Space Defense: Australia Launches Atlas, the New Laser Shield for Satellites

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Sydney, September 29, 2025 – At the **International Astronautical Congress (IAC) 2025** in Sydney, the Australian company **Electro Optic Systems (EOS)** presented its new technology: **Atlas Space Control Capability**, a high-energy laser system designed to counter threats to satellites in an increasingly contested orbit.

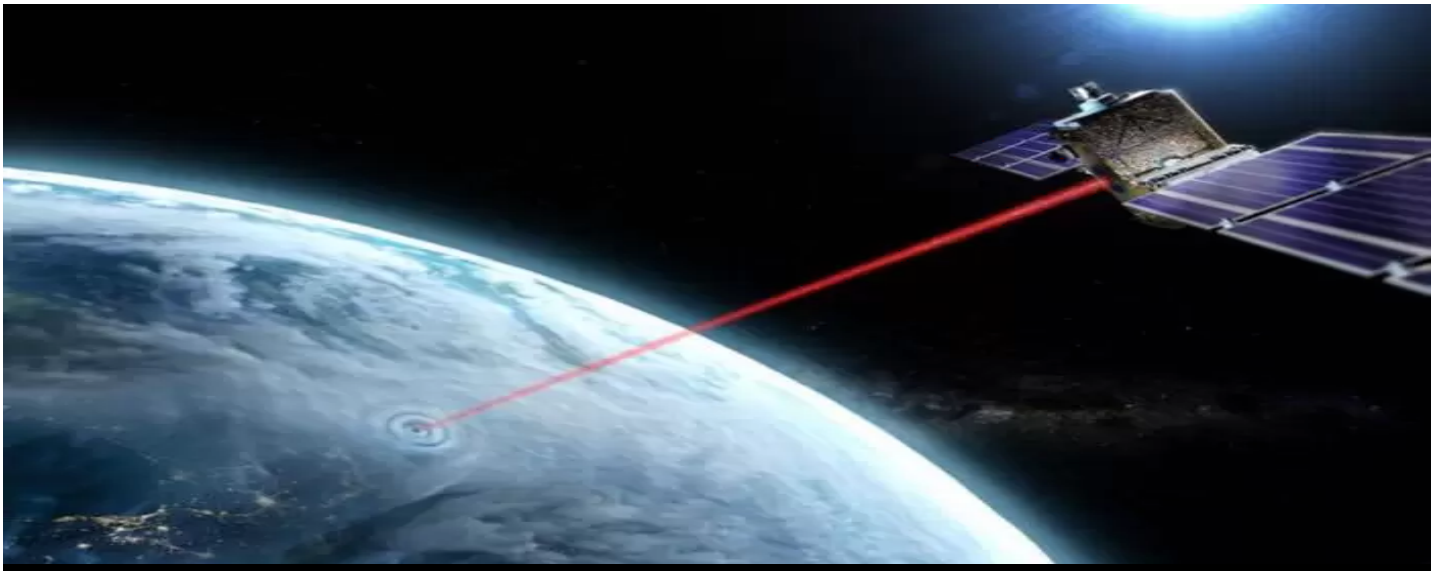
A New Arsenal for Space Domain Awareness

Atlas is part of the EOS space solutions family and is offered in three configurations: fixed, mobile, and relocatable, allowing it to be deployed anywhere in the world based on strategic needs.

Thanks to advanced telescopes and next-generation domes, the system can detect, track, and characterize objects in orbit in real-time – including faint and hard-to-detect satellites, as well as

space debris – both day and night.

One of the most innovative aspects is the **scalability of power**: operators can modulate the laser intensity based on the mission, ranging from a passive role of surveillance and deterrence to more direct control interventions. Additionally, Atlas is designed to integrate with **Space Domain Awareness (SDA)** networks and multi-domain operations, promoting cooperation and data sharing among allies.



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The CEO of EOS, **Dr. Andreas Schwer**, emphasized the urgency: "*Space is now a contested domain, and satellites, vital for both defense and daily civilian life, are increasingly at risk. Atlas was developed to protect these resources by offering scalable and easily deployable options for deterrence and orbital control*". Schwer also noted how EOS brings over 40 years of experience in laser and tracking technologies.

Strategic Implications and Challenges

The presentation of Atlas places Australia among the countries developing directed energy capabilities for space defense. With a modular, scalable, and globally deployable system, EOS aims to provide allies with tools to maintain freedom of action in space.

However, some issues remain open:

- **International norms and regulations**: the use of anti-satellite lasers raises concerns about strategic stability and arms control in space.

- **Collateral risks**: the use of a high-energy laser in orbit must consider unintended effects on other satellites or sensitive sensors.
- **Technical challenges**: atmospheric distortions, targeting precision, power supply, and beam propagation remain crucial elements to refine.
- **Costs and scalability**: it will be crucial to understand whether to focus on many low-power units or a few high-capacity installations.

The IAC 2025 and Australia's Space Rise

At the IAC 2025 EOS presented Atlas at its stand, attracting the attention of international delegates. The event brought together over **7,300 representatives from 90 countries** and more than **40 space agencies**.

Australia played a leading role, with **over 400 local scientific contributions** – a national record – demonstrating the country's growing ambition in the global space sector.

News link: https://eos-aus.com/news/eos-unveils-atlas-space-control-capability-at-iac-2025/