

Singapore to invest S\$45m a year in new defence tech labs for robotics, AI

The city-state will also host an inaugural Defence Technology Summit in 2018 as it looks to become a global player in modern military advancements.

Posted 03 Mar 2017 14:38 Updated 03 Mar 2017 21:45



432



Email



More



A

A



SINGAPORE: A starting seed grant of S\$45 million a year will be given to two new laboratories in the Defence Science and Technology Agency (DSTA) and DSO National Laboratories organisations, Defence Minister Ng Eng Hen said in Parliament on Friday (Mar 3).

“Modern militaries are powered by technology, and the next-generation SAF (Singapore Armed Forces), even more so,” he said. “Our defence technology organisations will gear up to support changes.”

To foster more experimentation and innovation, DSO will set up a robotics lab in April this year and DSTA will expand to include an analytics and artificial intelligence lab.

At the former, defence engineers will collaborate on prototyping, integration, simulation and testing of systems prior to field trials for the SAF. “The work on robotics has already begun,” said Dr Ng. “Six Singapore Infantry Regiment soldiers are currently experimenting with unmanned aerial and ground vehicles to perform missions. The Navy has gone further and is putting Unmanned Surface Vehicles which can navigate and avoid collisions autonomously into operations.”

“The SAF, working with the Ministry of Home Affairs, has already developed countermeasures to potential drone attacks. These systems were deployed in the last NDP (National Day Parade).”

DSTA's new lab will exploit the real-time information that can be derived from the Internet of Things and platforms, said the minister.

“The realisable potential is enormous. For instance, our Singapore Maritime Crisis Centre monitors more than 1,500 commercial shipping vessels in our waters daily. It uses AI to generate unique signatures for each, through collating information from multiple sources, including social media. It then detects any deviations from this signature,” he explained.

“This AI-embedded method detected a possible ISIS supporter on board a tanker in 2015. That person was barred from disembarking in Singapore. Finding this needle in a big haystack is only possible through modern means.”

Singapore will also host an inaugural Defence Technology Summit in early 2018. Targeted as a biennial event, the summit will be organised by DSTA together with Singapore's universities, A*STAR and Government agencies like GovTech, Cyber Security Agency of Singapore, National Research Foundation and Singapore Economic Development Board.

“Singapore can lead in defence technology, even though we are small,” said Dr Ng. “The Summit will provide a global platform to invite leading figures and luminaries to come share their views, provide a window into the future, allow us the opportunity to network and increase our access to new ideas and innovation.”

In his speech, Dr Ng also revealed that Singapore has around 5,000 defence engineers and scientists, with the number of related scholarships and awards on offer due to be increased by 40 per cent - up to 170 from 120 today - by 2025.

- CNA/jo