

ST Engineering's Highlights at Singapore Airshow 2026

Aviation Showcase

- **DrN-600**, co-developed with U.S.-based partner, AIR Inc., is the Group's first medium-lift cargo unmanned aircraft system (UAS) designed to address key barriers to large-scale UAS commercialisation, including technology robustness and unit economics. With a maximum take-off mass of under 600 kg and range of over 70 km, it is capable of carrying up to 100 kg in a versatile cargo compartment that supports various standard pallet sizes. The DrN-600 is engineered to balance performance with regulatory readiness, building on operational experience accumulated since 2018 through smaller UAS platforms. Certification of the DrN-600 is targeted for completion by 2028, while operational trials with the prototype systems will be conducted in parallel to gather customer feedback.
- **Business Aviation Thrust Reverser** uses hinged (pivoting) doors to redirect engine exhaust airflow forward during landing, helping the aircraft decelerate and reduce brake wear. The Thrust Reverser Unit (TRU) demonstrator is the Group's latest innovation for next-generation nacelle systems, designed for Long Duct Mixed Flow (LDMF) configurations on business jet-sized aircraft. It showcases the Group's expertise in advanced composite thrust reverser design, integrating high-temperature-capable composites, a fully electric actuation system and Computational Fluid Dynamics (CFD)-optimised aerodynamics. Validated through engine ground testing, the demonstrator achieves improved aerodynamic efficiency, acoustic performance and structural integrity under high-temperature conditions, highlighting the Group's capability to deliver lightweight, efficient and production-ready nacelle solutions for future aircraft platforms.
- **GEMINI-X** is a next-generation airborne tactical datalink system that connects multiple platforms including fighters, transports and helicopters to operate as a unified force. It delivers secure and accurate communication across air and ground platforms, enhancing coordination and real-time situational awareness. GEMINI-X integrates seamlessly with both aircraft systems and ground command and control (C2) networks, enabling multi-domain operations with minimal modifications for rapid deployment, reduced integration costs and accelerated mission readiness.

Defence, Public Safety & Security Showcase

- **Manned-Unmanned Teaming Operating System (MUMTOS)** is a next-generation open architecture for manned-unmanned teaming, linking unmanned platforms from micro drones to unmanned aerial vehicles (UAVs) and humanoids through an AI-powered Command, Control and Communications (C3) system. Designed to enable swarm tactics and integrate existing unmanned capabilities, MUMTOS delivers faster, safer and more effective operations through unified human-machine collaboration.
- **AI Cockpit** is an Agentic AI-enabled platform for combat land vehicles and is capable of making decisions and executing actions autonomously without constant human intervention. Operators can issue verbal commands to the AI Cockpit which interprets and carries out tasks, significantly reducing crew cognitive load. Enabled by a software-defined vehicle architecture, the system supports rapid insertion, updates and scaling of AI capabilities without hardware changes. It also provides unified control of heterogeneous unmanned vehicles (UxVs), including commercial off-the-shelf (COTS) platforms, and delivers a holistic manned-unmanned teaming solution by enabling combat and combat support platforms to deploy UxVs as motherships.
- **EagleStrike** is a next-generation loitering munition with dual-mode advanced payload that offers superior standoff flexibility with advanced targeting capabilities for coordinated, precision beyond line-of-sight missions against high-value assets.

Smart City Showcase

- **AGIL® Secure FastPass** provides a fully integrated and contactless airport traveller experience from check-in to boarding. Combining advanced biometrics, AI and unified security management, it ensures safety, efficiency and convenience at scale. At its core, AGIL Secure, an integrated security management and identity platform, centralises real-time monitoring, control and coordination of traveller movements in the airport and security events, managing all kerb-to-gate transactions and backend security systems for enhanced operational efficiency and whole-of-airport monitoring and control. AGIL Secure FastPass comprises:
 - **FastPass Mobile App** that pre-loads travellers' biometric identities and verified boarding passes to enable automated authentication and quick clearance at security checkpoints, immigration and boarding gates.

- **FastPass Biometric e-Gate** detects and verifies biometric identities at immigration lanes, enabling passport-free, contact-free and frictionless immigration clearance.
- **FastPass AI Scanning System** integrates AI with conventional X-ray luggage scanners to detect and analyse dangerous and restricted goods with up to 95% accuracy. It identifies all 20 prohibited items defined by the International Air Transport Association (IATA), reducing operator workload and minimising human error.
- **FastPass Boarding Kiosk** leverages Two-Factor Authentication (2FA) and verification for secure, contactless and automated boarding clearance.

Innovation Showcase

- **HubGen 1-MW Hydrogen Electrolyser** is designed to bring hydrogen production closer to demand, bridging energy gaps and accelerating hydrogen adoption. With integrated OT-level cybersecurity capabilities, the containerised system ensures resilient and secure operations across the infrastructures it supports.
- **I Additive Manufacturing Factory (I A.M. Factory)** is a mobile “A.M.-in-a-box”, where complex components are digitally constructed via GenAI, for onsite fabrication using powder bed fusion technology. This revolutionises just-in-time production by empowering operators with agile repair and sustainment capabilities, enhancing operational resilience and remote logistics at point of need.