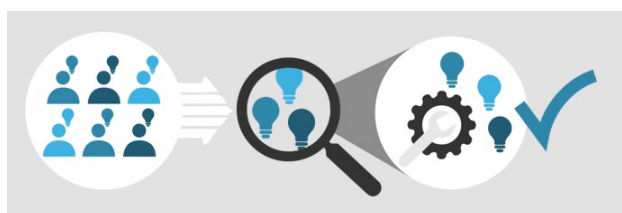**Engage**

At the core of the Engage KTN is the definition of various thematic challenges: new ideas suggested by the research community, not already included within the scope of an existing SESAR project. They are developed along with the ATM concepts roadmap and complementarily with some of the network's PhDs and theses.

Thematic challenge 2

AI, ML and Automation

4th workshop programme

Edition 1.2, 02 September 2021

Workshop date: **03 September 2021**

Host: EUROCONTROL ZOOM

URL for access: https://engagektn.com/thematic-challenges/

Registration: https://eurocontrol-int.zoom.us/meeting/register/u5wrfuitpzIpGdGzlbEFunxYbz9RXecV9w0S

Programme

1000-1015   **Welcome and overview from the Engage KTN; overview of TC2 and previous workshops –** *Dirk Schaefer (EUROCONTROL), Tatjana Bolic (University of Westminster) and Andrew Cook (University of Westminster)*

1015-1030   **Evolution of Automation, AI and ML research through the SESAR programme –** *Luca Crecco (SESAR JU)*

1030-1145   SESSION 1 (chair: Andrew Cook)

1030-1055   **Machine learning to improve tactical flight decision making: the case of Pilot3 –** *Luis Delgado (University of Westminster)*

1055-1120   **ARTIMATION –** *Mobyen Uddin Ahmed (MDH)*

1120-1145   **Using machine learning to predict the evolution and propagation of delays: main results and lessons learnt –** *Ramon Dalmau Codina (EUROCONTROL)*

1145-1230   TECHNICAL PANEL: "What is hot and what is broken in ML research?" (panellists: Gérald Gurtner (University of Westminster), Jose Manuel Cordero (CRIDA), Brian Hilburn (CHPR), Xavier Olive (ONERA), Ramon Dalmau Codina (EUROCONTROL); moderator: Dirk Schaefer)

1230-1330   *Lunch*

1330-1510   SESSION 2 (chair: Tatjana Bolic)

1330-1355   **MAHALO: AI-based conflict detection and resolution tools: Conformity vs. Transparency –** *Brian Hilburn (Center for Human Performance Research) and Tiago Monteiro Nunes (TU Delft)*

1355-1420   **NOSTROMO: Next-generation Open-Source Tools for ATM performance Modelling and Optimisation –** *Maria Teresa Cano Rincon (CRIDA)*

1420-1445   **AISA –** *Tomislav Radisic (University of Zagreb)*

1445-1510   **TAPAS: Unravelling the AI/ML "black box" in ATM –** *Jose Manuel Cordero Garcia (CRIDA)*

1510-1525   *Coffee break*

1525-1645 **PANEL & BRAINSTORMING "Future directions for ML research in ATM"** (moderator: Dirk Schaefer, Tatjana Bolic, Andrew Cook)
- **Brainstorming**
- **Panel** (panellists: Olivia Nunez (SESAR JU), Henk Blom (TU Delft), Benjamin Cramet (EUROCONTROL), Daniel Stecher (IBS Software))

1645-1700 **Wrap-up and close-out**