

PROJECT

WISE

A novel approach to remote and real-time aircraft maintenance

Funding: European (Horizon 2020)

Duration: Mar 2017 - Feb 2019

Status: Complete

Total project cost: €2,351,250

EU contribution: €1,645,875



Call for proposal: H2020-SMEINST-2-2016-2017

[CORDIS RCN : 208126](#)

Background & policy context:

In the last decade, the aircraft industry has been facing fundamental maintenance dilemmas:

- Maintenance expertise is missing in more than 21'000 airports worldwide whereas the number of commercial aircrafts on duty is inexorably growing
- Aircraft On Ground (AoG) for structural maintenance is a persisting financial burden: it costs 120 000€ per day to airline companies
- Today structural repair on AoG is unavoidably lengthy (up to several weeks) because the MRO operator has not been trained to specific non-recurring operations and does not have the proper maintenance equipment in hand.

The level of maintenance skills onsite needs to increase dramatically, and rapidly, otherwise the aircraft industry can expect a huge economic loss due to inappropriate structural maintenance on AoG.

The issue will be unprecedented in Europe, where 21.5% of the future maintenance workforce will be operating by 2030 (+130,000 technicians), in great need for expert assistance and training.

Objectives:

SUNAERO, the world leader in rapid aircraft repair technologies, has launched the project WISE.

WISE is a new approach to remote and real-time aircraft maintenance that combines assistance, training and equipment leasing services in a single offer to MRO organizations.

It will become possible to connect any airport (line maintenance) or MRO site to a remote maintenance expert, whenever needed. The WISE experts will be able to guide a repair until it is fixed a few hours later (6 hours on average).

The WISE assistance will be certifying and disseminate greener and smarter aircraft maintenance best practices. A new business model will be implemented for the benefit of the user.

The feasibility of the WISE concept was completed in 2015, with the support of a SMEI Phase 1 grant. The Phase 2 project will demonstrate and scale-up the WISE approach to bring expert assistance to the airports (on the wing service), wherever located (hubs, airports in urban areas, isolated airports).

Parent Programmes:

[H2020-EU.3.4. - Horizon 2020: Smart, Green and Integrated Transport](#)

Institute type: Public institution

Institute name: European Commission

Funding type: Public (EU)

Lead Organisation:

Sunaero - Helitest**Address:**

70 RUE AMPERE
69726 GENAY
France

EU Contribution: €1,645,875

Technologies:

Aircraft operations and safety
Rapid maintenance

Development phase: Demonstration/prototyping/Pilot Production

STRIA Roadmaps: Vehicle design and manufacturing

Transport mode: Air transport

Transport sectors: Passenger transport, Freight transport

Geo-spatial type: Other