

AEON

Advanced Engine
Off Navigation



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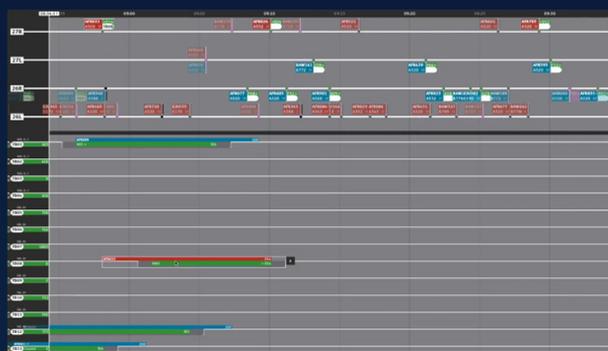
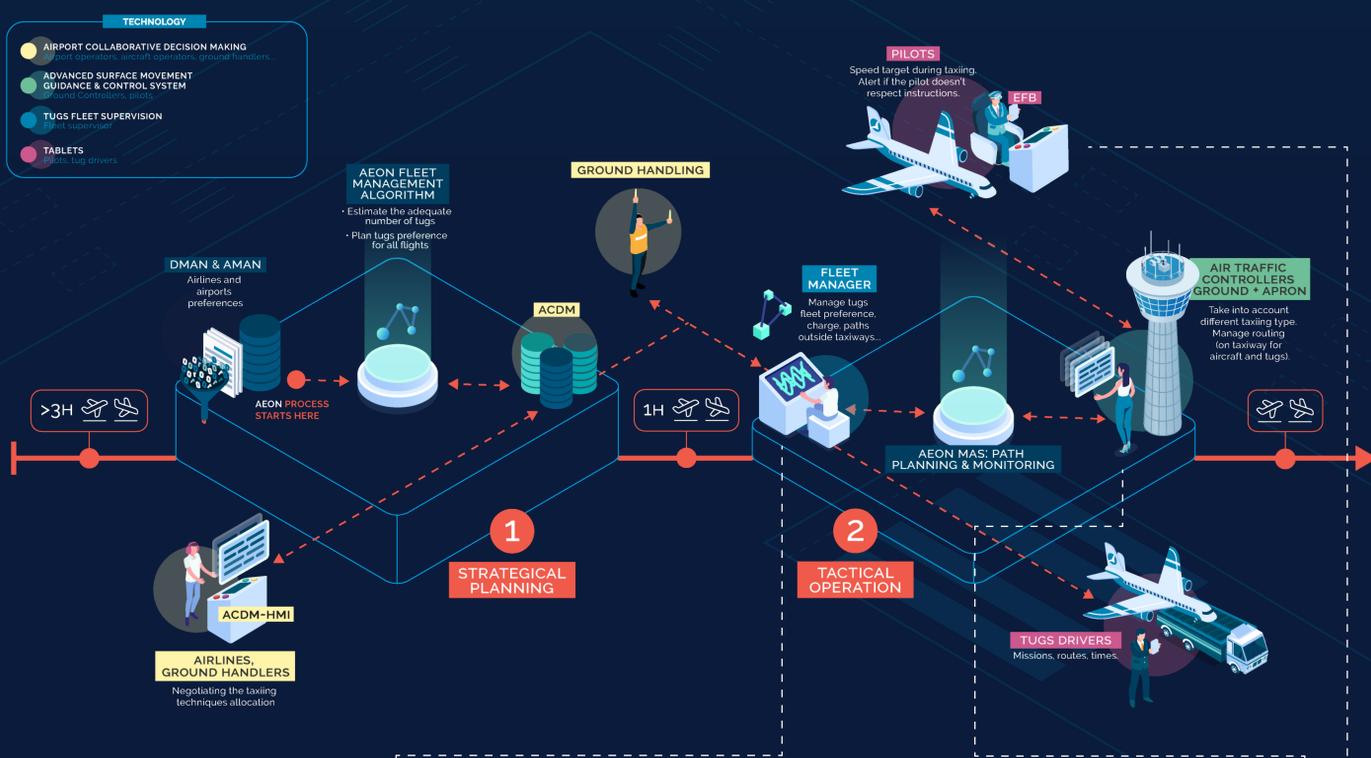
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CONTEXT AND OBJECTIVES

- Aircraft jet engines are inefficient for taxiing operations.
- Different taxiing techniques (such as Taxibots, E-Taxi, WheelTug) are coming onto market
- Each has its advantages and drawbacks: different performances, additional vehicles, maturity of the solution.
- AEON aims at innovating airport ground operations with more environmentally friendly taxiing techniques, combining the different solution into an innovative concept of operations that maximises engines-off time on ground for fuel and noxious emission savings.

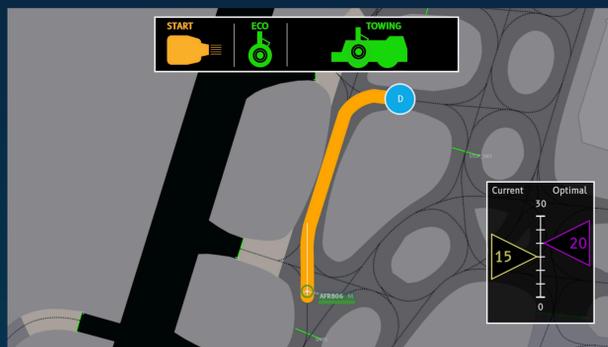
SCIENTIFIC CHALLENGES

- Optimise the usage of Taxibots
- Compute routing, speed profile and start up times for all aircraft in real time taking into account operational events
- Facilitate collaboration between the ground operations actors



An HMI supports the new Tug Fleet Manager role in (re)allocating tugs to aircraft considering arrival and departure sequences.

A-SMGCS HMI is completed with information on the taxi techniques and the routing service is updated accordingly.



The new routing service also calculates speed profiles for aircraft pilots to smooth the flows.