



AUO-0805 — Incorporation of Autonomous Engine-off Taxiing into surface operations

Fuel consumption and safety are improved during airport surface operations thanks to Taxi-out and Taxi-in phases being done through autonomous engine off taxiing used from the gate to the holding point before line up (i.e. for push back and taxi out) and from the runway exit to the gate (i.e. for taxi in to in block). This may be realised thanks to e.g. electric motors added to the main landing gear and drawing power from Auxiliary Power Unit with central control from the cockpit.

Rationale Such green taxiing is primarily intended for planes making shorter flights with a large number of rotations and airport movements, it will reduce fuel consumption with concomitant decrease in CO2 and NOx emissions whilst keeping down noise around the airport. It will also lower pilot workload vs. single engine taxi, increase gate autonomy and safety. Indeed, Engine off taxi could provide a significant safety improvement as the number of FOD (Foreign Object Debris) and blast damages during ground operations can be significantly reduced. Most FOD and blast damages are typically in the area close to the gate and engine off taxi could eliminate both risks.

Forecast V3 end date -

Benefits start date (IOC) -

Full benefits date (FOC) -

Current Maturity Level -

Solution Data Quality Index -

Current Maturity Phase R&D

Scope -

Release 2020

PCP Status -

Context

Related Elements



