



## The Control Room of the Future: AI empowered dashboards

7 October 2022

# Speakers



SAPIENZA  
UNIVERSITÀ DI ROMA

The  
Alan Turing  
Institute

**ProRail**

Verbindt. Verbetert. Verduurzaamt.



ECOLE NATIONALE DE L'AVIATION CIVILE

**ETH** zürich



EUROCONTROL



INTERNATIONAL CRITICAL  
**CONTROL ROOMS**  
ALLIANCE



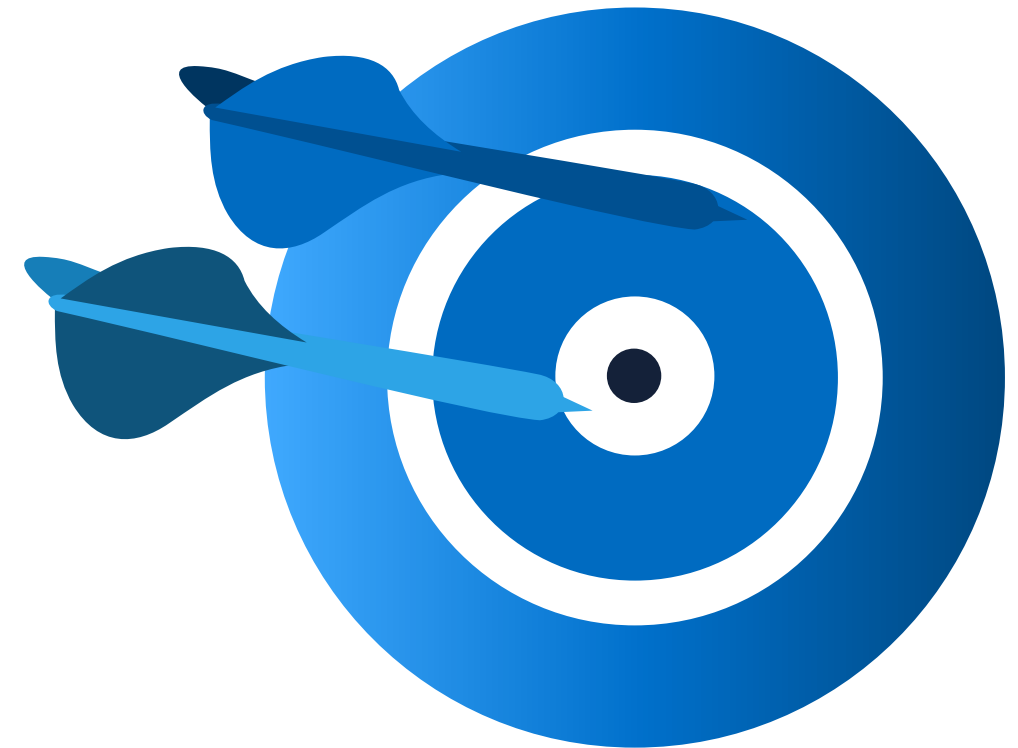
# Objectives of the Workshop



**Artificial Intelligence in control rooms:**  
discuss **opportunities and limitations**



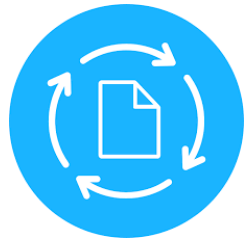
**Narrow the gap between**  
academics and practitioners



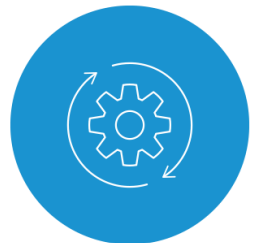
# Presenting the On Track Lab



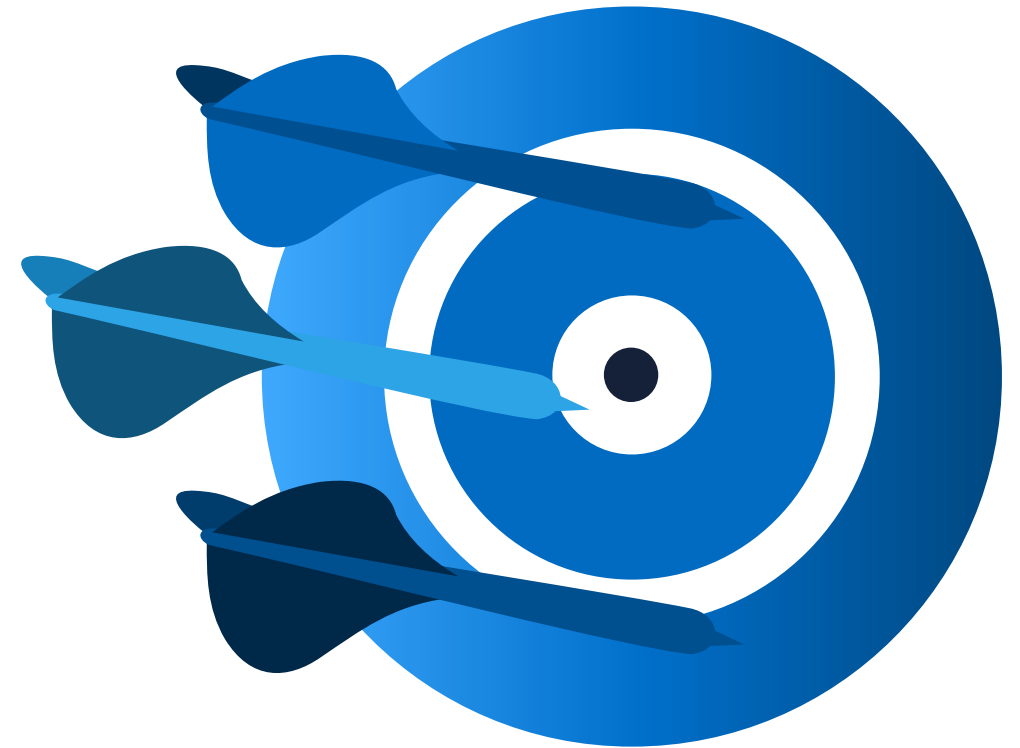
Improve and optimize  
**control room management**



**Data-driven** and **multidisciplinary**  
research (AI, OM, SD, etc)



Focus on **implementation** and  
feedback from **operational experts**



# Morning: 40 minute presentations, including Q&A

09.30 - 09.40

## OPENING

*Bart Roets, Infrabel & On Track Lab, Belgium*

## KEYNOTE

09.40 - 10.20

### Railway traffic control room, and room for control

*Francesco Corman, ETH Zurich, Switzerland*

## RAILWAY CONTROL ROOMS

10.20 - 11.00

### Real-time prediction of employee workload in digital railway control rooms

*Léon Sobrie, Ghent University & On Track Lab, Belgium*

## COFFEE BREAK

11.20 - 12.00

### Developing decision support systems for traffic control

*Wilco Tielman, ProRail, Netherlands*

## ENERGY CONTROL ROOMS

12.00 - 12.40

### The role of AI in decision support tools for electricity grid control room

*Hakan Ergun & Hussein Kazmi, EnergyVille, Belgium*

# Lunch and poster session

## PhD POSTERS

12.40 – 13.40

**Prescriptive maintenance with causal machine learning**

*Toon Vanderschueren, KU Leuven, Belgium*

**Internal Placement: Job Recommender Systems with Social Regularization**

*Simon De Vos, KU Leuven, Belgium*

**Balancing workload in digital railway control rooms**

*Changyu Men, IÉSEG School of Management, France*

# Afternoon: 40 minute presentations, including Q&A

## AVIATION CONTROL ROOMS

- 13.40 - 14.20** Democratizing business intelligence and machine learning for air traffic management safety  
*Riccardo Patriarca, Sapienza University of Rome, Italy*  
*Radu Cioponea, EUROCONTROL*
- 14.20 - 15.00** Artimation: transparent artificial intelligence and automation to air traffic management systems  
*Christophe Hurter, École Nationale de l'Aviation Civile (ENAC), France*

## COFFEE BREAK

- 15.20 - 16.00** Putting the AI in air traffic control  
*Evelina Gabasova, The Alan Turing Institute, UK*

## CRITICAL CONTROL ROOMS

- 16.00 - 16.40** Industry vision and expectations of AI in the control room  
*Peter Prater, International Critical Control Rooms Alliance (IC CRA)*
- 16.40 - 16.50** CLOSING  
*Marijn Verschelde, IÉSEG School of Management & On Track Lab, France*
- 16.50 - 18.00** NETWORKING EVENT