

1. ST Engineering's Satellite Systems and Geospatial Solutions Businesses

From advancing next-generation Earth observation satellites and turning geospatial data into actionable insights that support agriculture, maritime safety, environment monitoring and disaster management, ST Engineering's satellite business has been at the forefront of Singapore's space ecosystem, working with local start-ups and SMEs for over 20 years and contributing to the growth of Singapore's indigenous capabilities in satellite and space-based technologies.

Its joint ventures with DSO National Laboratories - [ST Engineering Satellite Systems](#) and [ST Engineering Geo-Insights](#) - have a combined space engineering talent pool of 140, reflecting our major space tech presence in Singapore.

ST Engineering Satellite Systems specialises in the design, development, build, test and operation of satellites. Complementing this, ST Engineering Geo-Insights specialises in satellite imagery and geospatial analytics solutions, leveraging near-equatorial satellites to provide Earth observation services that support sectors such as maritime, agriculture, energy and infrastructure.

2. NeuSAR-2 Constellation

NeuSAR-2 Constellation consists of four satellites and once fully operational by 2030, it will achieve a collective revisit rate of 8–16 times per day. Its high revisit rate enables more frequent imagery updates, a critical advantage for monitoring fast-changing situations such as floods, oil spills, or assessing damage after forest fires. The constellation also captures sharp imagery (at 0.6m per pixel), allowing more precise detection and analysis.

NeuSAR-2's four-satellite architecture offers resilience. If one satellite experiences issues or undergoes maintenance, the remaining satellites continue to operate, ensuring uninterrupted data flow.

Key technical features of NeuSAR-2 Constellation:

	NeuSAR-2 Constellation (<i>four satellites</i>) <i>Scheduled for 2027-2030</i>
Daily Revisit Rate	8 – 16 times collectively
Weight	≤ 280kg per satellite (small satellite)
In-Orbit Life	≥ 5 yrs per satellite
Frequency	X band
Highest Ground Resolution	0.6m per pixel
Imaging Modes	Spotlight, Stripmap

3. New Satellite Solutions Showcased at Space Summit@Singapore Airshow 2026

Solution	Description and Use Cases
MiNERVA HUB	<p>MiNERVA HUB is a space situational awareness platform that integrates space object tracking, conjunction risk analysis and space weather forecasting. Its conjunction analysis engine provides timely conjunction warning alerts, helping operators mitigate collision risks arising from more than 30,000 published space objects and severe space weather-driven positional uncertainty.</p> <p>Combined with its advanced visualisation tools and comprehensive satellite knowledge base, MiNERVA HUB is essential for proactive space traffic management and safeguarding the orbital environment.</p>
Earthsurance	<p>Earthsurance is a comprehensive assessment and monitoring platform designed to support projects aimed at reducing emissions from deforestation and forest degradation.</p> <p>Its advanced assessment tool uses 10 years of historical data to verify the forest's eligibility and validate carbon credit baselines. It leverages L-Band SAR technology to deliver near real-time insights, both above and below the forest canopy, enabling early detection of deforestation and degradation while supporting the long-term health of forest.</p>