

PILOT3



Pilots should have on board a better understanding of the stakes of the current mission - from the perspective of the airlines objectives.

Pilot3 will develop a **software engine model** to provide this support performing **multi-criteria optimisation** on trajectory optimisation.

The system is composed of a Performance Indicators Estimator, an Operational ATM Estimator, an Alternatives Generator and a Performance Assessment Module.

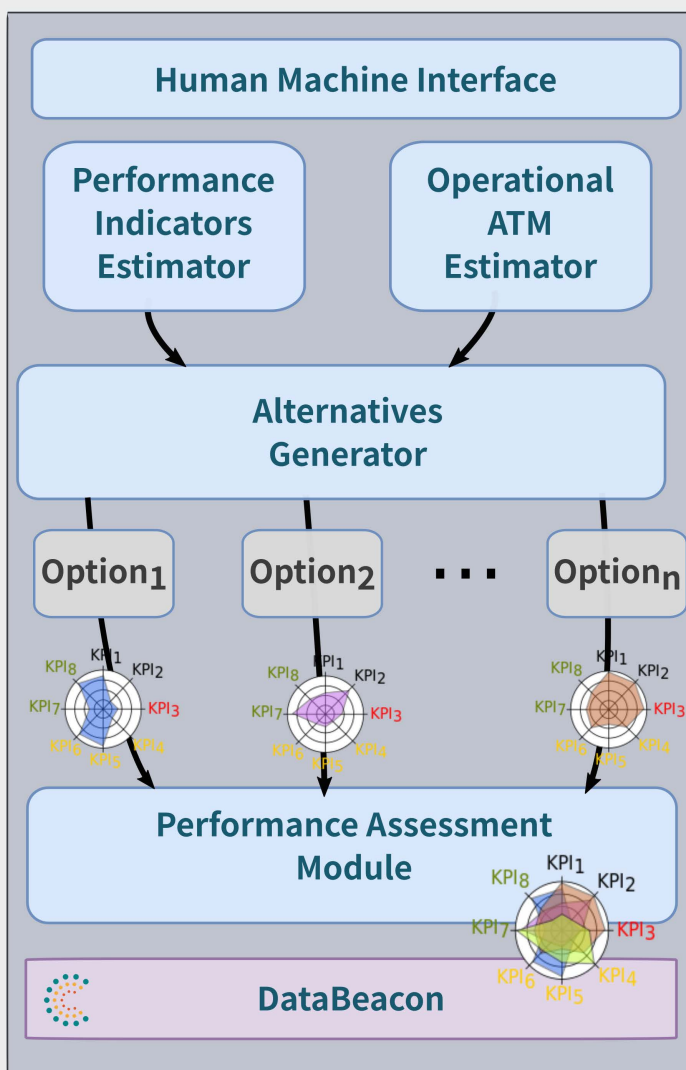
Two objectives are considered when generating alternatives:

- **Cost**, which is a complex objective built from the aggregation of three KPIs: (cost of fuel, cost of IROPs and other costs).

- **On-Time Performance**.

It will **explicitly estimate** the impact of different alternatives on these objectives making redundant the use of Cost Index as a proxy.

The **uncertainty** in the operations (such as arrival holding) will be estimated and considered in Pilot3 using heuristics and advanced machine learning techniques.



Key facts

- Clean Sky 2 programme
- Research and Innovation
- Start - November 2019
- End - January 2022
- Topic Manager - Thales

Main objectives

- Multi-criteria supporting decision tool for pilots
- Explicit modelling of performance indicators and uncertainty
- Considering cost and on-time performance
- Network and passenger effects on trajectory optimisation

Getting involved

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Pilot3 workshop
Spring 2021

More information
www.pilot3.eu

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THALES

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