

**MEDIA RELEASE**

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SATS AND TUMCREATE TEAM UP TO DIGITALISE AIR CARGO HANDLING

SATS Ltd. (SATS) and TUM CREATE Ltd (TUMCREATE¹) today announced that they are exploring commercialisation opportunities for the world's first artificial intelligence (AI) powered robotic air cargo system, SPEEDCARGO, to help digitalise air cargo handling and transform laborious processes for the freight industry.

The industry stands to benefit from improved productivity and time savings, in addition to higher throughput and load factors. Using SPEEDCARGO, airlines would be able to optimise their cargo hold based on volume, weight, and other criteria with a click.

SPEEDCARGO is an integrated solution comprising three products – CARGO EYE, CARGO MIND and CARGO ARM – which are targeted at optimising cargo acceptance as well as cargo palletisation through intelligent Unit Load Device (ULD) planning, and automatic ULD packing respectively. The AI-powered operating system enables seamless data connectivity for end-to-end optimisation, and improves safety and security across cargo operations.

As Asia's leading ground handler, SATS is contributing decades of operational know-how and expertise, along with its premises at SATS Airfreight Terminal as a test bed to accelerate cargo handling in a sustainable and secure manner. Since October 2018, TUMCREATE has been stationed on site, working closely with SATS during the prototype development phase and for ongoing trials.

SATS and TUMCREATE have achieved a 99.99% accuracy rate for the dimensioning of accepted cargo during trials of CARGO EYE. CARGO EYE produces a digital fingerprint for incoming cargo in real-time using an advanced 3D camera system for better pallet optimisation. SATS and TUMCREATE are concurrently making progressive enhancements to CARGO MIND and CARGO ARM with the aim of commercialising each product in phases.

The Civil Aviation Authority of Singapore (CAAS) facilitated the industry collaboration with its second Aviation Challenge², where TUMCREATE was awarded S\$1.9 million for SPEEDCARGO's prototype development over two years. The project has received S\$4 million in funding from the National Research Foundation Singapore's (NRF's) Central Gap Fund, which supports public research performers in the translation of research outcomes into useful products, processes, and services that generate economic and societal benefits.

"Piloting this technology in Singapore is part of our wider innovation programme to enhance services and scale our operational efficiency" said Alex Hungate, President and Chief Executive Officer, SATS. He added, "These capabilities would enhance our cargo network across Asia Pacific, along with COSYS+, our cloud-based cargo terminal management system, to augment real-time cargo visibility along our digital corridors."

Dr Suraj Nair, Head of SPEEDCARGO Technology, said, "This partnership with SATS is a unique opportunity for us to develop our technology into a fit-for-purpose solution for the airfreight industry.

¹ TUMCREATE is part of NRF's Campus for Research Excellence And Technological Enterprise (CREATE), an international campus set up to forge partnerships between Singapore's universities, research institutions, and leading overseas research institutions.

² CAAS launched Aviation Challenge 2 to develop solutions to automate the build-up and breakdown of cargo pallets and containers, to improve productivity and reduce physical strain on cargo handlers. TUMCREATE was one of the teams awarded in September 2015.

Support from industry players and regulators like CAAS is essential in realising SPEEDCARGO's vision of the automated airfreight terminal of the future”.

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ABOUT SATS

SATS is Asia's leading provider of food solutions and gateway services.

Our food solutions include airline catering as well as central kitchens for food service chains and institutions. Our comprehensive gateway services encompass airfreight handling, passenger services, ramp handling, baggage handling, aviation security services, aircraft interior and exterior cleaning, as well as cruise centre management.

SATS is present in over 60 locations and 13 countries across Asia Pacific and the Middle East.

SATS has been listed on the Singapore Exchange since May 2000. For more information, please visit www.sats.com.sg.

ABOUT TUMCREATE

TUMCREATE is a research platform for the improvement of Singapore's public transportation, including the deployment of electric and autonomous mobility. Researchers from world-leading universities, Technical University Munich (TUM) and Nanyang Technological University (NTU), joined forces and are funded by Singapore's National Research Foundation as part of the Campus for Research Excellence And Technological Enterprise (CREATE). TUMCREATE is made up of over 100 scientists, researchers, and engineers led by professors from TUM and NTU.

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