

Artificial Intelligence in SESAR

Marouan CHIDA
Head of Innovation & Market Uptake

A heavy bag to carry



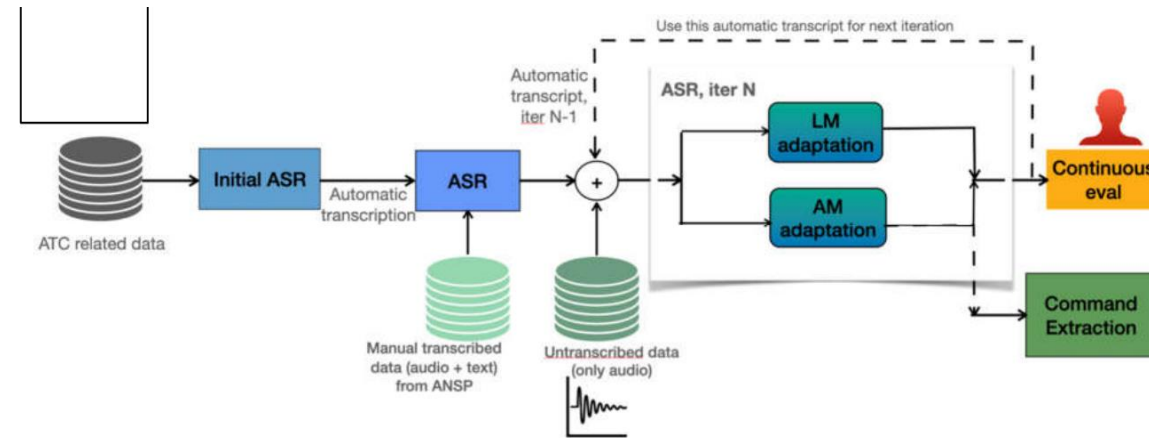
AI at the heart of the Digital European Sky



<https://www.sesarju.eu/ai>

- A **comprehensive strategy** and roadmap for R&I
- A **growing portfolio** of AI projects looking at real challenges
- **Fast track innovation** and uptake mechanism
- An **accelerating pace with SESAR3**
- **Close coordination** with the community

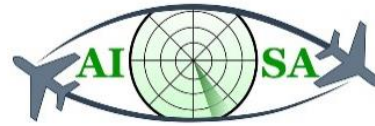
What did you say ?



Highly Automated Air Traffic Controller Workstations with Artificial Intelligence Integration

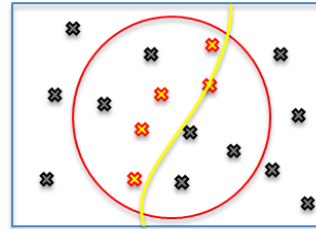
<https://www.hawaii.de>

Where are you going ?



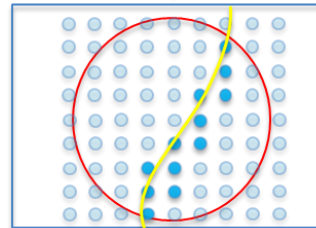
1. Waypoint probability (static)

→ [input]
flight plan



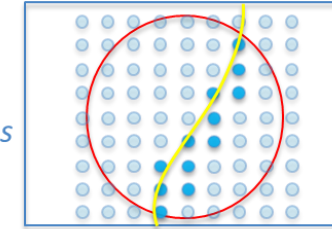
Neural Network

← [output]
waypoint
probabilities



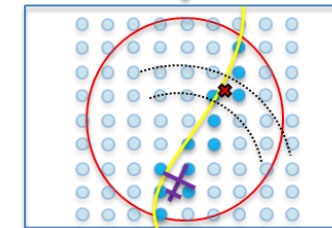
2. Position Prediction (dynamic)

waypoint
probabilities



aircraft state
(dynamic)

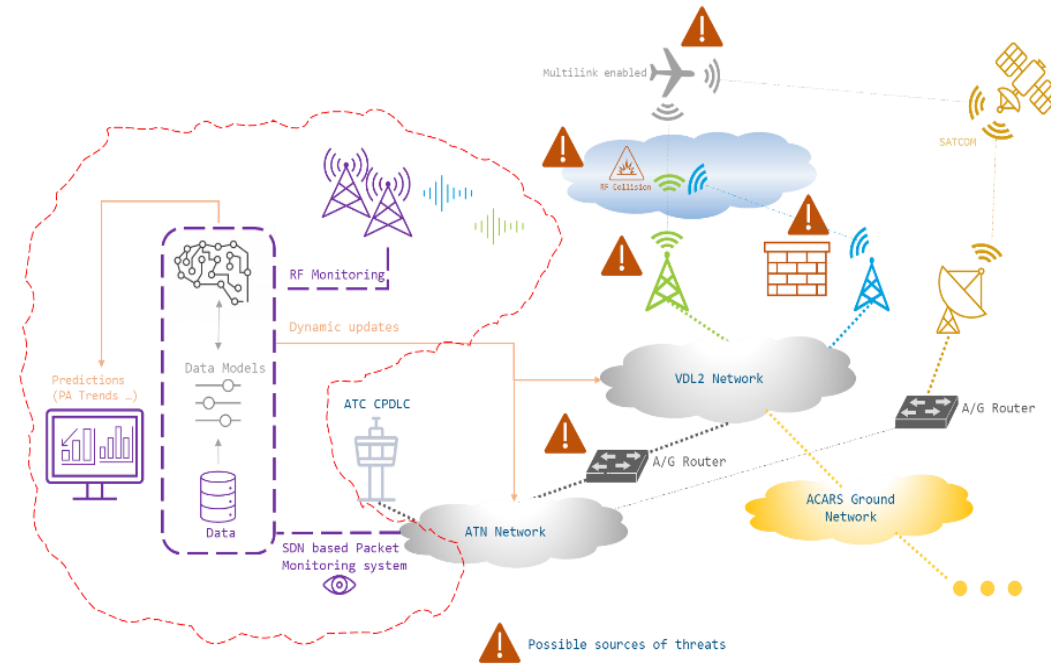
Position Prediction



AI Situational Awareness Foundation for Advancing Automation

<https://www.aisa-project.eu/>

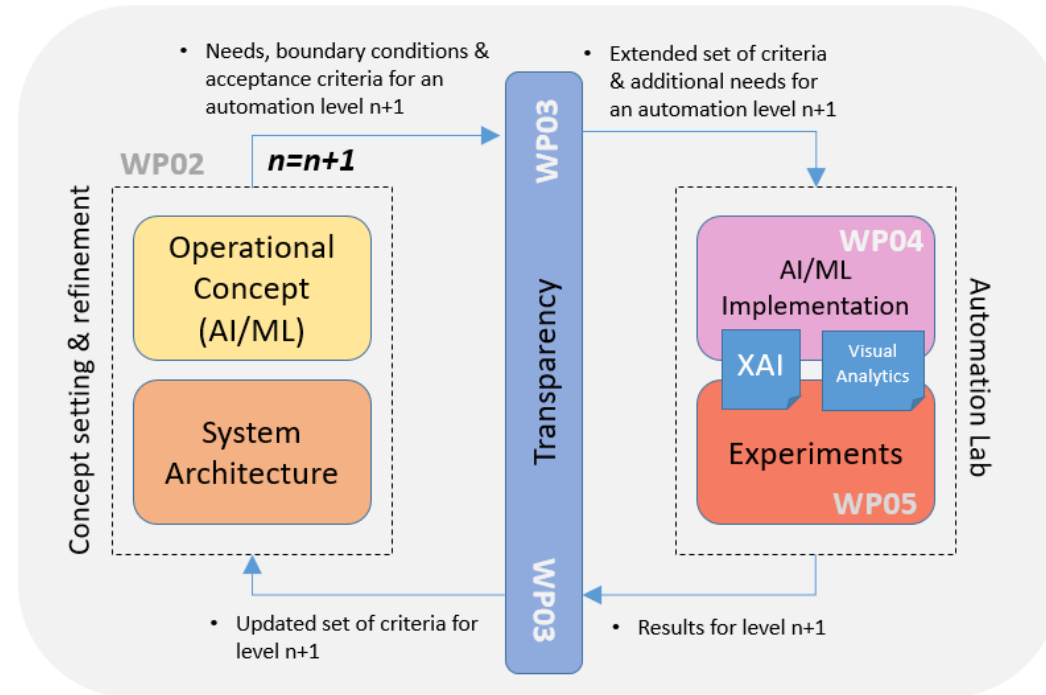
Mayday ! We are under attack...



Software defined networking architecture augmented with Artificial Intelligence to improve aeronautical communications performance, security and efficiency

<https://sinapse-s2020.eu>

Can I trust you ?



Towards an Automated and exPlainable ATM System

<https://tapas-atm.eu>

THANK YOU FOR
YOUR ATTENTION

