

Media Release

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To: The News Editor

FOR IMMEDIATE RELEASE

CAAS AND THALES TO JOINTLY SET UP AVIONICS LAB IN SINGAPORE TO TEST AND DEVELOP AIR TRAFFIC MANAGEMENT AND AIRPORT OPERATIONS SOLUTIONS

The Civil Aviation Authority of Singapore (CAAS) and Thales will jointly set up an International Avionics Lab in Singapore to test-bed and develop new avionics¹ solutions to enhance air traffic management and airport operations in the Asia-Pacific region and around the world. On 29 May 2025, CAAS, Thales, the Changi Airport Group (CAG), SATS Ltd. (SATS), Singapore Airlines (SIA) and the International Centre for Aviation Innovation (ICAI) signed a Memorandum of Understanding (MOU) to collaborate on the International Avionics Lab and jointly explore, initiate and undertake avionics innovation projects. The MOU signing was witnessed by His Excellency Mr. Stephen Marchisio, Ambassador of France to Singapore, and Mr. Lau Peet Meng, Permanent Secretary (Transport).

2 The CAAS-Thales International Avionics Lab, which will be set up in 2026, will house around six to eight engineers for a start. It will test and develop new solutions based on real-world operational scenarios involving airlines, air navigation service providers, airport operators and ground handlers. These will improve coordination and collaboration amongst these stakeholders to improve efficiency and performance, reduce delays and optimise resources.

¹ Avionics are the integrated electronic systems used on aircraft for a wide array of flight functions including flight operations, navigation, communication, and systems monitoring.

3 The CAAS-Thales International Avionics Lab will be Thales' first avionics lab outside France. It will tap on *cortAIx*, Thales' new AI accelerator that was launched in Singapore on 30 May 2025, to develop industrialised trusted AI solutions for critical systems. The new lab will also work with the AIR Lab, which was jointly established by CAAS and Thales in 2019, and aims to develop cutting-edge air traffic management solutions to optimise air transport operations in the region. CAAS will appoint ICAI to serve as the programme manager to support the overall planning and execution of the Lab's programmes with Thales.

4 One key strength of the CAAS-Thales International Avionics Lab is its ability to leverage One Aviation eco-system in Singapore² to drive research and development activities synergistically, which will help to lower the cost of investment and accelerate the development of solutions for the sector. Under the MOU, the partners will work together to identify key challenges that need to be addressed and undertake joint innovation projects to develop solutions, which could include the following:

- a. **Air traffic optimisation** by combining airlines' flight operations and cockpit data with air traffic management information. AI-enabled algorithms can detect and predict holding patterns within a particular radius around Changi Airport, helping manage congestion and leading to reduced flight delays.
- b. **Digitalising and optimising the data shared between airlines, air traffic management and airports.** Data from sensors in the aircraft like cameras or inflight entertainment systems can provide real-time, automated data to complement current data streams like video content from ground infrastructures. Enhancing these with AI models can aid airlines, air traffic managements and airport operators to improve collaborative decision making.

² This comprises CAAS, a safety regulator and air navigation service provider; SIA, a national carrier; CAG, an airport operator; and SATS, a ground handler.

5 The CAAS-Thales International Avionics Lab will harness Thales' global expertise in avionics, cybersecurity and AI. It will grow local capabilities in these domains, which will create new job opportunities in our aviation workforce for more Singaporeans. It is part of CAAS' strategy to establish Singapore as a hub for aviation innovation and strengthen Singapore's position as a global air hub and centre for maintenance, repair and overhaul (MRO) activities. It is also part of Thales' strategy to leverage Singapore as an innovation hub to capture opportunities from the strong traffic growth in the Asia-Pacific region.

6 Mr Han Kok Juan, Director-General, CAAS, said: "The CAAS-Thales International Avionics Lab is a good example of what Singapore offers to international technology companies - an integrated eco-system which allows them to quickly plug and play and develop new concepts and solutions that can be tried out across multiple stakeholders."

7 Ms. Emily Tan, Country Director and CEO for Thales in Singapore, said "The International Avionics Lab in Singapore will be the first of its kind for Thales outside of France, bringing our expertise in avionics, air traffic management, data analytics, cybersecurity and AI to the fore. We have contributed to Singapore's aerospace sector for over five decades. The International Avionics Lab is a further testament of the strong partnership with Singapore's key aviation stakeholders to develop solutions that support Singapore's growth as a Global Air Hub."

8 Ms. Yannick Assouad, Executive Vice President Avionics, Thales, said "We are thrilled to set up this International Avionics Lab in Singapore, in close collaboration with CAAS and ICAI. This pioneering initiative positions us at the heart of a dynamic ecosystem, where we can co-innovate with key aviation players, like Singapore Airlines, Changi Airport and SATS. It's a unique opportunity to bring our avionics technologies and expertise into real-world testing environments and accelerate the development of breakthrough collaborative solutions that will shape the future of aviation."

9 Mr Patrick Ky, Chief Executive Officer, ICAI, said: “The new International Avionics Lab is a launchpad for innovation—designed to build and test cutting-edge solutions that drive aviation growth across Asia Pacific. From tackling unique challenges like diverse ground infrastructure to creating globally scalable technologies, this is where ideas take flight. We're excited to welcome Thales Avionics to Singapore's thriving aviation innovation ecosystem—home to smart, agile, and entrepreneurial companies pushing the boundaries of what's possible.”

10 Mr Yam Kum Weng, Chief Executive Officer, CAG, said: “Changi Airport Group is pleased to contribute to the CAAS-Thales International Avionics Lab. We look forward to working with key aviation partners to boost Changi Airport's operational precision and efficiency, and strengthen Singapore's global air hub position.”

11 Mr Kerry Mok, President and CEO, SATS, said: “SATS is pleased to collaborate with the CAAS-Thales International Avionics Lab as part of an aviation ecosystem that is committed to innovation and operational excellence. These avionics innovation projects could enhance coordination across the aviation value chain—improving turnaround times, reducing delays, and enabling more efficient use of shared data and resources. This reflects our continued focus on applying practical, data-driven solutions together with our industry partners to meet real-world operational challenges and strengthen Singapore's position as a global aviation hub.”

12 Mr Goh Choon Phong, Chief Executive Officer, Singapore Airlines, said: “The CAAS-Thales International Avionics Lab enables us to collaborate with our partners to develop solutions that improve air traffic management and optimise airport operations in Singapore. This can potentially enhance coordination, reduce delays, and elevate the customer experience at Changi Airport, helping to further strengthen Singapore's position as a global aviation hub.”

About the Civil Aviation Authority of Singapore

The mission of the Civil Aviation Authority of Singapore (CAAS) is to grow a safe, vibrant air hub and civil aviation system, making a key contribution to Singapore's success. CAAS' roles are to oversee and promote safety in the aviation industry, develop the air hub and aviation industry, provide air navigation services, provide aviation training for human resource development, and contribute to the development of international civil aviation. For more information, visit www.caas.gov.sg.

About Thales

Thales (Euronext Paris: HO) is a global leader in advanced technologies for the Defence, Aerospace, and Cyber & Digital sectors. Its portfolio of innovative products and services addresses several major challenges: sovereignty, security, sustainability and inclusion.

The Group invests more than €4 billion per year in Research & Development in key areas, particularly for critical environments, such as Artificial Intelligence, cybersecurity, quantum and cloud technologies.

Thales has more than 83,000 employees in 68 countries. In 2024, the Group generated sales of €20.6 billion.

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