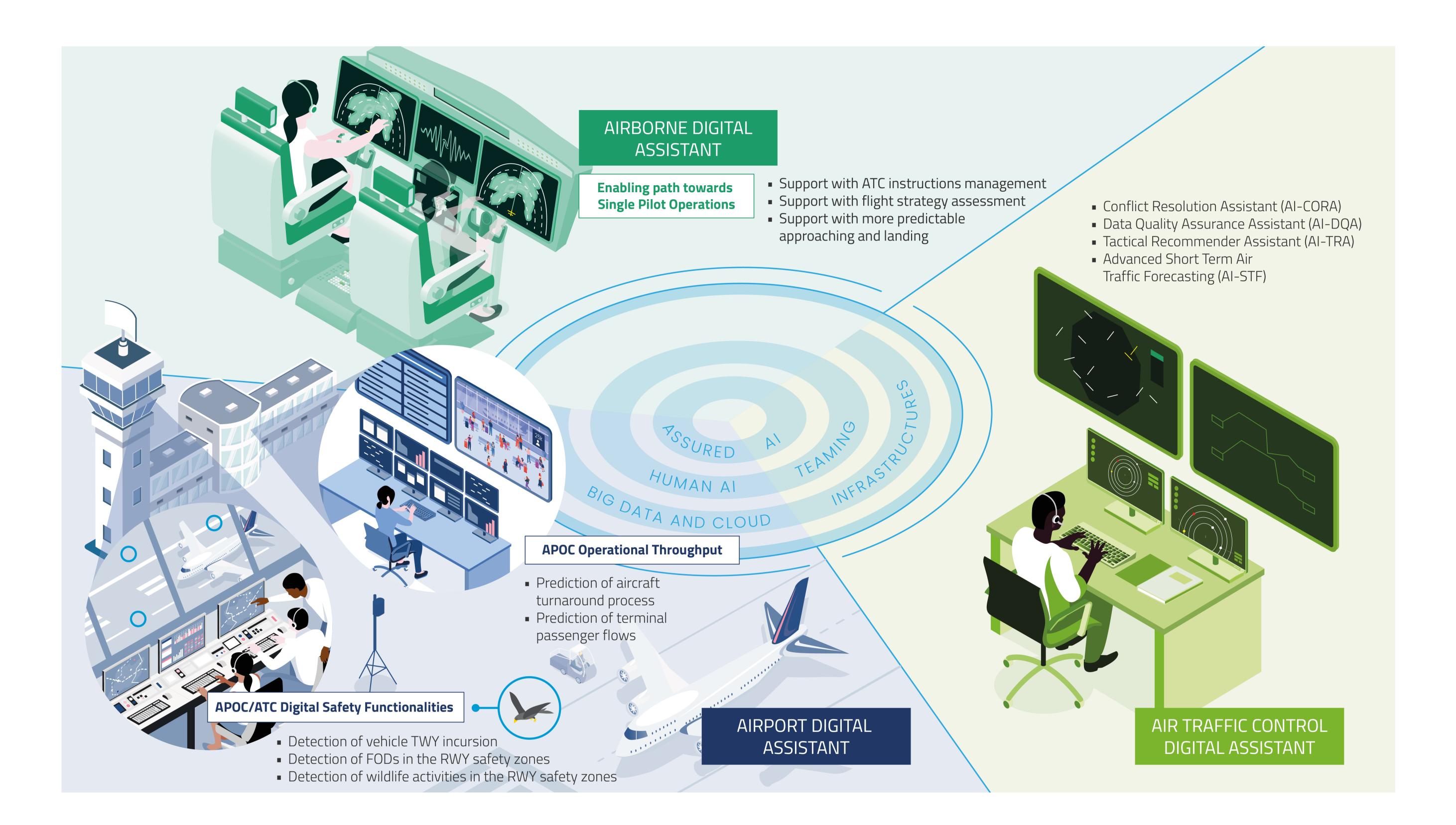


Just A Rather Very Intelligent System







JARVIS prototypes and validates three new Digital Assistants teaming with their human counterparts to deliver more efficient and safer operations in complex scenarios.

Key Al Challenges addressed in JARVIS:



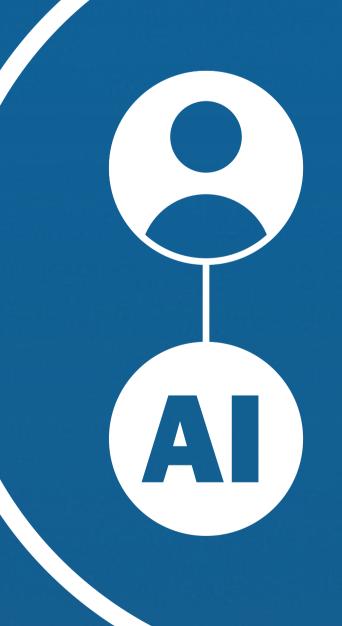
Dataset creation

As JARVIS' digital assistants are based on AI methods, the quality, diversity, and quantity of the data used for training the AI systems have a direct impact on their accuracy and performance. The dataset creation challenge addresses data collection issues that are common in the aviation domain and aims to provide key takeaways, such as the protection of GDPR and handling unbalanced datasets.

Al Design Assurance

The Al design assurance process aims to build trustworthy Al systems, i.e., systems that can be relied upon to perform their intended functions accurately, reliably, safely, and ethically. The JARVIS digital assistants utilise a range of Al methods, including reinforcement learning and machine reasoning. The robustness of these approaches, as well as providing explainability, is considered a particularly relevant challenge within JARVIS.





Human-Al Teaming

Human operators in ATM, such as airport managers, air traffic controllers, and pilots, should be supported and work seamlessly with the JARVIS digital assistants. As observed in human-human teams, a team's performance depends on the quality of its teamwork processes. JARVIS analyses what is needed to enable cooperation within Human-AI teams, focusing on specific guidelines for Human-AI teaming interaction design.









































