



2012

CBTC WORLD CONGRESS

Sheraton Amsterdam Airport, Netherlands

6 – 8 November 2012

www.cbtcworldcongress.com

ABOUT CBTC WORLD CONGRESS 2012

THE ANNUAL MEETING PLACE FOR THE GLOBAL CBTC INDUSTRY

Following the huge success of the second annual CBTC World Congress in Stockholm, Global Transport Forum will once again bring together over 300 delegates from around the world for the third annual event in Amsterdam, supported by Amsterdam metro. With exclusive insights from our brand new global CBTC users group, brand new technical and strategic sessions on topics such as enhancing lifecycle, ensuring effective systems integration and the future of CBTC deployments, more opportunity for interaction than ever before with audience polls, panel debates and dedicated breakout sessions and extended networking opportunities, this truly is the most valuable metro event of the year!

“A unique opportunity to network with CBTC professionals world wide, to share experiences and pull knowledge about the latest world class developments and solutions”

Phil Bartlett, Rail Signalling Lead, Europe, **Booz & Company**

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CBTC WORLD CONGRESS 2012 SPEAKERS

- **George Nagel**, Signalling and Train Control Project Manager, **Amsterdam Metro**
- **Tony Gray**, ATC Systems Manager, **Dubai Metro (Serco)**
- **Khoo Hean Siang**, Executive Vice President – Trains, **SMRT**
- **Kimmo Reiman**, Project Manager, Metro Automation, **HKL**
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- **Alberto Forchino**, Head of Special Engineering Projects, **Turin Metro**
- **Hugh Bridge**, Programme Delivery Engineer, **London Underground**
- **David Briginshaw**, Editor-in-Chief, **International Railway Journal**
- **Lutfu Akcil**, R&D Project Coordinator, **Istanbul Ulasim**
- **Anne-Grethe Foss**, Chief Operations Officer, **Metroselskabet**
- **Daniele Bozzolo**, Chairman, **CENELEC European Committee for Electrotechnical Standardization**
- **Ahmad Nizam Mohamed Amin**, Chief Operating Officer, Kelana Jaya Line, **Rapid KL**
- **Duncan Cross**, Deputy Director Operations, Overground and Crossrail, **Transport for London**
- **Roelf Post**, Program Manager ICT, **Municipality of Amsterdam**
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- **Claudio Traverso**, Vice President Market Intelligence, **Ansaldo STS**
- **Philippe Leguay**, International Urban Rail Systems Transport Director, **Keolis**
- **George Hacken**, Senior Director, Vital Systems, **NYCT**
- **Sim Wee Meng**, Group Director, **LTA**
- **Jesus Prieto**, Senior Signaling Engineer, **Metro de Caracas**
- **Tao Tang**, Lab of Rail Traffic Control and Safety, **Beijing Jiaotong University**
- **Antonio Muñoz**, Head of CoE, Automated Metro Systems, **Bombardier Transportation**
- **Thomas Godfrey**, Director, Product Management, **Bombardier Transportation**
- **José M. Martín**, Chief Marketing and Sales Office, **Teltronic**
- **Aurelio Rojo Garrido**, Secretary General, **ALAMYS**
- **Ricardo Cárdenas**, CBTC Project Manager, **Metro de Santiago**
- **Thierry Bonnefous**, Urban Solution Director, **Alstom Transport**
- **Melih Arpacı**, Director, Pre Acquisition Management, Mass Transit, **Siemens AG**
- **Gabriel Colceag**, VP Rail Signalling – Urban, **Thales Group**
- **Dan Filip**, Director Business Development, Transportation Solutions, **Thales Group**
- **David Dimmer**, Manager Strategy, Transportation Solutions, **Thales Group**
- **Damien Convert**, Commercial Director, Innovation, **GE Transportation**
- **Franco Fabbian**, Managing Director, Intelligent Control Systems (EMEA) **GE Transportation**
- **Jose Luis Domingo Zayas**, Mass Transit Line of Business Director, **Invensys Rail**
- **Nicolas Breton**, Technical Director, **Prover Technology**
- **Stephane Feray-Beaumont**, Product Group Director, **GE Transportation**

CBTC WORLD CONGRESS 2012 – AGENDA AT A GLANCE

TIMINGS	TUESDAY 6 NOVEMBER 2012 - DAY 1		WEDNESDAY 7 NOVEMBER 2012 - DAY 2	
08:50 – 09:00	CONFERENCE OPENING		CONFERENCE OPENING	
09:00 – 10:30	1. KEYNOTE SESSION	BEYOND METROS: WHY CHOOSE CBTC?	5. STRATEGIC SESSION	FUTURE LEGISLATION AND DEVELOPING STANDARDISATION
10:30 – 11:15	NETWORKING COFFEE		NETWORKING COFFEE	
11:15 – 12:45	2. USER GROUP	CBTC USER GROUP: OPTIMISING CBTC OPERATIONS	6. TECHNICAL SESSION	INCREASNG SAFETY AND THE NEED FOR BACK-UP SYSTEMS
12:45 – 14:00	NETWORKING COFFEE		NETWORKING COFFEE	
14:00 – 15:30	3. DEDICATED BREAKOUT SESSION	A) EFFECTIVE PROJECT MANAGEMENT B) IMPROVING ENERGY EFFICIENCY C) ENHANCING PASSENGER EXPERIENCE	7. TECHNICAL SESSION	REDUCING LIFECYCLE COSTS AND PREVENTING OBSOLESENCE
15:30 – 16:15	NETWORKING COFFEE		NETWORKING COFFEE	
16:15 – 17:45	4. TECHNICALSESSION	ENHANCING SYSTEMS INTEGRATION	8. ROUNDTABLE SESSION	SHAPING FUTURE CBTC DEVELOPMENTS
17:45 – 18:00	DAY ONE CLOSE		DAY TWOCLOSE	
18:00 – 20:00	NETWORKING DRINKS RECEPTION		END OF CONFERENCE	

AGENDA KEY

BUSINESS CASE SESSION

OPERATIONAL PERFORMANCE SESSION

FUTURE DEVELOPMENT SESSION

NETWORKING SESSION

CBTC USER GROUP

CBTC USER GROUP

The CBTC User Group is a brand new industry group to be launched at CBTC World Congress 2012. Following discussions with our Advisory Board, it is clear that there is a need for CBTC operators to come together on a more regular basis to share problems and define solutions to implementation and operational challenges. We hold User Group meetings throughout the year for CBTC experts from metros across the globe, with regional groups in Europe, Asia, Latin America, USA and MENA.

The conference agenda features a brand new CBTC User Group session, exclusively featuring metros. This session gives representatives of the group the opportunity to share with industry how they are using CBTC to enhance operations, the challenges of doing so and the key advances and evolutions they would like to see over the coming years. It also provides delegates with the opportunity to put their questions to the users, to ensure key challenges are met and understood and collaboration throughout the industry is enhanced.

The session features an introduction from a representative of the user group, highlighting 5 key issues to be discussed across implementation and operations. This is followed by short presentations from 4 metros, based around these aforementioned issues, followed by two audience polls (one on implementation and one on operations) and concluded with open questions from the audience and a concluding presentation from the moderator, drawing all the key learnings together (to be reported in the CBTC World Congress 2012 Insider's Guide).

CBTC USER GROUP MEMBERS



INNOVATIVE CONFERENCE FORMAT

We structure the agenda and onsite experience to ensure maximum idea sharing with best practice-solutions and ample networking breaks to build and develop future business relationships. **The following information highlights the key takeaways that you can expect from each session.**

KEY SESSION THEMES

BUSINESS CASE SESSIONS

With increasing numbers of CBTC systems being deployed worldwide, consideration must be given to long-term performance and costs in order to assess ROI. Sessions focusing on business case issues are colored in gold and include the keynote session on **Beyond Metros: Why Chose CBTC?** and the technical session on **Reducing Lifecycle Costs**.

OPERATIONAL PERFORMANCE SESSIONS

In order to improve service, reduce delays, increase ridership and revenue, performance of CBTC Systems must be optimized. Sessions focused around performance are colored brown and include the strategic session on **Optimising Performance** and our technical session on **Enhancing Systems Integration**.

FUTURE DEVELOPMENT SESSIONS

CBTC standards and regulations continue to evolve. Metros must be aware of the developments to reduce costs and improve service. Sessions focusing on future developments are colored in orange and include the strategic session on **Future Legislation and Standardisation** and the breakout session on **Enhancing Passenger Experience**.

NETWORKING SESSION

In addition to the topics, we understand that it is important for our speakers, sponsors and attendees to have time for further networking to discuss the topics in more depth in an informal setting, and to forge future business relationships. That's why we have ample **dedicated networking time built into the agenda at regular intervals**.

SESSION HIGHLIGHTS

PLENARY SESSIONS

- The keynote sessions provide best-practice insights and key lessons learnt from the most innovative projects. See page 7 for details of the keynote presentation on **The business case for CBTC and successfully integrating the system with ERTMS deployments**
- The technical sessions feature live case studies from senior experts on overcoming specific technical challenges. See page 11 for the presentation on **Effective integration to enhance communication networks**
- Unique strategic sessions reveal the ongoing future plans for industry leaders that can be applied to your business model. See page 8 for the case study on **Utilising CBTC to increase capacity and reduce delays**

ROUNDTABLE & BREAKOUT SESSIONS AND MAXIMISING INTERACTION

- Our unique roundtable and breakout sessions allow you to get your key questions answered! Delegates sit in groups of 10 to examine and exchange views on key issues set by the expert moderator, delivering back best-practice strategies to the whole audience! See page 9 for the breakout sessions on **Effective Project Management, Improving Energy Efficiency and Enhancing Passenger Experience**
- Responding dynamically to evolving issues, anonymous, electronic polls deliver a live consensus of how the audience feels on key contentious topics and spark debate amongst delegates. See page 12 for the poll on **Are back-up systems essential for any metro network?**
- In addition to the polls, panel debates allow you to get maximum value from the event. Get involved and take your chance to discuss your challenge with an industry leader. See page 11 for the panel debate on **How to successfully deliver a total system to enhance traffic management and reduce costs**

CONCLUSIONS AND INSIDERS GUIDE

- This is a live, interactive learning experience and at the end of each session, our expert moderators will summarize the key conclusions for further debate during extended networking breaks
- Following the event, the Global Transport Forum team uses these conclusions, poll results and key takeaways to develop an official **Insiders Guide** for the conference. This is available to all delegates post-event and will also be available to download online at www.cbtcworldcongress.com.

10 KEY REASONS TO BE A PART OF THE CBTC WORLD CONGRESS 2012

- 1.** It is the definitive global event for CBTC professionals to learn new best-practice strategies from all the leading metros across the globe.
- 2.** Uncover the future of CBTC deployments beyond metros with the growth of the monorail and mainline commuter trains opting for CBTC technology.
- 3.** Hear key insights from our brand new exclusive CBTC Users Group, with representatives from across the globe sharing crucial strategies to optimise CBTC performance.
- 4.** Enhance energy efficiency to ensure reduced OPEX costs and enhance the sustainability of your metro.
- 5.** Discover the future legislation that will impact your development plans and learn how standardization can help interoperability and reduce future costs.
- 6.** Increase ROI by maximising the lifecycle of your system and reducing the costs associated with obsolescence.
- 7.** Reduce costs related to back-up systems, with a dedicated session analysing the business case and operational impact.
- 8.** Enhance project management strategies to deliver successful new systems and improve long-term operational performance.
- 9.** Ensure effective systems integration and optimal communications networks to reduce costs and improve sub-system reliability.
- 10.** Meet with over 300 other senior level CBTC professionals and develop future business relationships to ensure success

TUESDAY 6 NOVEMBER 2012: CONFERENCE DAY ONE

08:00 Registration and networking breakfast

CONFERENCE OPENING

08:50 Global Transport Forum welcome and opening remarks
Dan Loosemore, Head of Production, **Global Transport Forum**

1. KEYNOTE SESSION: BEYOND METROS: WHY CHOOSE CBTC?

BUSINESS CASE SESSION

09:00 TO 09:05 – PART 1: INTRODUCTION TO THE EVOLUTIONS IN CBTC DEPLOYMENT

Session moderator: **George Nagel**, Signalling and Train Control Project Manager, **Amsterdam Metro**

Introductory remarks: With the need to reduce costs and improve performance it is not only metros turning to CBTC but railways and monorails. The introduction will highlight why CBTC is being selected to enhance flexibility and lower lifecycle costs and look at the evolution in CBTC.

- 09:00 Moderator's introduction to the session**
- Understanding the business case for CBTC deployments on railways and urban lines
 - Justifying CBTC deployments and assessing the operational and cost advantages VS ERTMS systems
 - Utilising CBTC systems to enhance capacity, throughput, flexibility and safety
 - Successful technology selections and overcoming interoperability challenges on urban and mainlines
 - The impact of new deployments on lifecycle costs and the passenger journey experience

09:05 TO 09:50 – PART 2: STRATEGIC KEYNOTES ON IMPLEMENTING CBTC AND DEFINING SYSTEM NEEDS

Keynotes:The keynotes feature the industry's leading innovators, giving key best-practice insights and lessons learnt from the biggest most innovative projects to overcome challenges in deploying CBTC and highlight the potential for CBTC beyond metros

09:05 Railway keynote address: The business case for CBTC and successfully integrating the system with ERTMS deployments
Duncan Cross, Deputy Director Operations, Overground and Crossrail, **Transport for London**

09:20 Operator keynote address: Utilising CBTC to enhance capacity, improve service and increase revenue
Neil Morris, Head of Engineering, **Dubai Metro (Serco)**

09:35 Event partner keynote address: CBTC: A key enabler to intelligent transport systems
Stephane Feray-Beaumont, Product Group Director, **GE Transportation**

09:50 TO 10:30 – PART 3: POLL, DEBATE AND CONCLUSIONS ON THE BUSINESS CASE FOR CBTC DEPLOYMENTS

Audience poll: Encouraging interaction and working towards a consensus, delegates vote on the potential for CBTC deployments on more complex rail networks.

- 09:50 Audience poll: Can CBTC technology work successfully on mainline rail networks?**
- Yes, absolutely it has all the features necessary to do so
 - There is potential but it needs to be carefully integrated
 - The system can not deal with the complexities of mainline networks
 - Undecided

Panel debate: The panel debate encourages audience interaction to make sure your key questions are addressed. The panelists will debate the potential of CBTC beyond metros and discuss the evolution of the technology

09:55 Panel debate: The future of CBTC and the potential for CBTC deployments to enhance performance on metro and non metro lines
Duncan Cross, Deputy Director Operations, Overground and Crossrail, **Transport for London**
Stephane Feray-Beaumont, Product Group Director, **GE Transportation**
Neil Morris, Head of Engineering, **Dubai Metro (Serco)**

Concluding remarks: The moderator will draw the strategic and technical strands of the session together, in a short concluding summary.

10:25 Moderator's concluding summary of the session

10:30 Networking coffee

2. STRATEGICSESSION: CBTC USER GROUP: OPTIMISING CBTC OPERATIONS

USER GROUP

11:15 TO 12:00: – PART 1: OPTIMISING CBTC PERFORMANCE: USER GROUP PRESENTATIONS

User Group chairman: **Anne-Grethe Foss**, Chief Operations Officer, **Metroselskabet**

Chairman introduction and User Group presentations:
It is crucial for metro operators to optimise system performance and meet passenger needs. The User Group chairman will outline key challenges in doing so and then 4 representatives of the global Users Group will highlight their best-practice strategies for implementation and operation, in a series of 10 minute presentations.

11:15

Moderator's introduction and CBTC User Group presentations

- Exploiting CBTC technology to increase capacity, reduce headways and enhance passenger numbers
- Taking advantage of CBTC to provide sustainable transportation and reduce lifecycle costs
- Maximising the safety and performance of the system to enhance reliability
- Designing CBTC systems to make future evolutions and migrations easier and more cost-effective

Kho Hean Siang, Executive Vice President, Trains, **SMRT**

Sim Wee Meng, Group Director, **LTA**

Jesus Prieto, Senior Signalling Engineer, **Metro de Caracas**

Ricardo Cárdenas, CBTC Project Manager, **Metro de Santiago**

12:00 TO 12:20 – PART 2: AUDIENCE POLL AND USER GROUP FORUM ON IMPLEMENTING CBTC SYSTEMS SUCCESSFULLY

Audience poll: Encouraging interaction and debate between operators and suppliers, delegates will vote on the importance of collaboration between the metro and the supplier when planning and implementing CBTC systems.

12:00

Audience poll: Can effective collaboration during the planning and implementation phase help to reduce costs and improve long-term performance?

- A. Yep collaboration is crucial to both minimise cost and enhance long-term ROI
- B. It will certainly help to reduce CAPEX but will have little operational impact
- C. There must be a long-term maintenance agreement in place if costs are to be reduced long-term.
- D. It will have little impact on cost but will improve operations long-term

CBTC User Group forum: The CBTC User Group representatives will discuss the importance of collaboration in implementing CBTC systems

12:05

CBTC User Group forum: Best-practice in implementing CBTC systems and enhancing collaboration to reduce costs and delays.

12:20 TO 12:40 – PART 3: AUDIENCE POLL AND USER GROUP FORUM ON OPTIMISING CBTC OPERATIONS

Audience poll: Encouraging interaction and debate between operators and suppliers, delegates will vote on the single most important feature of CBTC systems and this result will be analysed during the CBTC User Group forum

12:20

Audience poll: What is the single most important benefit that CBTC systems offer operators?

- A. Increased safety and reliability
- B. Increased capacity and reduced headway
- C. Reduced costs
- D. Improved auxiliary functions and enhanced passenger services

CBTC User Group forum: The forum will address best-practice strategies for operating CBTC

12:25

CBTC User Group forum: Best-practice in operating CBTC systems to reduce delays, minimise operational costs, improve performance and increase revenue

12:40 TO 12:45 – PART 2: AUDIENCE POLL AND USER GROUP DISCUSSION ON IMPLEMENTING CBTC SYSTEMS

Concluding remarks: The chairman will draw the strands of the session together, in a short concluding summary.

12:40

Moderator's concluding summary of the session

12:45 Networking lunch

3. BREAKOUT SESSIONS	A) EFFECTIVE PROJECT MANAGEMENT	B) IMPROVING ENERGY EFFICIENCY	C) ENHANCING PASSENGER EXPERIENCE
SESSION THEME	OPERATIONAL PERFORMANCE SESSION	BUSINESS CASE SESSION	FUTURE DEVELOPMENT SESSION
14:00 TO 14:15 - PART 1	INTRODUCTION TO SUCCESSFUL PROJECT MANAGEMENT TO REDUCE DELAYS AND ENHANCE LONG-TERM OPERATIONS	INTRODUCTION TO SUSTAINABLE METRO SYSTEMS AND COST-SAVING EFFICIENCY	INTRODUCTION TO DEVELOPING PASSENGER INFORMATION TO IMPROVE SERVICE AND PERCEPTION OF RELIABILITY
<p>Moderator presentation: The moderator will give a 15-minute presentation detailing best-practice strategies on their respective topics and highlighting major challenges. The moderator will then set each group in the breakout a key question to examine and discuss.</p>	<p>Moderator's opening presentation: Defining effective migration plans and improving collaboration to enhance operational efficiency</p> <p>Hugh Bridge, Programme Delivery Engineer, London Underground</p>	<p>Moderator's opening presentation: Developing energy efficient operations and the impact on cost and performance</p> <p>Thomas Godfrey, Director, Product Management, Bombardier Transportation</p>	<p>Moderator's opening presentation: Effectively collaborating with the supplier to offer the best possible service to the passenger.</p> <p>Gabriel Colceag, VP Rail Signalling – Urban, Thales Group</p>
14:15 TO 15:00 – PART 2	ROUNDTABLE DEBATE AND INTERACTION TO DEFINE BEST-PRACTICES IN EFFECTIVE PROJECT MANAGEMENT	ROUNDTABLE DEBATE AND INTERACTION TO DEFINE BEST-PRACTICES IN REDUCING COST THROUGH ENERGY EFFICIENCY	ROUNDTABLE DEBATE AND INTERACTION TO DEFINE BEST-PRACTICES IN IMPROVING JOURNEY EXPERIENCE
<p>Breakout Discussions: Sitting in large groups, delegates are given the platform to engage, examine and exchange views on the moderator's questions and presentation. This is an interactive session so be ready to share your ideas!</p>	<p>Key topics to debate:</p> <ul style="list-style-type: none"> Defining system needs and ensuring minimal disruption during migration Collaborating with the supplier to reduce delays and ensure optimal long term performance Best practices in managing the testing processes to ensure safe and reliable systems Developing a long-term view that maximises ROI and allows for further applications and future upgrades Integrating the new system with the existing network and ensuring sub-systems are effectively integrated 	<p>Key topics to debate:</p> <ul style="list-style-type: none"> Developing sustainable and green metro networks of the future Lowering operational costs through increased energy efficiency Assessing the potential impact on operations: Will it increase journey time? Creating a strategy that optimises energy savings without reducing speed of operations Building energy efficiency into the long-term operational strategy to reduce lifecycle and maintenance costs 	<p>Key topics to debate:</p> <ul style="list-style-type: none"> Reducing service delays with CBTC to enhance perceptions of reliability from the public Exploiting the auxiliary functions of CBTC to improve information displays at stations and on metros Deploying real-time information to inform passengers about expected delays and increase satisfaction rates Improve onboard information with live updates and effective PA systems Use modern technology to improve service levels, retain ridership and increase revenue

15:00 TO 15:30 – PART 3	SUMMARY OF BEST PRACTICE STRATEGIES AND CONCLUSIONS ON PROJECT MANAGEMENT	SUMMARY OF BEST PRACTICE STRATEGIES AND CONCLUSIONS ON ENERGY EFFICIENT OPERATIONS	SUMMARY OF BEST PRACTICE STRATEGIES AND CONCLUSIONS ON ENHANCING PASSENGER EXPERIENCE
<p>Breakout feedback: Each breakout table will nominate a spokesperson that will report back to the entire audience on their answers to the specific question assigned.</p>	<p>Spokesperson for each group gives feedback to moderator on key findings</p>	<p>Spokesperson for each group gives feedback to moderator on key findings</p>	<p>Spokesperson for each group gives feedback to moderator on key findings</p>
<p>Concluding remarks: A summary of the session outcomes and takeaways.</p>	<p>Moderator's concluding summary of the session</p>	<p>Moderator's concluding summary of the session</p>	<p>Moderator's concluding summary of the session</p>
<p>15:30 Networking coffee break</p>			

4. TECHNICAL SESSION: ENHANCING SYSTEMS INTEGRATION

OPERATIONAL PERFORMANCE SESSION

16:15 TO 16:20 – PART 1: INTRODUCTION TO THE KEY CHALLENGES IN ENSURING FULLY INTEGRATED OPERATIONS

Session moderator: Kimmo Reiman, Project Manager, Metro Automation, HKL

Introductory remarks: To advance operations and improve journey experience, effective integration with sub-systems and auxiliary controls is imperative. This introduction highlights the challenges in effective integration and communication networks to reduce costs and delays and ensure safety.

16:15

Moderator's introduction to the session

- Ensuring safe and effective radio and communication networks to reduce delays and improve reliability
- Overcoming integration challenges to ensure sub-systems are being deployed effectively
- Using auxiliary controls to enhance passenger information, CCTV and communications
- Enhancing data capability and managing all elements of train operation
- Managing control centre messages effectively to prevent delays and ensure effective critical communications

16:20 TO 17:05 – PART 2: TECHNICAL CASE STUDIES ON INTEGRATING SYSTEMS TO ENHANCE SAFETY AND SERVICE

Case studies: The case studies from leading experts on systems integration and communication systems, provide live examples of solutions available to optimize sub-systems and auxiliary functions to meet needs and advance automation

16:20

Case study: Integrating communication networks to increase reliability of critical communications and ensure fully integrated transport management
Kimmo Reiman, Project Manager, Metro Automation, HKL

16:35

Case study: Effective integration of auxiliary and sub-systems to enhance communication networks
Roelf Post, Program Manager ICT, Municipality of Amsterdam

16:50

Industry insight: Meeting basic needs and simultaneously deploying innovative applications to reduce cost and improve passenger service
José M. Martín, Chief Marketing and Sales Office, Teltronic

17:05 TO 17:45 – PART 3: POLL, DEBATE AND CONCLUSIONS ON THE IMPORTANCE OF SYSTEMS INTEGRATION

Audience poll: Encouraging interaction and working towards a consensus, delegates will vote on the importance of systems integration not only for mission-critical communications but passenger information

17:05

Audience poll: How important are integrated communication networks not only for critical communications but for enhancing passenger service

- A. Systems integration not only improves safety levels but allows for greater real-time information to the passenger
- B. While important for reliable radio communication, it will make little impact on passenger service levels
- C. Integration solutions are not cost-effective at the present time
- D. They remain only a secondary consideration for metros

Panel debate: The panel debate will highlight the importance of systems integration to optimise operational performance and reduce long-term lifecycle costs

17:10

Panel debate: How to successfully deliver a total system to enhance traffic management and reduce costs

Kimmo Reiman, Project Manager, Metro Automation, HKL
Roelf Post, Program Manager ICT, Municipality of Amsterdam
Lutfu Akcil, R&D Project Coordinator, Istanbul Ulasim
José Manuel Martín, Chief Marketing and Sales Office, Teltronic
Dan Filip, Director Business Development, Transportation Solutions, Thales Group

Concluding remarks: A summary of the session outcomes and takeaways.

17:40

Moderator's concluding summary of the session

CONFERENCE CLOSE

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

18:00 Networking drinks reception

WEDNESDAY 7 NOVEMBER 2012 – CONFERENCE DAY TWO

08:00 Registration and networking breakfast

CONFERENCE OPENING

08:50 Global Transport Forum welcome and opening remarks
Dan Loosemore, Head of Production, Global Transport Forum

5. STRATEGIC SESSION: FUTURE LEGISLATION AND DEVELOPING STANDARDISATION

FUTURE DEVELOPMENT SESSION

09:00 TO 09:05 – PART 1: KEY CHALLENGES IN DEVELOPING CBTC STANDARDISATION

Session moderator: **David Briginshaw**, Editor-in-Chief, International Railway Journal

Introductory remarks:
 Demand for open procurement, reduced costs and enhanced interchangeability is driving standardisation and with global deployments increasing, regulation is also developing. The introduction highlights the impact of future CBTC standards and legislation

- 09:00 **Moderator's introduction to the session**
- What impact would ERA / European Commission directives have on the cost and operation of CBTC systems?
 - How can suppliers and operators work together to deliver interchangeable operations and low lifecycle costs?
 - Is it possible to set standards for performance and functional CBTC requirements that must be met?
 - Would further regulation work to slow deployments and stifle innovation in CBTC technology?
 - Guaranteeing compatibility to reduce costs and allow for more open procurement in future.

09:05 TO 09:50 – PART 2: STRATEGIC CASE STUDIES ON THE IMPACT OF FUTURE STANDARDISATION

Case studies: The case studies from experts on developing CBTC systems and working towards interoperability, provide live examples of how standardization may impact CBTC costs and performance and give insights on the shape of future legislation

- 09:05 **Case study: Setting standards for performance and the impact of regulation on CBTC deployments and performance**
George Hacken, Senior Director, Vital Systems, NYCT
- 09:20 **Industry insight: Working collaboratively with the operator to bring down costs and allow for future advancements**
Melih Arpacı, Director, Pre Acquisition Management, Mass Transit, Siemens AG
- 09:35 **Industry insight: A standard state of the art CBTC for the future: Lessons learned and foundations**
Jose Luis Domingo Zayas, Mass Transit Line of Business Director, Invensys Rail

09:50 TO 10:30 – PART 3: AUDIENCE POLL AND DEBATE ON THE POTENTIAL FOR CBTC STANDARDS

Audience poll: Encouraging interaction and debate between operators and suppliers, delegates will vote the feasibility of a defined set of standards for CBTC to reduce costs and improve performance

- 09:50 **Audience poll: Is global standardisation of CBTC systems possible?**
- A. A set of standards would be possible with greater collaboration
 - B. It is desirable to reduce costs but only possible if enforced by regulation
 - C. It may be possible but would slow down the development of CBTC technology
 - D. It is neither possible nor is it desirable

Panel debate: The panel will debate the impact that any future legislation would have on the CBTC industry and discuss the potential for standardisation to reduce costs

- 09:55 **Panel debate: The impact of further regulation on the CBTC industry and the importance of standardisation in creating an improved ROI**
Jose Luis Domingo Zayas, Mass Transit Line of Business Director, Invensys Rail
George Hacken, Senior Director, Vital Systems, NYCT
Melih Arpacı, Director, Pre Acquisition Management, Mass Transit, Siemens
AG Claudio Traverso, Vice President Market Intelligence, Ansaldo STS
Daniele Bozzolo, Chairman, CENELEC European Committee for Electrotechnical Standardization

Concluding remarks: A summary of the session outcomes and takeaways.

10:25 **Moderator's concluding summary of the session**

10:30 Networking coffee

6. TECHNICAL SESSION: INCREASING SAFETY AND THE NEED FOR BACK-UP SYSTEMS

OPERATIONAL PERFORMANCE SESSION

11:15 TO 11:20 – PART 1: KEY CHALLENGES IN INCREASING SAFETY AND DEFINING THE NEED FOR FALLBACK SYSTEMS

Session moderator: Pier Galileo La Scala, Head of Exploitation and Operations, Turin Metro

Introductory remarks: Effective testing procedures and safety processes are crucial both to ensure passenger safety and prevent costly accidents and delays. CBTC offers the best solution but the introduction highlights the challenges in optimising testing and certification assesses the need for fallback systems.

11:15

Moderator's introduction to the session

- How to optimise testing processes and the differences between brownfield / greenfield projects
- Putting effective safety measures in place to reduce delays and eliminate failures
- Is there still a need for redundancy systems and what is the risk of not having them?
- The impact of fallback systems on operations and maintenance costs and how to reduce these costs
- What is the future of CBTC safety and are fallback systems a necessary part of it?

11:20 TO 12:05 – PART 2: TECHNICAL CASE STUDIES ON EXPLOITING TECHNOLOGY AND COST-EFFECTIVE DEPLOYMENT

Case studies: The case studies featuring experts on CBTC Safety, provide live examples of how global metros look to develop safety systems and deliver key insights into leading safety processes and strategies to reduce costs and avoid delays.

11:20

Case study: Ensuring safety and efficiency with mixed fleet operations
Ahmad Nizam Mohamed Amin, Chief Operating Officer, Kelana Jaya Line, Rapid KL

11:35

Industry Insight: Utilising CBTC technology to reduce the need and costs for fallback systems whilst improving safety
Antonio Muñoz, Head of CoE, Automated Metro Systems, **Bombardier Transportation**

11:50

Industry insight: Defining a cost-effective process for certification to reduce costs and ensure reliability
Alexandre Betis, Principal Business Development Manager, **Ansaldo STS**

12:05 TO 12:45 – PART 3: AUDIENCE POLL, DEBATE AND CONCLUSIONS ON THE NEED FOR FALLBACK SYSTEMS

Audience poll: Encouraging interaction and debate between operators and suppliers, delegates will vote the necessity of fallback systems for global operators considering the perceived cost of any failure and extra costs they cause

12:05

Audience poll: Are back-up systems essential for any metro network?

- A. Absolutely, this is the only solution in case of a fault with the system
- B. It's not ideal but it is necessary to maximise safety
- C. There is absolutely no reason to deploy fallback systems with CBTC
- D. Undecided

Panel debate: The panel discussion will highlight the key to a successful and quick testing process and comprehensive safety procedure to reduce costs and improve reliability

12:10

Panel debate: Delivering optimum safety and with CBTC systems and reducing long-term costs

Ahmad Nizam Mohamed Amin, Chief Operating Officer, Kelana Jaya Line, Rapid KL
Alberto Forchino, Head of Special Engineering Projects, **Turin Metro**
Antonio Muñoz, Head of CoE, Automated Metro Systems, **Bombardier Transportation**
Nicolas Breton, Technical Director, **Prover Technology**
Alexandre Betis, Principal Business Development Manager, **Ansaldo STS**

Concluding remarks: A summary of the session outcomes and takeaways.

12:40

Moderator's concluding summary of the session

12:45 Networking lunch

7. TECHNICAL SESSION: REDUCING LIFECYCLE COSTS AND PREVENTING OBSOLESCENCE

BUSINESS CASE SESSION

14:00 TO 14:05 – PART 1: KEY CHALLENGES IN ENSURING CBTC LIFECYCLE

Session moderator: Aurelio Aurelio Rojo Garrido, Secretary General, ALAMYS

<p>Introductory remarks:With CBTC systems now in use across the globe and technology advancing at such a tremendous rate, metros must consider the total cost of ownership. This session looks at how CBTC can reduce lifecycle costs and debates how to prevent obsolescence.</p>	<p>14:00</p>	<p>Moderator's introduction to the session</p> <ul style="list-style-type: none"> Defining the total cost of ownership and maximising ROI on CBTC deployments Key ways to reduce maintenance and operational costs, increasing lifecycle and preventing obsolescence Working with the supplier to reduce costs over the whole of the systems life Deploying a CBTC system with the future in mind to ensure future upgrades are cost-effective Effective use of diagnostics and key performance monitoring to prevent delays and reduce costs
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14:05 TO 14:35 – PART 2: TECHNICAL CASE STUDIES ON MAXIMISING LIFECYCLE AND REDUCING COSTS

<p>Case studies: The case studies featuring experts across financial, operations and maintenance of CBTC systems provide live examples of how metros can</p>	<p>14:05</p>	<p>Case study:Effective maintenance strategies for CBTC systems to reduce costs and prevent obsolescence Philippe Leguay, International Urban Rail Systems Transport Director, Keolis</p>
	<p>14:20</p>	<p>Case study:The importance of CBTC technology development and its application in China Tao Tang, Lab of Rail Traffic Control and Safety, Beijing Jiaotong University</p>
	<p>14:35</p>	<p>Industry insight:Working collaboratively with the operator to reduce total cost of ownership and enhance all benefits that can be expected from CBTC systems. Thierry Bonnefous, Urban Solution Director, Alstom Transport</p>

14:35 TO 15:30 – PART 3: AUDIENCE POLL, DEBATE AND CONCLUSION ON CBTC TOTAL COST OF OWNERSHIP

<p>Audience poll: Encouraging interaction and working towards a consensus, delegates will vote on the potential for CBTC diagnostics and preventative maintenance to reduce lifecycle costs</p>	<p>14:50</p>	<p>Audience poll:Can the diagnostic and performance indicators CBTC provides be used to reduce costs and prevent obsolescence?</p> <p>A. It will certainly reduce costs compared to legacy systems B. If staff were trained and taught how to effectively use them, it would have the potential to do so C. The total cost of ownership will still be more in the long-term than with legacy systems D. Undecided</p>
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<p>Panel debate: The panelists will highlight the potential for CBTC to reduce lifecycle costs and discuss the issue of obsolescence and total cost of ownership</p>	<p>14:55</p>	<p>Panel debate: Successfully reducing maintenance and lifecycle costs and maximising ROI with CBTC deployments Tao Tang, Lab of Rail Traffic Control and Safety, Beijing Jiaotong University Philippe Leguay, International Urban Rail Systems Transport Director, Keolis Dorota Popinska, Chief Financial Officer, Warsaw Metro Thierry Bonnefous, Urban Solution Director, Alstom Transport</p>
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<p>Concluding remarks: A summary of the session outcomes and takeaways.</p>	<p>15:25</p>	<p>Moderator's concluding summary of the session</p>
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15:30 Networking coffee break

8. INTERACTIVE ROUNDTABLE DEBATE: SHAPING FUTURE CBTC DEVELOPMENTS

A FUTURE INNOVATION SESSION

16:15 TO 16:30 – PART 1: MODERATOR'S INTRODUCTORY PRESENTATION

Session moderator:

Moderator presentation: With CBTC systems advancing and technology improving, the challenge moving forward is to define exactly what is needed from the next-generation solutions to overcome current challenges and optimize performance. How can suppliers and operators work together, to find new best-practice solutions?

16:15

Moderator's opening presentation:

Klavs Hestbek Lund, Project Director, **Metroselskabet**

José M. Marín, Chief Marketing and Sales Office, **Teltronic**

16:15 TO 17:00 – PART 2: ROUNDTABLE DEBATES AND INTERACTION

Roundtable debates: Sitting on cabaret-style roundtables in large groups, delegates are given the platform to engage, examine and exchange views on the importance of planning for future-generation technologies. This is an interactive session so be ready to share your ideas!

16:30

Questions and topics for metro operators to consider

- What do we need from future CBTC systems?
- Optimising CBTC performance and operations
- Minimising maintenance and lifecycle costs
- Protecting CBTC investments and generating ROI
- Successfully planning future operations

Questions for industry suppliers to consider

- What is the next-generation of CBTC?
- Working with operators to bring down overall costs
- Developing an integrated operations and maintenance strategy
- Maximising lifecycle of CBTC systems
- Creating additional functionality for the operator

17:15 TO 17:45 – PART 3: FEEDBACK FROM EACH ROUNDTABLE AND MODERATOR'S CONCLUDING SUMMARY

Roundtable feedback: Each roundtable will nominate a spokesperson that will report back to the entire audience on their best-practice strategies discussed to develop effective business plans

17:15

Roundtable spokesperson feedback to moderator on key findings for CBTC Users

Roundtable spokesperson feedback to moderator on key findings for CBTC Suppliers

Concluding remarks: A summary of the session's key outcomes and takeaways.

17:30

Moderator's concluding summary of the session

CONFERENCE CLOSE

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

THURSDAY 8 NOVEMBER 2012 – CONFERENCE DAY THREE

The dedicated workshops offer participants access to detailed insights that delve deeper into the specific technical challenges discussed throughout the conference. Led by subject matter experts with insights from leading speakers, the hands-on format encourages maximum interaction and idea sharing amongst workshop leaders and delegates. To meet the unique needs of each sector of the industry, there is a choice of two unique workshops offering participants best-practice strategies on the latest industry challenges.

INTERACTIVE WORKSHOPS	INCREASING CAPACITY AND MAXIMISING EFFICIENCY WITH DRIVERLESS OPERATIONS	ENHANCING COLLABORATION TO REDUCE COSTS AND ENHANCE LIFECYCLE
09:00 – 09:15 PART 1	WORKSHOP LEADER CASE STUDY	WORKSHOP LEADER CASE STUDY
<p>Workshop Leader presentation: The workshop leader will give a 15-minute presentation looking at the following topics and highlighting major challenges.</p>	<p>Case Study: The role of CBTC technology in improving capacity and service</p> <p>David Dimmer, Manager Strategy, Transportation Solutions, Thales Group</p>	<p>Case Study: The importance of collaboration in defining project needs and ensuring long term success</p> <p>Damien Convert, Commercial Director, Innovation, GE Transportation</p> <p>Franco Fabbian, Managing Director, Intelligent Control Systems (EMEA) GE Transportation</p>
09:15 TO 10:30 – PART 2	OPEN DEBATE AND DISCUSSION	OPEN DEBATE AND DISCUSSION
<p>Participant debate and discussion: Having heard the presentation from the moderator, the participants will discuss the questions raised and at the end of the session, the moderator will draw some conclusions on the key points.</p>	<p>Open debate and discussion: Participants will discuss in groups the issues raised by the presentation and consider the following points:</p> <ul style="list-style-type: none"> • Exploit CBTC to enhance capacity • The key to minimising headways • Maintaining efficiency with increasing ridership • The long-term impact of CBTC on passenger numbers • Utilising auxiliary functions to improve service 	<p>Open debate and discussion: Participants will discuss in groups the issues raised by the presentation and consider the following points:</p> <ul style="list-style-type: none"> • Defining the drivers that will influence the ROI and lifecycle of the investment • Aligning supplier innovations to the long-term needs of the metro • Developing an agreement that will make future innovations easier to deploy • Utilising CBTC to generate additional revenue
10:30 TO 11:15	NETWORKING COFFEE BREAK	NETWORKING COFFEE BREAK
11:15 TO 11:30 – PART 3	WORKSHOP LEADER CASE STUDY	WORKSHOP LEADER CASE STUDY
<p>Workshop Leader presentation: The workshop leader will give a 15-minute presentation looking at the following topics and highlighting major challenges.</p>	<p>Case Study: Defining the requirements of driverless systems and ensuring smooth long-term implementation</p>	<p>Case Study: Working together to bring down maintenance costs and enhance lifecycle of new systems.</p>
<p>Participant debate and discussion: Having heard the presentation from the moderator, the participants will discuss the questions raised and at the end of the session, the moderator will draw some conclusions on the key points.</p>	<p>Open debate and discussion: Participants will discuss in groups the issues raised by the presentation and consider the following points:</p> <ul style="list-style-type: none"> • Defining the necessary functionality to improve performance • Key strategies to ensure a smooth migration • The potential of driverless technology to reduce costs • Working with suppliers to define requirements and meet needs 	<p>Open debate and discussion: Participants will discuss in groups the issues raised by the presentation and consider the following points:</p> <ul style="list-style-type: none"> • Developing structured upgrade plans to reduce costs and enhance lifecycle • The impact of predictive maintenance strategies to reduce delays and OPEX costs • Successfully collaborating with the supplier to maximise lifecycle of new deployments • The necessity of having a maintenance agreement as part of a procurement contract.

12:45 TO 14:00	NETWORKING LUNCH	NETWORKING LUNCH
14:00 – END OF DAY THREE	CHOICE OF SITE VISITS	CHOICE OF SITE VISITS

CHOICE OF SITE VISITS

Following lunch, delegates can choose between two innovative site visit options ran by our supporters GVB and Amsterdam metro. Our unique site visits to GVB Control Centre and the construction of the NZL give delegates a first-hand look at the latest industry projects and provide a live example of the issues discussed over the first two days.

Delegates will leave the conference hotel and make their way to central station for the visits where each group will meet with the respective representatives from the NZL project and GVB for exclusive guided tours. The tours will finish not later than 16:30

Please make your choice when registering and for further details email daniel.loosemore@globaltransportforum.com. **Places will be allocated on a First Come First Served basis so book now to avoid disappointment!**