

UIC Global Signalling & Telecom conference



21-23 March 2013
Delhi, India

OBJECTIVES

The International Conference on Train Control Command Signalling and Radio-Communication organised by UIC, Indian Railways and RailTel Corporation of India Ltd. is confirmed to take place from 21 – 23 March 2013 in New Delhi, India.

This conference is a world level expression of cooperation in the railway Signalling and Radio-Communication domains, as a consequence of the growing importance of the international market and the vital needs of train operators and rail infrastructure managers, within the chain of transmission of information for train control, diagnosis, maintenance, efficient management and traffic control, passenger information and leisure.

It aims at enabling open, relevant and comprehensive information exchange on the state of the art, technologies, needs and requirements, as well as the vision of future systems. Up to 600 Signalling and Telecommunication specialists and VIPs from around the world are expected. Participating representatives of major industries and developing centres may also have the opportunity to take part in interactive dialogue, to endorse the requirements, vision and position of the railways and to express their efficient responses and future developments.

The two sections of the conference, led by 30 renowned speakers carefully selected by UIC (train operating companies, infrastructure managers, railway suppliers), will debate subjects such as:

- Practical, real implementation of systems and lessons learned
- Interoperability, modularity and inter-changeability
- Consequences of rapid developments of technology – especially in the IT and radio-communication – IP introduction
- Increased role of common norms and standards in a globalised technology world
- Supply with guarantees for efficient life cycle operation
- Decisions on new regional railway projects.



In more detail and in the scope of the conference, the conclusions and outputs should provide the railway train control command signalling and radio communication domains with a clear vision on achievements and of development tendency with concrete approach to demonstrate:

- The capability of satisfying the basic needs and requirements for evolution in the rail transportation system
- The opportunities to adapt modern systems to specific needs and requirements urged from particular traffic and train operations, regional developments, national inheritance and other such considerations
- The maintenance of an efficient platform to largely federate the knowledge, the best practice, the converging requirements and assess the supply base for the systems in their evolution of techniques and technologies
- The provision of support to the win-win process in the user-manufacturer relationship, where understanding of requirements and competition shall be responding to the market and the use of leading technologies to assure migration based on large technology developments.

The results of the study on “PROOF OF CONCEPT TRIAL OF VSAT BASED TRAIN CONTROL COMMUNICATION SYSTEM” undertaken in 2012 by UIC will also be detailed during this conference.

This event is free for UIC members and open for participation to any company interested in these topics.

**WE LOOK FORWARD TO MEETING
YOU SOON IN DELHI
FROM 21 – 23 MARCH 2013**

For further information please contact
Béatrice Ségéral, Senior Advisor,
Institutional Relations Department:
segeral@uic.org



PRACTICAL INFORMATION

VENUE

The UIC Global Signalling & Telecom Conference will take place at the Manekshaw Convention Center in Delhi.



EXHIBITION HALL

There shall be 3 days exhibition to be held concurrently from 21st till 23rd March 2013.

SPONSORSHIP & EXHIBITION

To get more information, please contact Mr. Anshul Gupta:
anshulgupta63@gmail.com

LANGUAGE

The seminar will be conducted in English including papers presentation and discussion.



TECHNICAL VISIT

Signalling – ETCS, RRI, Divisional Control Office, Delhi Metro OCC

Telecom - RailTel NOC, GSM-R, Satellite Hub

REGISTRATION

For UIC members, it is free of charge. Registration on the UIC website:

<http://www.uic.org/spip.php?article3028>.

For the industries (registration, exhibition and sponsorship), please contact Mr. Anshul GUPTA, RailTel:
anshulgupta63@gmail.com

VISA

If you need help to get your visa, please contact Mr. Anshul Gupta:
anshulgupta63@gmail.com.

If you need a nominative invitation letter, please send him a copy of your passport and the visa form available on the UIC website completed:

<http://www.uic.org/spip.php?article3028>

CONFERENCE ACCOMMODATION:

4 hotels have been selected (special rates and transfer/transport available):

- HOTEL LE MERIDIEN
- HOTEL THE RADISSON BLU
- HOTEL ITC FORTUNE PARK
- HOTEL BEST WESTERN - TAURUS

Hotels Reservation forms and details are available on the UIC website:

<http://www.uic.org/spip.php?article3028>



PROGRAMME

Thursday 21 March 2013

08h30~09h30 Registration

09h30~10h30 Welcome & Opening

- Mr. Pawan Kumar BANSAL, Minister for Railways, India
- Mr. K. J. S. Prakash REDDY, Minister of State for Railways, India
- Mr. Vinay MITTAL, Chairman Railway Board, India
- Mr. Kul BHUSHAN, Member Electrical , Railway Board, India
- Mr. Jean-Pierre LOUBINOX, Director General, UIC
- Mr. R. K. BAHUGUNA, MD, RailTel, India

Vote of thanks by Mr. Anshul GUPTA, Secy IRSE, India

10h30~11h00 ----- Coffee break -----

Technical visit arranged for signalling installations at New Delhi station (one of world's largest RRI). The technical visit will be organised in parallel of the Telecom sessions from 11h00 to 18h00.

11h00~13h00 TELECOM SESSION 1

"Railways Radio Communications status in Asia Pacific and European Region"

Abstract: Railways Radio Communication situation within the Railway Infrastructure Manager or in the region: State of the art, Close Future (around 5 years time) plans; Issues – Interferences, license, frequency capacities, etc. Implemented applications and foreseen evolution.

Chairman: Robert SARFATI

UIC GSM-R Operators Group Chairman/SYSTRA Consultant Director

- **11h00~11h25**
Indian Railways Communication Scenario and Road Ahead
Mr. P. K. SRIVASTAVA, Additional Member, Telecom, Indian Railways
- **11h25~11h45**
GSM-R in Europe
Mr. Gottfried WINTER – Funkwerk Kolleda, representing GSM-R IG
- **11h45~12h05**
Radio Communications Status in Australia – Future plans
Mr. Derel WUST, ARA, Australia
- **12h05~12h25**
The present and future of Mongolian Railways
Mr. B. ENKHDALAI, UBTZ
- **12h25~12h50**
Constructions and applications of the GSM-R in China
Mr. JIANG Yongfu, MoR, China
- **12h50~13h00**
Questions and Answers

13h00~14h00 ----- Lunch -----

14h00~16h00 TELECOM SESSION 2

“Radio Solutions for Communication Based Signaling Systems– Requirements - IP Migration”

Abstract: Signaling requirements for radio systems: operational needs, specific functionalities, standardization needs, way forward

Chairman: Mr. P. K. SRIVASTAVA, Additional Member, Telecom, Indian Railways

- **14h00~14h20**
Radio Communication System in THSRC
Mr. Tom HSU, THSRC
- **14h20~14h40**
Evolution of Signalling on Indian Railways & Road ahead for Radio based Signalling
Mr. M. SURESH, Additional Member/Signalling Railway Board, India
- **14h40~15h00**
Trends of Signalling & Communication in the Korean Railway
Mr. YUN Hak-Sun & Mr. LEE Young-Soo, KRNA, Korea
- **15h00~15h20**
Standardisation actions taken (IEC PT 62773)
Mr. HATTORI, RTRI, Japan
- **15h20~15h40**
GPRS for ETCS – European Pilot
Mr. Dan MANDOC, UIC
- **15h40~16h00**
Questions and Answers

16h00~16h30 ----- Coffee break -----

16:30 – 18:30 TELECOM SESSION 3

“Future Railways Mobile Telecommunication Systems Solutions”

Abstract: Vision on future (beyond 2020/2025) radio systems, to be used for data and voice applications (CBTCS included), Broadband Introduction

Chairman: Mr. Dan MANDOC
UIC ERIG Chairman, GSM-R Project Manager, UIC

- **16h30~16h50**
Nokia Siemens Networks – GSM-R Evolution
Mr. Pramod KAPOOR, NSN
- **16h50~17h10**
Kapsch CarrierCom vision of GSM-R IP Migration Steps
Mr. Alexander TSYTSURA, Head of customer solution management, Railways, KAPSCH CARRIER COM
- **17h10~17h30**
Future Railways Mobile Telecommunication Systems Solutions
Mr. Sebastien Cousteix – Solution Expert, HUAWEI Technologies
- **17h30~17h50**
Future Radio based Mobile Telecom System solution for efficient Train operations
Mr. A. Seshagiri RAO, Director Planning, RailTel & Mr. Alvin LAM, Motorola Singapore
- **17h50~18h10**
GSM-R Evolution to IP
Mr. Robert SARFATI, UIC
- **18h10~18h30**
UIC Future Railways Mobile Telecommunication Systems Solutions upcoming project
Mr. Chiel SPAANS, ProRail/UIC
- **18h30~19h00**
Questions and Answers

19h00~20h00 Exhibition visit & Cocktail

Friday 22 March 2013

Technical visit arranged for telecom installations at New Delhi, Telecom Centre, Thompson Road. The technical visit will be organised in parallel of the Signalling sessions from 09h00 to 18h00.

09h00~10h30 SIGNALLING SESSION 1

“Train control systems in Asia, America, Australia and Europe – converging requirements”

Chairman: Mr. Kul BHUSHAN

Member Electrical, Railway Board, Indian Railways

- 09h00~09h20

UIC – Synthesis of modern train control core requirements – From ETCS to CTCs, PTC and JR-ATACS

Mr. George BARBU, Senior Advisor, Rail System, UIC

- 09h20~09h40

Chinese Train Control System level 3 (CTCS-3) - technology and applications

Mr. ZHANG Zhihui, CRSCD, China

- 09h40~10h00

Satisfaction of JR specific requirements by ATACS system

Mr. HASHIMOTO, JR East

- 10h00~10h20

Specific requirements and options for CCS of Indian Railways – Train Collision Avoidance System (TCAS)

Mr. Mahesh MANGAL, Senior Executive Director, Signal, RDSO

- 10:20~10h30

Discussion moderated by the UIC: Converging requirements – a reality or a dream?

10h30~11h00 ----- Coffee break -----

11h00~13h00 SIGNALLING SESSION 2

“Routing, train detection and track-side signaling requirements and developments”

Chairman: Mr. George BARBU

Senior Advisor, Rail System, UIC

- 11h00~11h20

Situation in Europe, towards a new generation of interlocking – INESS

Mr. Piero PETRUCCIOLI, Senior Advisor, Rail System, UIC

- 11h20~11h40

Interlocking requirements to satisfy the new requirements for train control

Mr. Rajeev SHARMA, Executive Director, Signal Development, Railway Board, India

- 11h40~12h10

Electronic interlocking – solutions and tendencies in China

Mr. JIN Guo, Southwest Jiaotong University, China

- 12h10~12h30

Performance of electronic interlocking enabling the integration into the JR future train control

Mr. Hideyuki KATSUSHIMA, Manager of Electrical Engineering Department & Mr. Shintarou SUZUKI, Assistant Manager of Electrical Engineering Department, West Japan Railway

- 12h30~13h00

Discussion: From classical interlocking to the wide electronic solutions via modularity and scalability

13h00~14h00 ----- Lunch -----

14h00~16h00 SIGNALLING SESSION 3

“Requirements for new technologies of train positioning and train detection”

Chairman: Mr. Piero PETRUCCIOLI
Senior Advisor, Rail System, UIC

- **14h00~14h20**
Requirements of performance for train autonomous location compatible with train control
Dr. A. S. GANESHAN, Scientist, PD-Navigation System (GAGAN & ICNSS) ISRO
- **14h20~14h40**
VSAT based Train Control communication system
Dr. B. M. SHUKLA, Professor IIT, Kanpur
- **14h40~15h10**
SATLOC – an innovative conception to reach highest operational safety target by close-loop train-track interaction based on satellite (GNSS) positioning
Mr. George BARBU, Senior Advisor, Rail System, UIC
- **15h10~15h30**
Radio Communications-Based Train Control in Singapore
Mr. Thierry BONNEFOUS & Mr. Alexis DAUGERAS, Alstom
- **15h30~16h00**
Japan: Traffic Management System high density traffic conditions
Hitachi

16h00~16h30 ----- Coffee break -----

16h30~18h00 SIGNALLING SESSION 4

“The industry vision – the evolution of CCS supply in a world-wide market”

Chairman: Mr. George BARBU
Senior Advisor, Rail System, UIC

- **16h30~16h50**
Implementation and migration strategy to radio/satellite starting from ETCS Level 1 System
Mr. Francesco INZIRILLO, MERMEC Group
- **16h50~17h10**
Mr. Bernhard STAMM, Siemens
- **17h10~17h30**
On board Broadband system for efficient train movement & operations
Mr. Nirav DAVE, Technosat communications, Mumbai
- **17h30~18h00**
Modern CCS, Bombardier

18h00~18h30 Round table: CCS converging requirements and adequate response of supply and migration

Moderator: Mr. George BARBU, Senior Advisor, Rail System, UIC

20:00 Official diner



Saturday 23 March 2013

09h00~10h30 Plenary Session Telecom & Signalling

Chairman: Mr. M. SURESH

Additional Member, Signal, Railway Board, India

- 09h00~09h30

Voice and Data requirements for a Digital Radio System in Europe, Present and Future

Mr. Dan MANDOC, Senior Advisor, Rail System, UIC

- 09h30~10h00

CCS, New Technologies and Options, Closing remarks, the point of view of railways, railway unity around core requirements

Mr. George BARBU, Senior Advisor, Rail System, UIC

- 10h00~10h30

Integrated response – engineering, testing, supply and support of migration via maintenance of high-tech (Industry representative)

10h30~11h00 ----- Coffee break -----

11h00~12h30 Round table: CCS and Telecom opportunities to join for overall performance and migration of modern train control and traffic management systems

Moderator : Rail thematic Experienced Journalist (from India)

- Mr. Kul BHUSHAN, Member Electrical, Railway Board, India
- Mr. M. SURESH, Addl Member/Signal, Railway Board, India
- Mr. P. K. SRIVASTAVA, Addl Member/Telecom, Railway Board, India
- Mr. Vincent VU, Director Institutional Relations, UIC
- Mr. Dan MANDOC, Senior Advisor, Rail System, UIC
- Mr. George BARBU, Senior Advisor, Rail System, UIC

12h30~13h30 Closing Remarks:

Mr. Arun SAKSENA, Advisor/Signal, Railway Board, India

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For further information please contact
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