

# SESAR JU research on show at TRA 2024

## Cracking complex air traffic operations

**15 April 2024**

Georges Mykoniatis &  
Theodora Nikolitsopoulou, ENAC

The challenges facing air traffic control may differ and solutions to them are often developed in isolation of one another. The HYPERSOLVER project aims to develop a “hyper solver” based on an advanced artificial intelligent reinforcement learning method with continuous reassessment and dynamic updates.

 [www.sesarju.eu/projects/hypersolver](http://www.sesarju.eu/projects/hypersolver)



## Digital remote towers

**16 April 2024**

Tommaso Fadda,  
University of Bologna

Significant advances have been made in remote tower technology since its implementation in 2014. What started as a concept to make small and regional airports more viable has extended to a family of solutions and blending other technologies such as virtual/augmented reality. Meet partners from the remote tower project (PJ.05), which has helped advance this technology.

 [www.sesarju.eu/projects/DTT](http://www.sesarju.eu/projects/DTT)



## Multimodal transport synergies

**17 April 2024**

Ismini Stroumpou, Sparsity Technologies

A seamless door-to-door journey relies on collaboration and data sharing among transport service providers (TSPs) across transport modes. The SIGN-AIR project designed a smart contracts framework aimed at facilitating the generation of contractual agreements among TSPs.

 [www.sign-air.eu/](http://www.sign-air.eu/)



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## Redefining green aviation with fuel-efficient solutions

**17 April 2024**

Rob Fitzhugh, AirTel



Climate change will shape many aspects of citizens' lives in the 21st century and beyond. The HERON Digital Sky Demonstrator aims to show how the introduction of optimised air traffic management operations and new technologies can mitigate aviation's environmental footprint and reduce fuel consumption and emissions.



[www.sesarju.eu/projects/heron](http://www.sesarju.eu/projects/heron)

## On the radar: flight centric operations

**18 April 2024**

Tobias Finck, DLR



European airspace is divided into flight information regions, which are subdivided into sectors to provide safe separation services for aircraft travelling through the airspace. Changing to a flight-centred structure without reference to geographical sectors opens up the opportunity to distribute the traffic more evenly. The FCA project is developing the flight-centric concept for an europe-wide implementation in medium density traffic areas considering the existing national boundaries.



[www.sesarju.eu/projects/FCA](http://www.sesarju.eu/projects/FCA)

## Fostering knowledge transfer

**15 April - 18 April 2024**

The Engage 2 knowledge transfer network (KTN) aims to share the resources and findings of the SESAR research and innovation programme with a view to informing future fundamental research, as well as transferring results towards application-oriented work.



<https://engagektn.eu>