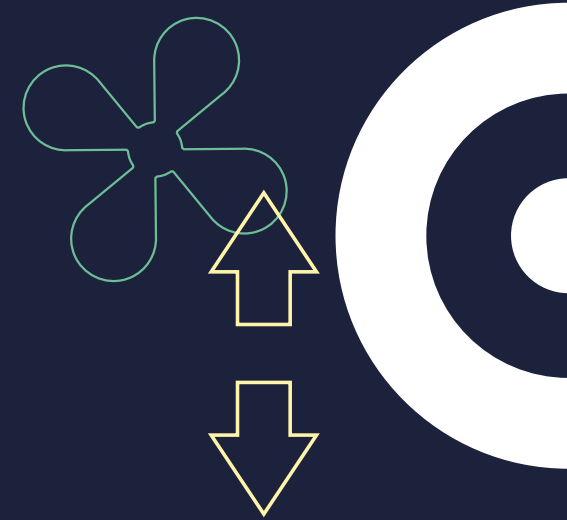


Greener taxiing technologies: costs and benefits

SURVEY RESULTS

Recently, the AEON Consortium has launched a survey to gather the opinion of ground operations experts about issues related to the introduction of three green taxiing technologies: TaxiBots, e-Taxi systems and Single Engine Taxiing (SET). Here are the results.

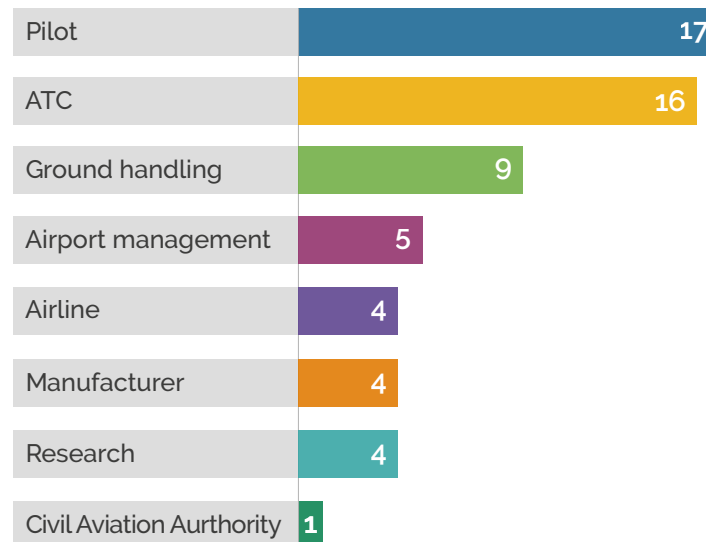


Sample overview

60 replies from highly skilled and experienced professionals from 8 different areas of activity.

58% of the sample with more than 15 years of experience.

What is your field of activity?



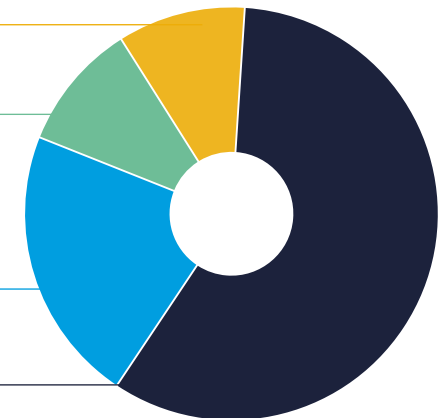
What is your experience in the field?

10%
1-5 years

10%
10-15 years

22%
5-10 years

58%
more than 15 years



What is your country of origin?

60

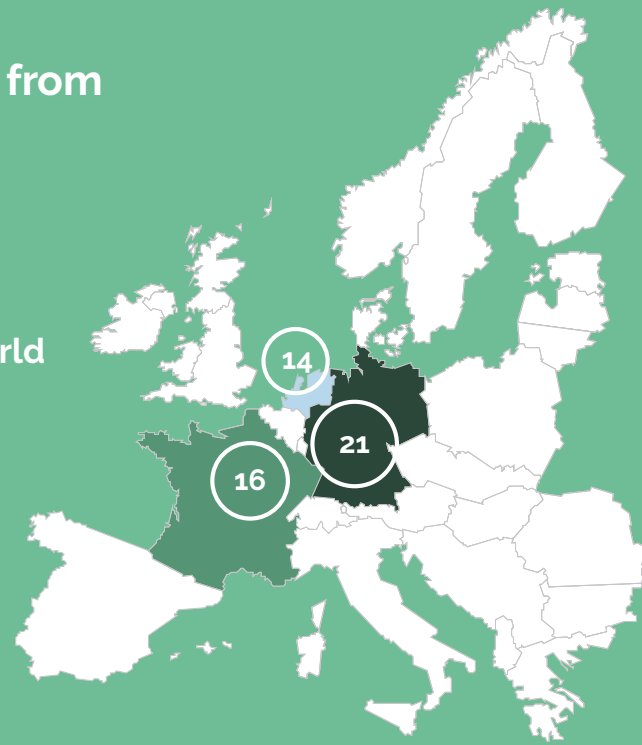
countries worldwide.

The vast majority of replies are from Germany, France and the Netherlands.

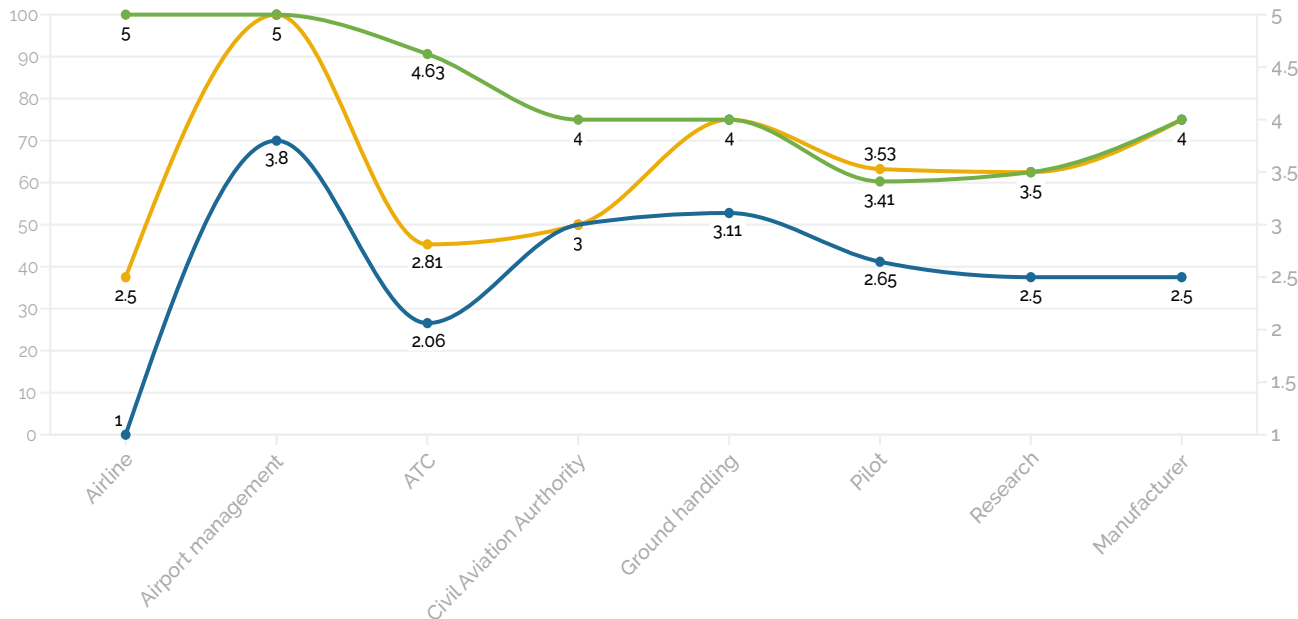
Experts coming from

58 Europe

2 Rest of the world



How familiar are you with these techniques?



SET is a very well-known solution.

This reflects the wide employment of this green taxiing technique.

TaxiBots are sufficiently known from most of the areas, even though airlines - who might become potential clients in the future - appear to be less familiar with this technology.

The e-Taxi systems are the less known if compared with the other techniques.

— SET — TaxiBots — e-Taxi

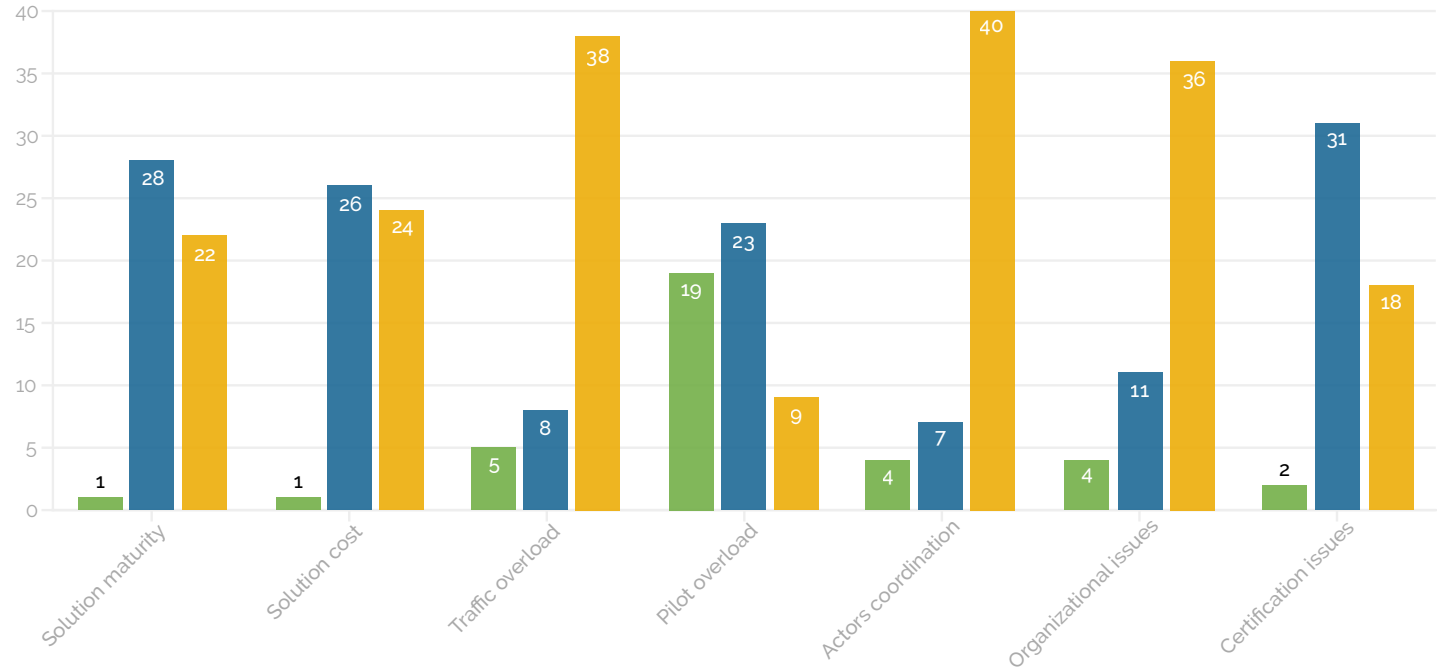
Results overview

We looked for the elements that could be the main blocking aspects of Single Engine Taxiing (SET), e-Taxi, and TaxiBots.

SET is the less challenging solution, apart from their link with pilot's workload. The main blockers of **e-Taxi** systems are the low maturity levels, the high levels of costs, pilot overload and certification issues.

TaxiBots are affected by high traffic overload, coordination between actors and organizational issues.

In your opinion what are the main blockers for the operational use of these techniques?



- SET
- e-Taxi
- TaxiBots

SET



e-Taxi



TaxiBots

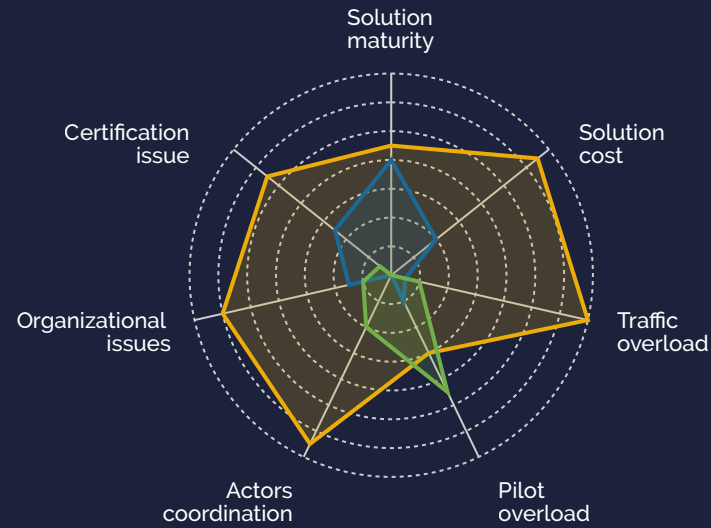


Expert perspective on blockers

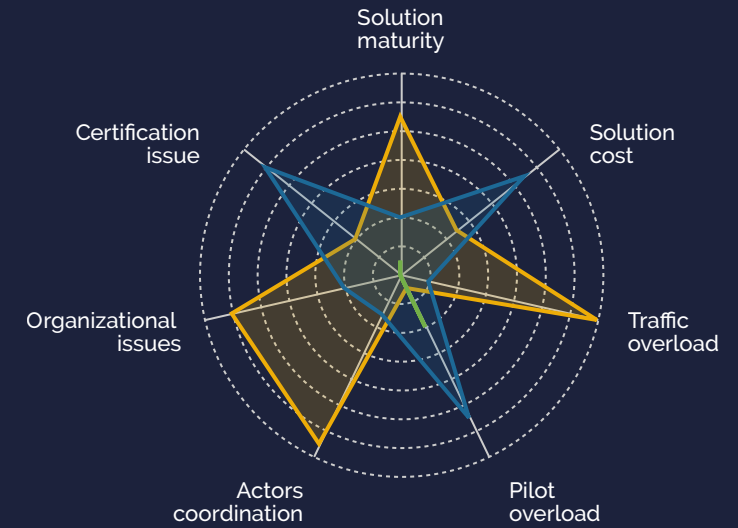
Each category of experts showed to have a different opinion on the techniques taken into account by the AEON project.

- SET
- TaxiBots
- e-Taxi

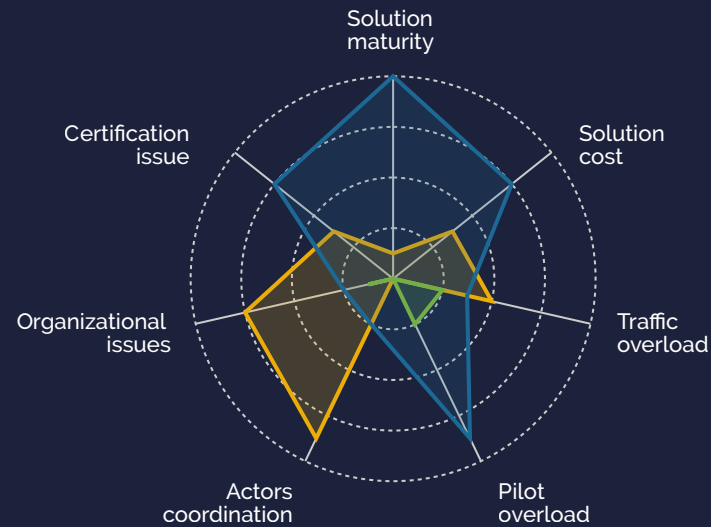
Pilot



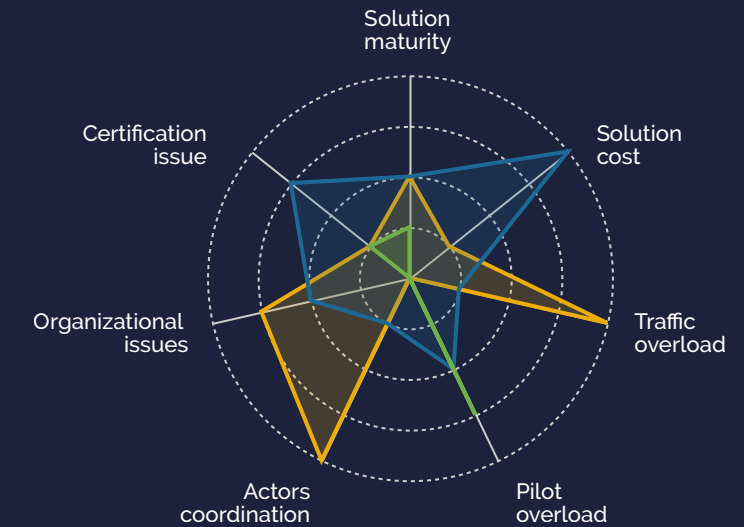
ATC



Ground handling



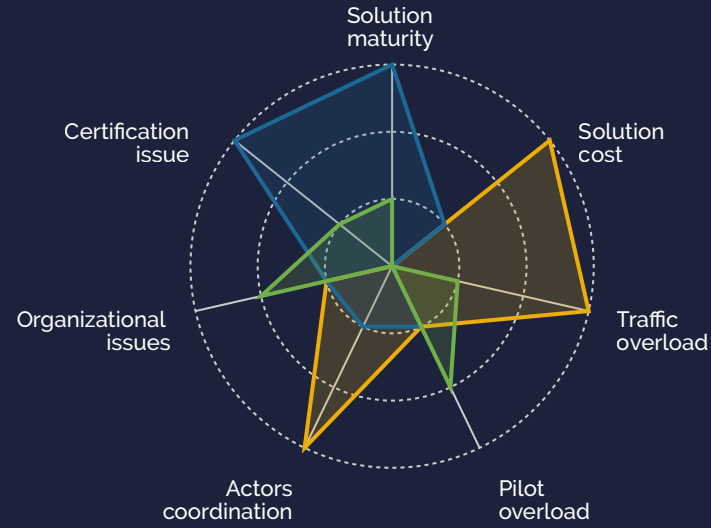
Airport management



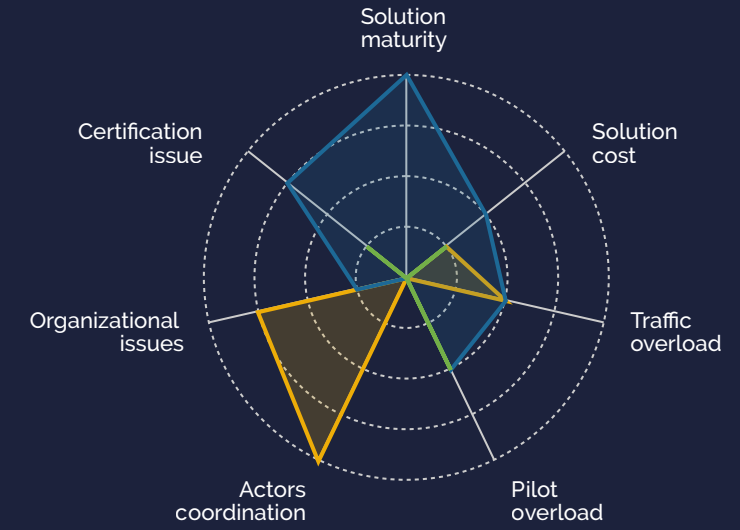
Expert perspective on blockers

- SET
- TaxiBots
- e-Taxi

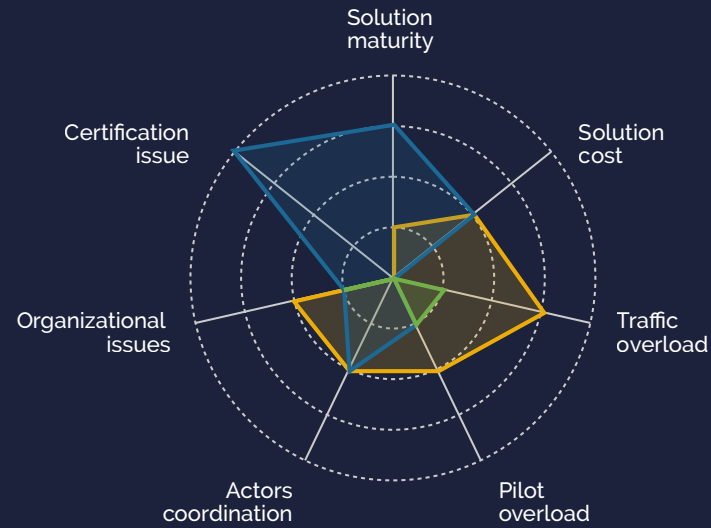
Airline



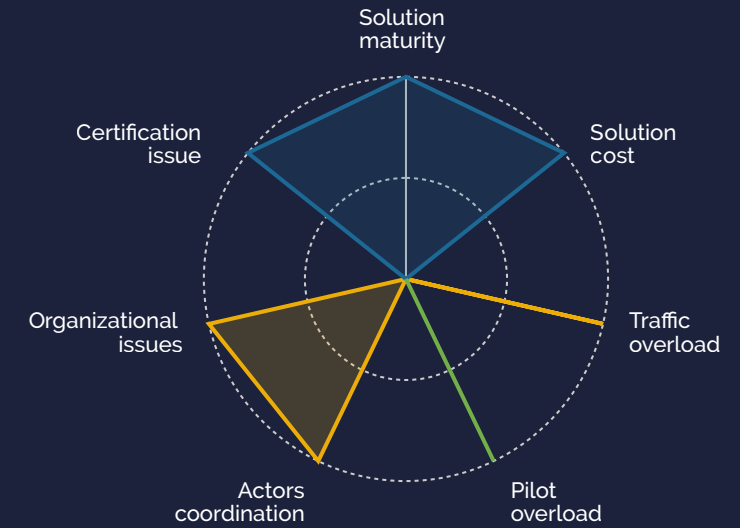
Manufacturer



Research



Civil aviation authority



Future scenarios

The airport clearly emerged as the subject to be in charge of managing and coordinating the use the new advanced taxiing solutions taken into account by AEON.

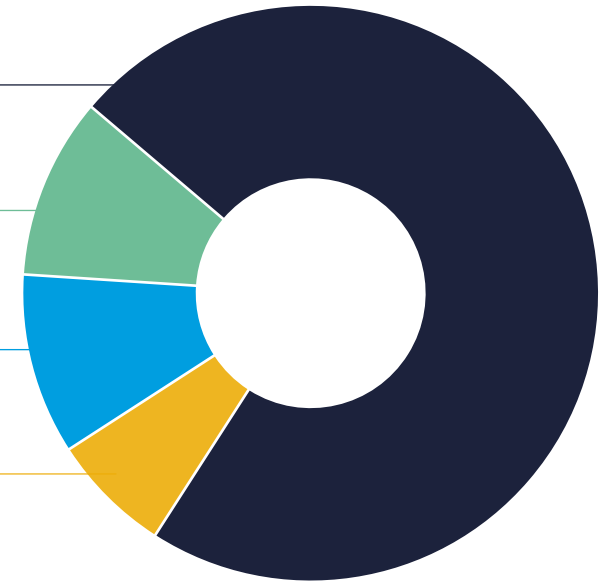
Who should be in charge?

73% The airport
43 replies

10% The ground handlers
6 replies

10% Both the airport and ground handlers
6 replies

7% The airlines
4 replies



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