Leading in Runway Efficiency - Honeywell's and Safran's EGTS shortlisted for IHS/Jane's ATC award

EGTS International, a joint venture between Honeywell and Safran, was recently shortlisted for an IHS/Jane's ATC award for its EGTS taxiing system. The technology was recognised and shortlisted in the category of Terminal Area and Runway Efficiency Innovation, which promotes new innovative technologies designed to make runway operations more efficient.

Because an aircraft's main engines are optimized for flying rather than taxiing, they burn a disproportionate amount of fuel during ground operations. EGTS allows aircraft to push back without a tug and then taxi between gate and runway without engaging the main engines by using the Auxiliary Power Unit (APU) generator to power electric motors in the main landing gear. The result is an up to 4 per cent reduction in fuel burn per flight cycle.

Each of an EGTS-equipped aircraft's powered wheels on main landing gears is fitted with an electromechanical actuator, while unique power electronics and system controllers give pilots total control of the aircraft's speed and direction during taxi operations. In addition to reduced fuel burn, the system will also generate further savings by minimizing the risk of damage to engine turbines from foreign objects on the apron and taxiways.

The technology will have no impact on brake cooling time, can be easily retrofitted using optimized retrofit kits and, unlike other systems currently in development, can generate enough traction to operate in virtually all weather conditions, airport surfaces and gradients.

As well as operational cost reductions, the environmental benefits are also compelling. EGTS would have a considerable impact on airport noise and emissions pollution, offering a reduction of up to 75% in carbon (CO2/HC/CO) and up to 50% Nitrogen Oxide (NOx) emissions compared to current levels. One single aircraft using EGTS is the equivalent of removing 400 cars from Europe's roads in terms of the fuel use and CO2 emissions.

EGTS will also improve runway and airport efficiency by reducing gate and apron congestion, improving on-time departure, and allowing passengers to de-plane faster as a result of faster ground handling operations.

The technology, which is aimed at narrowbody fleets flying short haul routes with a high number of daily rotations, is being evaluated by numerous airlines including Air France, easyJet and TUIfly, and is being assessed by Airbus for integration on its A320 family of aircraft.

Commenting on the technology's recognition in the IHS/Jane's ATC award EGTS Program vice presidents Brian Wenig and Olivier Savin said "We are very proud that EGTS was shortlisted for this award. EGTS will bring airlines and airports a myriad of benefits, not just in terms of fuel savings, but in a cleaner, faster, more efficient terminal and runway environment. With airlines and airports facing increasing pressure to simultaneously lower costs, reduce emissions and improve on-time performance, the industry is recognising the value that electric taxiing can bring to operations right from day one."