INTERNATIONAL UNION
OF RAILWAYS

NSW
GOVERNMENT

The 5th UIC Asia-Pacific
Control-Command and Signalling
& Telecommunications
Workshop

Sydney, Australia
3-4 May 2018

WELCOME MESSAGE

UIC is pleased to invite you to the 5ᵀᴴ UIC Asia-Pacific Workshop on Control Command Signalling and Telecoms (CCS&Tlc) which will take place in Sydney (Australia), hosted by Transport for New South Wales (TfNSW), from 3ᴿᴰ to 4ᵀᴴ of May 2018.

We look forward to welcoming you in Sydney from 3ᴿᴰ to 4ᵀᴴ May 2018

Since 2007 the UIC Asia Regional Assembly has had as a focus CCS and Telecommunications Development Technologies, integrated into the broader UIC strategy to achieve a harmonised Traffic Management and Control-Command and Signalling system.

The workshop aims to inform both an understanding of leading technologies and a base for core system requirements across world railways.

OVERVIEW

Venue

The 5ᵗʰ UIC Asia-Pacific Workshop on Control Command Signalling and Telecoms (CCS&Tlc) will take place at the International Convention Centre Sydney, Room C4.5 in Sydney (Australia).

http://www.iccsydney.com.au

Language

The conference will be conducted in English, including papers, presentations and discussion.

PROGRAMME

THURSDAY 3 MAY 2018

08:30 - 09:00   **Registration**

09:00 - 09:10   **Opening Ceremony**

09:10 - 10:00   **Keynote Speeches**

10:30 - 12:30   **SIGNALLING SESSION 1 – "Optimal modelling and safety assessment of Signalling Systems, via standardized methods and languages"**

This opening session will examine the management of rail signalling assets data, incorporating the need for accuracy and integrity (with appropriate GIS systems) and integration on with other rail assets including track, civil works, rolling stock and telecommunications. And It will also look at data validation for the final safety assessment of the system.

12:30 - 13:30   **Lunch**

13:30 - 15:00   **SIGNALLING SESSION 2 - "Cybersecurity"**

With advanced train control systems relying upon radio transmission of safety related data between trackside and onboard, these radio links could easily become the target of cyber-attacks. Moreover the gateways for data exchange via the Internet are also a potential security weakness. This session aims to showcase the most advanced research and techniques used to secure data against cyber-attack.

15:30 - 17:00   **SIGNALLING SESSION 3 - "Train Control and future trends"**

This session will provide a status update on the development and integration of new CCS systems with Automatic Train Operation (ATO), looking to a higher level of optimisation of the train run by reducing the level of human responsibility, as well as the integration with Automatic Train Supervision (ATS), which aims to optimise rail operations.

Possible use of non-rail specific signalling products, such as PLCs from nuclear or process control industries or even COTS products which offer greater industrial volumes and wider applications will also be highlighted. Moreover, satellite integration within CCS could also bring significant cost savings and increased safety in various railway operations.

Further advantages of system implementation, such as broken rail detection on lines not equipped with train detection systems, will also be covered in this session.

17:00   **Welcome cocktail**

FRIDAY 4 MAY 2018

09:00 - 10:30   TELECOM SESSION 1 - "The regulatory contexts and migration strategies toward future technologies"

We here expect to get a comprehensive description of the regulatory environments of the different world regions as well as the envisaged strategies for achieving the significant modifications required to guarantee the future of Rail Signalling systems and their adaptation to rapidly evolving technology.

11:00 - 12:30   TELECOM SESSION 2 - "The Future Railway Mobile Communication System and other main radio development projects"

This session will provide an overall update on the main ongoing projects worldwide targeting the evolution of the current standard telecommunication system GSM-R, which has an expected lifespan until 2030, and towards the new generation of digital data communication systems, in particular the UIC master project FRMCS and its relationship with standardisation bodies such as ETSI and 3GPP.

12:30 - 13:30   Lunch

13:30 - 15:00   TELECOM SESSION 3 - "The suppliers' view on products and applications for safety and security"

In this session selected main telecommunication suppliers worldwide will have the opportunity to describe their envisaged solutions to the rail industry needs as covered in the two previous sessions. There will be an opportunity to demonstrate integrated solutions for rail telecommunications and the monitoring /event recognition of different components of the rail environment.

15:30 - 16:00   Conclusion Session

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REGISTER ONLINE

Registration online on the UIC website:
https://events.uic.org/5th-uic-asia-pacific-control-command-signalling-and-telecommunications-workshop

Registration fee :

UIC members : Free of charge
Non UIC members: 500 Euros

Contact

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