# **VISION**

HAIKU envisions developing Human-Centred Al-Based Intelligent Assistants for safe, secure, trustworthy, and effective Human-Al partnerships in aviation systems.

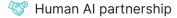
## **GOAL**

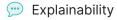
Anchored in a truly human-centric approach, our goal is to pave the way for Al integration in aviation, crafting Intelligent Assistant prototypes that embody human values and dynamically evolve based on user interactions.

# **APPROACH**

Starting from users' needs, we prioritize integrating technology to enhance human activities, ultimately improving safety within aviation operations.

# **WORK AREAS**





Future aviation workforce & skills

Safety culture

Societal acceptance of AI

Acceptable Means of Compliance for AI

SHS-L assessment framework: Safety, HP, Security and Liability

#### **FOLLOW US**









# A 36-month project funded by the Horizon Europe R&I Program

Human Al teaming Knowledge and

Understanding for aviation safety



## **CONSORTIUM**

We are 15 Partners from 10 different countries, bringing together Human Factors expertise, domain's key endusers and technology suppliers of excellence.



















Suite5



**←** EMBRAER

















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### **USE CASES**

COCKPIT



Led by ENAC

Intelligent Assistant in the cockpit to assist in 'startle response' adverse events

"How can we use AI to support pilots in effectively handling startling and surprising events in the cockpit?"

**FOCUS** assistant: Flight Operational Companion for Unexpected Situations



Scan for explanatory video



Scan for demo video



Led by Linköping University and LFV

Digital Intelligent Assistant for Urban Air Mobility coordinator to assist in traffic management

"How can a digital assistant (DUC) support human UAM Coordinators in routine tasks and contingencies, opening city skies for a multitude of co-existing and sometimes conflicting drone services?"

**DUC** assistant: Digital assistant for UAM Coordinator



Scan for explanatory video



Scan for demo video

AIRPORT



Led by Engineering

Intelligent Assistant to improve airport safety through data analysis

"How can we leverage historical data to generate actionable and predictive safety intelligence for improving the day-to-day operations and safety performance in Luton London Airport?"

**ASW** assistant: Airport Safety Watch



Scan for explanatory video



Scan fo demo video

COCKPIT



Led by Thales and Embraer

Intelligent Assistant in the cockpit to assist in route planning/replanning

"How can we enhance Pilot-Intelligent Assistant collaboration by using higher level interaction language based on operational intentions?"

**COMBI** assistant: Enhanced Bldirectional COMmunication for cockpit operations



Scan for explanatory video ATM



Led by SkyWAY

Intelligent Assistant for tower (and remote tower) controllers to assist in routine and repetitive tasks for aircraft on approach

"How can Al enhance Air Traffic Controllers' decision-making process and optimise runway utilisation in single-runway airports?"

ISA assistant: Intelligent
Sequence Assistant



Scan for explanatory video

AIRPORT



Led by CERTH/HIT

Airport Intelligent Assistant to monitor risk factor conditions associated with indoor spread of infectious diseases

"How can we empower passengers to make informed decisions about their visits to airport areas while ensuring their safety and minimising the risk of COVID infection?"

**COVAID** assistant: Covid Aid



Scan for explanatory video