director, MRTA

11:45 Industry insight:

Enhancing client knowledge and capabilities based on successful projects undertaken around the globe
Marta Fontecha, Business Development Transport Division, Teltronic

Panel:

Panellists will address the potential advantages of total systems integration across signalling and telecommunications and the far reaching benefits that this will have for the network as a whole (beyond signalling and telecommunications)

12:00 Panel session:

An integrated signaling and telecoms network with maximum safety as the foundation for additional non-safety critical functionalities
Nguyen Manh Hien, International Cooperation Department, Vietnam Railways
Somprasong Suttayamully, Technical Director, MRTA
Marta Fontecha, Business Development Transport Division, Teltronic
Arnaud Besse, Bids and Strategy Director, Thales Solutions Asia

12:45 Networking lunch



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TECHNICAL SESSION

7: OPERATING ADVANCED SYSTEMS

Session Moderator: Don Sambandaraksa, Southeast Asia Correspondent, Telecom Asia

Session overview:

Having successfully transitioned to a new signaling and telecoms system, rail or metro operator and supplier must work together to ensure ongoing operations are optimized to meet or even exceed project lifecycle and that ROI meets the projections of the original business plan. The system must be operated and maintained effectively to maximize capacity, safety, reliability and quality of service. In addition, many advanced systems offer the capability to do much more than manage basic safety critical functions when operated to their full potential

Session themes:

ERTMS, CTC, CBTC, GSM-R, LTE, SCADA, capacity, safety, reliability, quality of service, operational rules, training, maintenance, lifecycle costs, ROI

Session topics:

- Defining comprehensive operational rules to optimize long-term operations and minimize costs
- Maximizing safety whilst simultaneously exploiting the potential of the new system to enhance revenue
- Long-term investment strategy for new deployments – building future technologies into the budget
- Developing effective maintenance strategies that enhance lifecycle whilst minimizing disruption
- Clarifying the role of the supplier in ensuring efficient operations and maintenance of the systems they installed

Insights:

Each speaker will deliver optimum strategies for maximising the performance and reliability of new signalling and telecoms systems and developing effective maintenance strategies to enhance lifecycle and reduce on-going costs

14:00 Main line operator insight:

Maximizing the value of new systems to drive operational efficiency and improve passenger experience

Satoru Masutani, Senior Engineer, Electrical and Signal Network System Department, East Japan Railway Company

14:15 Mass transit operator insight:

Enabling operators to effectively manage new systems to maximize reliability and enhance the system lifecycle

Rommel Gavieta, Vice President, Metro Rail Transit Corporation (Manila Metro)

14:30 Political insight:

Ensuring a higher degree of safety and higher quality of services whilst maintaining cost-effective operations

Padet Praditphet, Policy and Plan Analyst, Ministry of Transport, Bangkok

Panel:

Panelists will address strategies for optimising the performance of newly deployed systems in order to reduce costs and maximise revenues

14:45 Panel session:

Moving from simple to advanced systems and ensuring systems generate maximum ROI

Padet Praditphet, Policy and Plan Analyst, Ministry of Transport, Bangkok

Satoru Masutani, Senior Engineer, Electrical and Signal Network System Department, East Japan Railway Company

Rommel Gavieta, Vice President, Metro Rail Transit Corporation (Manila Metro)



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15:30 Afternoon coffee

ROUNDTABLE SESSION

Moderated by subject matter experts, these interactive sessions allow participants an opportunity for in-depth, honest discussion in an informal setting. Hosted on tables of no more than 10, participants deliberate on the topics detailed below.

8: THE FUTURE OF MAIN LINE AND MASS TRANSIT SYSTEMS IN ASIA

Session moderator:

Tao Tang, Professor School of Electronics and Information Engineering, **Beijing Jiaotong University**

Session overview:

Throughout this conference we have looked at the massive increase in demand across main line and mass transit rail in Asia from India to China, Japan to Korea and South East Asia to Australia and the correlated need for a drastic and rapid increase in capacity across the board. We've looked at how these projects can be financed, planned, tendered, delivered and maximized across integrated operations and maintenance. We must now build a cohesive picture of how this fits together into a long-term vision for the future of main line and mass transit rail in Asia.

Session themes:

ERTMS, CTC, CBTC, GSM-R, LTE, SCADA, politics, finance, planning, tendering / procurement, technology and technology selection, migration / delivery, operations, maintenance

Session topics:

- Defining flexible political and financial models for planning and financing projects
- Clear planning and open, competitive and clear tendering process for optimum technology selection
- Defining optimum delivery, migration and switch over strategies with minimum disruptions
- Working towards pan-Asian standardization, certification, systems integration and interoperability
- Delivering efficient operations and maintenance when scaling up to more advanced systems

Roundtables:

Participants will be split into two groups, one focussing on main line and one focussing on mass transit, to define the future of main line and mass transit signalling and telecoms systems in Asia

16:15 **Moderator's introductory presentation**

16:30 **Open discussion:**

- **A: Main line rail**
- **B: Mass transit rail**

17:30 **Moderator's concluding remarks**

CLOSING REMARKS

17:45 **Global Transport Forum closing remarks and close of Signalling and Telecommunications: Asia 2012**
Dan Loosemore Head of Production, Global Transport Forum