



*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 1**

# **Vulnerabilities and global security of the CNS/ATM system**



## ***Workshop final programme***

Edition 1.0, 25 March 2019

Workshop date: **27 March 2019**  
Host: SESAR Joint Undertaking  
Address: Avenue de Cortenbergh 100, 1000 Brussels  
Web details for access: <https://www.sesarju.eu/about-us/visiting-us>

# Abstract

CNS/ATM components (e.g., ADS-B, SWIM, datalink, Asterix) of the current and future air transport system present vulnerabilities that could be used to perform an 'attack'. Further investigations are necessary to mitigate these vulnerabilities, moving towards a cyber-resilient system, fully characterising ATM data, its confidentiality, integrity and availability requirements. A better understanding of the safety-security trade-off is required. Additional security assessments for legacy systems are also needed to identify possible mitigating controls in order to improve cyber-resilience without having to replace and refit. Future systems security by design is essential: a new generation of systems architectures and applications should be explored to ensure confidentiality, cyber-resilience, fault tolerance, scalability, efficiency, flexibility and trust among data owners. Collaborative, security-related information exchange is essential to all actors in aviation. This is specially challenging in a multi-stakeholder, multi-system environment such as ATM, where confidentiality and trust are key.

## Programme



## Request a booking

To request a place:

- please visit: [engagektn.com](https://engagektn.com)
- go to the “Contacts” page and select “Thematic challenge workshop registration”, clearly stating which workshop you wish to attend



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