INTERNATIONAL UNION
OF RAILWAYS

UIC RAILWAY NOISE DAYS - 2023

Sustainable railways strive to be good neighbours

28/02/2023 - Day 1: Being a responsible neighbour

8:30 – 9:00	**Welcome desk & networking coffee**
9:00 – 9:20	**Introduction and welcome remarks** ***Moderated by Jakob Oertli,*** *UIC Noise & Vibration Sector, SBB* • ***Kara OLDHOUSER,*** *UIC Sustainability Platform Vice Chair, Amtrak* • ***Lucie ANDERTON,*** *UIC Head of Sustainability, Network Rail*
9:20 – 10:20	**Hackathon:** ***Groups:*** ***Facilitator:*** *Policy:* *Pınar YILMAZER, UIC* *Supplier:* *Haike BRICK, DZSF* *Lineside resident:* *Alf EKBLAD, Trafikverket* *Research centre:* *Lorenzo FRANZONI, UIC* *Operators:* *Jamie WILKES, NR* *Infrastructure:* *Michael DITTRICH, TNO*
10:30 - 10:45	**Break**
10:45 - 11:45	**Policy** • ***Pınar YILMAZER,*** *Facilitator of policy group UIC Noise and Vibration Sector* • ***Marco PAVIOTTI,*** *EU DG ENV Policy Officer* • ***Ethem PEKIN,*** *CER* ***Question and Answers***
11:45 – 12:00	**Sponsors Booth @ Room Stephenson**
12:00 - 13:00	**Lunch Break**
13:00 - 14:30	**Supplier** • ***Haike BRICK,*** *Facilitator of supplier group, DZSF* • ***Joan SAPENA,*** *Alstom* **Lineside residents** • ***Alf EKBLAD,*** *Facilitator of lineside resident group, Trafikverket* • ***Laurent DROIN,*** *Centre d'Information sur le Bruit (CidB)* **Research** • ***Lorenzo FRANZONI,*** *Facilitator of research group, UIC Noise and Vibration* • ***Thomas MALY,*** *Technical University of Vienna* ***Question and Answers***
14:30 - 15:00	**Break**
15:00 - 16:00	**Operators** • ***Jamie WILKES,*** *Facilitator of operators group, Network Rail* • ***Martijn WOLF,*** *Nederlandse Spoorwegen (NS)* **Infrastructure** • ***Michael DITTRICH,*** *Facilitator of infrastructure group, TNO* • ***Urs SCHOENHOLZER****, SBB* ***Question and Answers***
16:00 - 16:40	**UIC Noise and Vibration Project** • ***Louise MORRIS,*** *ATKINS - UIC report on nuisance and health impacts of railway noise* • ***Martin RISSMANN*** *VibraTec - UIC report on management of parked and stationary trains*
16:40-17:00	**Closing session *by Jakob Oertli*** **Evening Reception at UIC Mezzanine**

Hackathon:

Why? To inspire solutions to railway noise and benefit from the collective knowledge of the diverse participants so that railways can contribute to the European Zero Pollution Action Plan.

What? Participants will come together from different stakeholders to address the problems with a solution-oriented approach. The interactive workshop will ask participants to use their own expertise but apply it to the issues from a different point of view. Participants will analyse the matters, identify the drivers and potential solutions through a different lens than their usual role.

How? Participants will complete their registration on the UIC Railway Noise Days by selecting from the following interest groups **other than** their usual area of expertise or stakeholders group they represent.

- Policy
- Operators
- Infrastructure
- Supplier
- Lineside resident
- Research centre

Before the event, UIC organisers will assign participants for each group based on the choices of the participants whose applications have been received. During the interactive session, you will only participate in a single group. If you wish to be assigned to another group, please contact UIC in advance.

On the first day of the UIC Railway Noise Days, participants will ‘put themselves into the shoes of’ the assigned group. Each facilitator will lead a discussion with the group members on how to tackle the problem of railway noise while illustrators will help to stimulate visual thinking.

In plenary, the facilitators will summarise all the information discussed and share the proposed solutions with the other participants in the following sessions. The session speakers will be invited to build upon the ideas proposed by each group.

No projector or computer will be used during the interactive session, our visual thinking facilitators will help transfer your ideas into illustrations.

Technical Reports:

Noise from parked and stationary trains: An analysis of operational and technical solutions

Nuisance and Health Impact of Railway Noise

Biographies

Jakob OERTLI, born 1962 in Los Angeles, California, holds a diploma from the Swiss Federal Institute of Technology in Zürich, Switzerland and received his Ph.D. from Rutgers University in New Jersey. He currently works as an environmental engineer in the Track Systems Unit in the Infrastructure Department of the Swiss Federal Railways (SBB) and is responsible for national and international noise management issues as well as for noise reduction measures on the track. He is also Chair of UIC's Noise and Vibration Sector and the editor of the state-of-the-art-report for railway noise in Europe published in 2020.

As the Director of Sustainability at Amtrak, America's intercity passenger rail, **Kara OLDHOUSER** leads the strategic planning, reporting, and integration of resilience and decarbonization across the enterprise. Her fifteen+ years of professional experience in sustainability - in public, private, and social sector roles - positioned Kara well to tackle Amtrak's diverse sustainability and climate adaptation opportunities. Since joining Amtrak in 2017, she's created an environment in which sustainability and resilient strategies are defined and implemented. Current achievements include the unanimous approval from Amtrak's Board of Directors of Amtrak's Climate Commitment, setting a goal to achieve Net-Zero carbon emissions by 2045 goal, and launching the company's first climate resilience strategic plan.

Lucie ANDERTON joined the UIC in 2021 to lead the Sustainability Unit. Lucie is an Environmental Management graduate and Chartered Environmentalist, and is seconded from Network Rail, where she has gained 15 years of experience in the UK rail industry in the field of sustainability. Working in major railway infrastructure projects both during construction and design phases, Lucie has strived to embed sustainable thinking in design processes and construction techniques, including how new railways can be constructed to avoid impacts upon neighbours. With the RSSB, Lucie chaired the UK Rail Industry Noise group and published an article in the Acoustics Bulletin 'Raising the bar is assessing railway noise and vibration for new line-side housing' (2018).

Pınar Yılmazer is a Programme Senior Advisor at the UIC Sustainability Unit. She manages the UIC Noise and Vibration sector and coordinates its projects and activities. Working in collaboration with 19 UIC members, she is currently leading two UIC projects and three working groups: noise and vibration technical advice (NOVITÀ), low-cost noise control by optimised rail pads (LOWNOISEPAD), acoustic rail roughness working group, curve squeal working group and vehicle noise working groups. She holds a MRes in Rail System Integration from the University of Birmingham (UK) and worked on the detection of wheel flatten defects with acoustic emission sensors. Previous to her current position, Pinar worked in the engineering department at Turkish State Railways in Ankara and CERN in Geneva.

Marco PAVIOTTI is policy officer at the European Commission since more than 10 years. He is an engineer who has been involved in environmental noise research and policy making since 2000. He worked both in the private and in the public sector, before joining the Directorate General for the Environment in the European Commission. In this role he follows all aspects of environmental transports and is in charge of the European environmental noise policy in relation to the management and update of the Environmental Noise Directive (END, 2002/49/EC). He coordinated the development of the common European noise assessment methods, and the health assessment methods. He contributed to the evaluation and update of the noise related European legislation. He worked in different roles in The Netherlands, Germany, Italy, Greece and then Belgium. He is since 1997 part of the Italian railway engineers' society.

Ethem PEKIN has been the Senior Environmental Economist at the Community of European Railway and Infrastructure Companies (CER) since 1 November 2013. Ethem studied at the Free University of Brussels, where he obtained a PhD in Applied Economics in 2010. Prior to joining CER, Ethem worked as a Research Associate at the Free University of Brussels.

Haike BRICK is Senior Researcher for Railway Noise and Vibration at the German Centre for Railway Research. Haike studied environmental engineering at the Technical University of Berlin and then worked as a research assistant in the field of noise and vibrations at Beuth University of Applied Sciences Berlin and TU Dresden. In 2009, she completed her PhD in technical acoustics at Chalmers University in Gothenburg. She then worked for 10 years at Bombardier in Hennigsdorf in rail vehicle development as an acoustics engineer. During this time she participated in and also coordinated the European research projects FINE1 and FINE2. This was followed by a position as an innovation specialist at DB Systemtechnik. In 2021, she moved to the German Centre for Rail Traffic Research (DZSF). There she coordinates and supervises research projects on the topics of noise and vibration protection and is developing LärmLab 21, which is planned as a permanent testing and experimental field of the DZSF.

Joan SAPENA

Graduated from La Salle Engineering School in 1995 in Technical Engineering Telecommunications (Sound&Image), joined ALSTOM Transport in 2000. Before he has been working for five years in Noise Vibration and Harshness (NVH) department of automotive engineering company for NVH testing. He has lead site activities of acoustics and promoted to Senior Expert in 2005 and to Master Expert in 2019 in the field of Vibroacoustics in Alstom. Since 2008 he has been leading the Acoustics Core Competence Network in ALSTOM and built the Central Engineering acoustics team in Paris. He has participated in the elaboration of Europeans programs as ACOUTRAIN, ROLL2RAIL, FINE1 and FINE2. He is representative for France in the CEN/TC256/WG3 – Acoustics group since 2008 and member of the UNIFE Noise Group. His main expertise is Rolling Stock Acoustics of all type of products and the development of transfer path methods for interior noise.

Lorenzo FRANZONI is a Junior Sustainability Advisor at UIC. He manages the Sustainable Land use Sector and its upcoming projects, and he supports the coordination of the activities of the Noise and Vibration Sector. Lorenzo holds a master's degree in Environmental Change and Global Sustainability and a Bachelor's in Water Management.

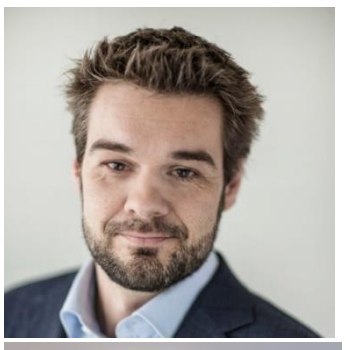
Thomas MALY has been employed at the TU Vienna for more than 20 years, first as an assistant, since 2018 as a senior scientist. Thomas studied electrical engineering at the TU Vienna, and then conducted research at the Institute of Electrical measurements and circuit design on wayside train monitoring and derailment safety. In 2007, he moved to the Research Center for Railway Engineering of the Institute of Transportation, were he has increasingly focused on railroad noise. Since 2010 he has been almost exclusively working on numerous research topics in the field of railway noise, especially curve squeal, psychoacoustic, wheel defect noise and last but not least the European noise prediction model.

Alf EKBLAD

Experienced Senior in the field of vibration with a demonstrated history of working both as a consultant at a private company and as a Senior Specialist in the Swedish Transport Administration. Chairman of the Vibration Expert Group of UIC. Elected as the Swedish expert in the ISO group working with vibration from railways and the chairman of the group working with vibration standards in Sweden.

Laurent DROIN has a doctorate in applied acoustics from the University of Le Mans. He has worked as a consultant specialised in environmental acoustics for 35 years, within the companies Acouphen, Acouphen Environnement and Soldata Acoustic. In particular, he has contributed to the development of know-how useful to local authorities for the assessment and management of environmental noise, in connection with their travel, urban planning and sustainable development policies. He is honorary president of the French professional group of acoustic engineering (CINOV-GIAc), an expert in acoustics for the courts and a university instructor in urban acoustics.
Laurent DROIN is since 2016 director of the Noise Information Centre in France. CidB is a non-profit association, recognised as being of public utility, which implements various types of actions to facilitate the consideration of noise and its effects on Man in his environment, at home, at work, at school, in his leisure activities, etc. CidB is a reference resource centre for the public and for all professional actors concerned by the quality of the noise environment.

Jamie WILKES is a Principal Engineer for the UK infrastructure manager, Network Rail. Operating within the Technical Authority department, he specialises in both track engineering and Noise & Vibration (N&V). This involves all aspects from on-site measurement to numerical simulation, analysis and mitigation with a focus on practical research & development. He regularly represents the UK Infrastructure Manager on national and international noise and vibration Standards / Working Groups, and is currently focussed on rail roughness and curve squeal research**.**



Martijn WOLF is a consultant at Ricardo Rail Netherlands and has a background in mechanical engineering. Starting his professional career in 2000, he focuses on sustainability topics energy, noise/ vibrations and circularity. Since many years, he is the advisor for the Dutch Railway Operator NS on environmental topics. In that role, he is the chair of the EuroSpec working group Parking Noise and working group Circularity and he is member of the UIC Network Noise and Vibrations.

Michael DITTRICH is an expert on environmental noise control, with focus on railway, road and machinery noise, measurement, modelling, standards, regulation and policy. He has worked for many years in acoustics at TNO and has been involved in many national and international R&D projects and studies on railway noise.

Urs SCHOENHOLZER joined the infrastructure division of Swiss Federal Railways in 2013. He has been working in the track department since then and is currently responsible for the infrastructure division's corporate team of noise and vibration specialists.

Louise MORRIS is a Principal Acoustician and Chartered Engineer at Atkins, a world-leading design, engineering and project management consultancy. She specialises in environmental sound and uses her expertise and insights to drive innovation in the sector to secure an acoustically sustainable future.

Martin Rissmann

- International Project Engineer
- Since 2016 at VibraTec, based in Ecully near Lyon, France
- Activities: Railway noise on behalf of different clients: operators, infrastructure managers, rolling stock manufacturers and suppliers
- Expertise in rolling noise, curve squeal noise, aeroacoustics, ground vibration

Sponsors

Gold Sponsor

Your worldwide partner in customized railway superstructure solutions.

Semperit is a global manufacturer of industrial polymer products and solutions.
Every day, surface and underground trains have to travel safely, quickly and comfortably to their destinations. Our customised range of track construction products meets this challenge and enables rail transport to move forward, without compromising safety, speed or comfort. Our rail fastening components meet international standards and are rigorously tested to ensure their performance and durability. We are committed to working with our local and international partners, railway authorities and sleeper manufacturers to provide the best possible service.
Semperit is therefore a manufacturer of high-quality products for fastening components and the development partner for innovative complete solutions made of rubber and plastic.

Silver Sponsor

FIMOR has more than 45 years of experience in polyurethane and offers several products for the railway sector including anti-noise covers for ballast wagons to reduce noise for the residents and the operators