

# International Railway Safety Council

Berlin, 12 to 17 October 2014

Sunday  
12 October

Arrival of  
participants:  
All day

Registration:  
1:30 - 6:30 pm

Stakeholder  
meetings:  
3:00 - 5:00 pm\*

Welcome  
Reception:  
7:00 - 10:00 pm

Monday  
13 October

Presentations &  
discussions:  
9:00 am - 5:00 pm

Partner programme:  
12:00 am - 4:00 pm

Internal exhibition:  
10:00 am-7:00 pm

Gala Dinner:  
7:00 - 10:30 pm

Tuesday  
14 October

Presentations &  
discussions:  
9:00 am - 5:00 pm

Partner programme:  
9:00 am - 5:00 pm

Core group  
meeting:  
6:00 - 8:00 pm

Wednesday  
15 October

Presentations &  
discussions:  
9:00 am - 5:00 pm

Partner programme:  
10:00 am - 1:00 pm

Farewell Party:  
7:00 - 10:30 pm

Thursday  
16 October

Technical visits:  
10:00 am - 4:00 pm

Friday  
17 October

Technical visits:  
10:00 am - 4:00 pm

\* time can be adjusted to the needs of the groups

## **Monday, 13 October 2014**

### **Session 1 “The (European) idea of standardised safety management systems”**

The European Railway Agency will discuss its views on the harmonized European railway market. In response, the national safety authority of France will give a practical overview of the challenges involved in adopting existing practices. An independent perspective based on a variety of exercises will also be presented, proposing ways to develop the European railway idea further.

1. "Safety Management Systems: Opening the market through commercial freedom and safety responsibility in the European legislative framework"  
Jen Ablitt, MA (Cantab), European Railway Agency
2. "Preserving railway knowledge in a context of withdrawal of historical national practices and rules"  
Frédéric Lisiecki | Sarah El Saad | Denis Huneau, Project officer in vehicle specification | Project officer in safety interoperability |  
General Director, French National Safety Authority: Etablissement Public de Sécurité Ferroviaire
3. "The European architecture of safety regulations for railways - critical review"  
Prof. Dr.-Ing. Wolfgang Rösch, CEO of RöschConsult Group | Court and NSA appointed expert, RöschConsult Group GmbH

### **Session 2: "Regulation challenges"**

Three supervisory authorities will discuss ten years of experience in safety management. European legislation requires specific monitoring and support to manage the changes in authorities' daily work.

1. "Regulating railway safety in changing political environment"  
Caroline Wake, Head of UK Delegation, Channel Tunnel Safety Authority
2. "Risk based decision making in targeting oversight"  
Heidi Niemimuukko, Director of Audits, Finnish Transport Safety Agency
3. "Approach to a supervision regime after the issue of a safety authorisation – Assessing the effectiveness of Safety management systems in terms of constructional engineering, superstructure and building facilities"  
Peter Hefer, Federal Railway Authority

## Session 3: "Implementation challenges"

Knowledge is power, and hence knowledge management must take a multi-disciplinary approach in order to ensure an efficient utilisation of staff expertise. Teamwork in particular will bring out individual strengths, and different implementations of SMS are presented.

1. "The importance of knowledge management to rail safety", A & K Ross Associates Pty Ltd  
Alan Ross, MSc, BSc, CMIOSH, Grad Dip OSH, A & K Ross Associates Pty Ltd
2. "Safety created through teamwork by expanding the strength of each individual"  
Masaki Hattori | Tetsuo Maruyama, Deputy Manager of the Transport Safety Department | Manager of the Transport Safety Department, East Japan Railway Company
3. "Establishing safety management system in railways: A case study for Turkish Railways"  
Abide Koc | Ercan Konar, Safety Expert | Safety Expert, General Directorate of Turkish State Railways (TCDD)

## Tuesday, 14 October 2014

### **Session 4: " Risk assessment methods I"**

Practical application of the Common Safety Methods on Risk Assessment will be presented by an infrastructure manager, a safety authority and a consultant to highlight the benefits of implementing a harmonised regulatory framework and the challenges faced in doing so.

1. "Common safety method or best practice - A practical implementation of CSM-RA"  
Mona Tveraaen | Kjetil Gjønnes | Carsten Busch, Jernbaneverket
2. "Risk management - an essential process for maintaining and improving of railway safety"  
Dr. Tobias Schaller, Head of unit Scientific Bases, Swiss Federal Office of Transport, Division Safety
3. "Is it safe enough? Railway risk acceptance in times of fundamental changes"  
Jan van Veen MSc, Senior consultant Safety & Risk management, Lloyd's Register Rail Europe B.V.
4. "Managing Change – Practical application of the Common Safety Method on Risk Evaluation and Assessment and its role in the wider risk management process"  
Marcus Dacre | John Lane, BA MSc PhD | BSc MSc CEng FICE, RSSB

### **Session 5: "Risk assessment methods II"**

Safety models, data base inconsistencies and worst-case scenarios can affect risk assessment findings. Different players will present different ways to handle these aspects of risk assessments.

1. "Focusing on worst case scenarios efficiency or negligence"  
Bernhard Hulin, PHD Informatics, Accredited Assessor for railway vehicles, Safety Manager, Berner & Mattner
2. "Safety Analysis on Source Information Inconsistency of Railway Signalling System"  
Xiaoli She | Guoliang Gao | Jian Yang, Manager of Technical Safety Department | Director of Quality Management Center | Professor, Dept. of Electronic Engineering, Beijing National Railway Research & Design Institute of Signal & Communication Co., Ltd. | Tsinghua University
3. "Improving railway safety by properly modeling - complex socio-technical systems"  
Jorge Almeida | Alexandra Fonseca, Principal Engineer | Senior Engineer, Critical Software, S.A.

## Session 6: "Human factor I"

Human factors management in train operation must cover a systemic perspective while designing and optimising the system. Three presentations will examine how shiftwork and fatigue affect railway safety and how the human factor contributes to system safety.

1. "Shiftwork and Safety: Calibration of Models of Accident Risk Due to Shiftwork and Fatigue in Railroad Operations"  
Patrick Sherry | Allison M. Bondanza, PhD | MA, PhD Candidate, The University of Denver
2. "Using event data in German railways for a systematic perspective of system design and optimization"  
O. Sträter | M. Arenius, Department of Work | Organisational Psychology, University of Kassel
3. "Methods and options for preserving railway safety knowledge in a changing environment." – The Importance of Human Factors Management in Train Operations."  
D. Bouwer | Hubinger, S.P. | Pr. Eng., South African Railway Safety Regulator

## Session 7: "Human factor II"

Options for evacuation in hazardous situations and the role of occupational medical services maintaining safety will be presented from the perspective of the practitioners. Results of research activities on ways to help lower suicide rates will be summarised.

1. "Research on factors contributing to railway suicides in order to develop prevention methods"  
Kenji Horioka, Safety Research Laboratory Chief, East Japan Railway Company
2. "Guiding evacuation procedures for passengers at Kamakura and Zushi stations on the kosuka line when tsunami occur "  
Hiroshi Wada, Tokyo Branch, East Japan Railway Workers Union (JREU)
3. "The role of occupational medical services to maintain the safety of railway transportation"  
Mayumi Fujimoto, Occupational medical service section, East Japan Railway Workers Union (JREU)

## Wednesday, 15 October 2014

### **Session 8: "Knowledge transfer and motivation"**

Railway safety is supported by safety culture, corporate safety expertise and acceptance at all management levels of an enterprise. The presentations in this session will outline how railway knowledge can be maintained, shared and improved.

1. "Railway knowledge - a fundamental for regulation of railway safety"  
Gerald Beesley | Michael Neale, Commissioner | Inspector, Railway Safety Commission
2. "Sharing corporate safety knowledge with managers during a period of significant change"  
Nelson Ng | Stephen Watson, CEng, MCIBSE, MHKIE, MIET, MSARS, MSc, MBA, BEng | CEng, CSci, FICHEME, BEng, MTR | Arthur D. Little
3. "Improving safety culture through a focus on behaviors that aim to promote personal accountability in safety at transnet"  
Niki Rakgoadi, Culture and Employee Engagement Manager, Transnet SoC Limited

### **Session 9: "IT-supported safety management"**

IT supports safety management in operations, training and monitoring activities. This session will present new approaches and the resulting models and offer a forum for sharing experience on how to handle the increasing complexity of modern railway systems.

1. "System-wide Bi-level Meta-heuristic Optimization Approach of CBM for Railway Train"  
Sungjun Song | Sunghoon Kim | Hwasoo Yeo, Ph.D Candidate | Ph.D Student | Assistant Professor, Graduate School for Green Transportation | Department of Civil and Environmental Eng.
2. "Safety information management systems (SIMS) - A web based tool for safety management over Indian railways"  
Erik Aarts | Ramon Oostveen, ICT designer | Business consultant, Indian Railways
3. "Warning train traffic when a signal is passed at danger based on detection in the Dutch traffic control system (PRL)"  
Jorge Almeida | Alexandra Fonseca, Principal Engineer | Senior Engineer, ProRail B.V. The Netherlands
4. "Developing a tool to measure and improve the safety culture of Canada's railway industry"  
Daniel Blais | Ian Naish, Project Officer, Accessibility and Human Factors | President, Transport Canada, Transportation Development Centre | Naish Transportation Consulting Inc.

## Session 10: "Safety engineering maintains railway safety"

Management systems and railway knowledge maintain and improve the railway safety worldwide. International engineering experience and lessons learned from safety related projects will conclude the IRSC 2014.

1. "Implementing safety concept on railway projects worldwide"  
Dieter Michell-Auli, Management Board, DB International GmbH
2. in final process.  
Christian Neveu, Head of the UIC Human Factors Working Group, SNCF
3. "Engineering competence maintains safety in a changing railway world"  
Hans-Rüdiger Püttner, Risk Management & Safety Assessment, DB Systemtechnik GmbH