Registration

Name/Title

Surname

Company

Function

Street

City

Country

Phone

E-Mail

Date and Signature

- students under 28 years (€ 50,-)
- UEEIV Member Association (€ 95,-) 0
- others (€ 150,-) 0

Please, return this form till 15th May 2016 at the latest!

Organisation

Organisation

UEEIV - Union of European Railway Engineer Associations Kaiserstrasse 61 60329 Frankfurt am Main Telefon: +43 (0)316 8736216 Fax: +43 (0)316 873106216 E-Mail: sekretariat@ueeiv.eu www.ueeiv.eu

Venue

Wirtschaftkammer Wien Großer Saal Schwarzenbergplatz 14 1040 Wien/Österreich Tel: +43 (1) 51450

Registration

Please, send this form till 15th May 2016 to Fax: +43 (316) 873106216 E-Mail: sekretariat@ueeiv.eu

Registration Fees

- € 150,-Registration Fee
- € 95,for UEEIV Member Associations
- € 50,for students under 28 years of age (Please enclose a copy of your ID)

After registration has been processed, you will receive an invoice which serves as a confirmation of registration. The registration fee includes participation at the Conference, attendance at Welcome Reception, the Conference Dinner and the Excursion.

Cancellation policy: Up to four weeks before the start of the Conference 50% of the registration fee will be retained. If notice is given less than four weeks beforehand there will be no refund.

Hotel Reservation

Please organise your travel and hotel reservations yourself.

System Engineering 19th-20th May 2016

Vienna, Austria



Introduction



Dear participant,

Since its inception was the railway a system where different subsystems, disciplines and processes enabled the railway to fulfill its function: transporting passengers and forwarding freight. Over the allmost 200 years since the first trains started running the system as gained in capacity, speed but also in complexity due to

additions to the systems like signalling, telecoms, overhead power system, etc.

The fact that many railways of the past have now been split in formal entities like Railway Undertakings and Infrastructure Managers makes that the system perspective is not so easy to obtain. In an integrated railway it was easier to see the whole perspective than it is now when one is working in a single discipline. Evident is many times that, although the system is build up from optimal subsystems, the building, maintaining and above all operation of the railway is not that easy, with often an effect on the services the system intends to provide. The quality of service is in many cases not up to the standard, leading to complaints by passengers and freight forwarders. An extra effect is the brain drain due to retirement of the baby boomers currently going on.

In another world, that of the defense and aviation industries, a new way of thinking occurred, making explicit the system thinking in the design and operating processes. The buzzword "System Engineering" seemed not appropriate for the railway, but over the last couple of years one hears more and more railway engineers using this term.

What is the goal of system engineering? To make sure that requirement / functions are broken down in the underlying requirements and allocated to the appropriate subssystem; always from the overal system perspective. Doing so helps to understand the system, its parts and the interaction between these parts.

This seminar will show examples of what system engineering is and how it is applied in the sector as well as in other sectors. The UEEIV sees as a core part of its mission to "spread the knowledge", helping engineers in the sector to expand their knowledge, as well as providing a platform for networking for the professionals. I hope to see many of you during this interesting seminar.

Programme

	a three second	
Thursday, 19 th May 2016		
09:30	Registration	
10:30	Welcome and introduction Frans Heijnen, President of UEEIV Daniel Wirth, Secretary of UEEIV	
10:50	Railway and System Engineering Felix Schmid, Birmingham Centre for Railway Research and Education, GB	
11:20	System engineering on the view of ÖBB Dietmar Zierl, ÖBB Infrastruktur AG, Austria	
11:50	Questions and Answers	
12:00	Coffee and Tea	
12:30	Hyper complicity and communication requirements Markus Bolli, SANGMU, Switzerland	
13:00	System Engineering and EURAIL-ING Manfred Kehr, UEEIV	
13:15	Questions and Answers	
13:25	Lunch	
14:30	Gotthard Base Tunnel: Operationg processes and system integration Hans-Peter Vetsch, Vetsch Rail Consulting GmbH, Switzerland	
15:00	Systems Engineering from Space to Rail Sven-Olaf Schulze, Gesellschaft für Systems Engineering e.V., Germany	
15:30	Questions and Answers	
15:40	Coffee and Tea	
16:10	Podium discussion Daniel Wirth, Secretary of UEEIV	

Programme

17:00	Closing Remarks Frans Heijnen, President of UEEIV	
17:15	End of Seminar	
19:00	Conference dinner in SALMBräu (Brewery) Rennweg 8 1030 Wien	
Friday, 20 th May 2016		
To join the Excursion, please take the ÖBB-train: S-Bahn S60 direction "Wiener Neustadt" Departure: • Wien Hauptbahnhof 09:11 (Plattform 12 A-C) • Wien Meidling 09:35 (Plattform 8)		
09:42	Arrival at station "Wien Blumental"	
09:50	Excursion to construction site "Freight Centre Vienna South" Bernhard Knoll, ÖBB Infrastruktur AG, Austria	
13:00	End of Excursion (site visit)	
13:23	Departure by train S60 direction "Bruck/Leitha"	
	 Arrival: Wien Meidling at 13:31 Wien Hauptbahnhof at 13:37 	