

EOS



Canberra-based Electro Optic Systems (EOS) is a potential strategic partner to develop sovereign Australian guided weapons capability.

Australian owned and controlled EOS has over 35 years' experience in providing the capability required for sovereign guided weapons including R&D, design, manufacturing and supporting complex and high technology sensors, guidance packages, targeting systems and weapon systems. EOS more broadly also designs and manufactures in Australia space control systems consisting of software, space and aerospace C2 management and safety systems, optical sensors and components, lasers, large tracking and directing telescopes, electronic hardware, specialised coatings and precision mechanical components. This capability has been refined over many years and adapted as technologies and industrial capabilities have evolved. EOS has also established a local supply chain that supports high technology defence industry capabilities and aerospace quality manufacturing. EOS regularly invests in supply chain partners to create industrial capabilities that are unique in Australia.

EOS could play a number of roles including but not limited to:

- Major team member in an Australian Sovereign Guided Weapons Enterprise delivering locally developed and manufactured guidance, tracking and sensor solutions.
- Supplier to the Sovereign Enterprise of locally developed technologies.
- Local manufacturing partner for overseas supplied designs and sub-components.

The company has been involved in the guided weapons domain for over 35 years, since the company's founding and has delivered extremely high-level targeting and guidance solutions to a number of large US space and land programs over that time. Specific EOS Australian developed technology in the stabilisation, fire control and directed energy fields remain relatively unique within both the space and land domains. In order to deliver on these programs EOS has designed and developed high-level capabilities in optical and laser systems as well as the software and mechanical capabilities to deliver these systems



as practical solutions for employment in space and on Earth. This includes systems and sub-systems essential to any sovereign guided weapons program.

EOS has the base skills and the right skill sets to quickly move further into the guided weapons domain. As one of the largest Australian sovereign defence companies and the largest Australian defence exporter, the company has a large workforce and a core group of technologists that can work with experienced guided weapons partners to establish an effective capability in the short-term. In the longer term EOS believes that Australia should commit to not only the establishment of a sovereign guided weapons capability that can manufacture overseas designs but should push to develop, manufacture to scale, and export guided weapons capabilities that are fully Australian.

Not only does Australia have all the necessary skills and industrial capability to develop and sustain a world-class guided weapons industry, it also has an immediate requirement to see such a capability develop, grow and mature into a credible and essential industry for our national defence. In fact, the further we expand the scope of the capability, the more commercially viable and internationally competitive it will become. While it appears that the initial interest and focus of the capability is directed at certain threats, there is nothing stopping the Government and the ADF from expanding the scope over time to encompass every guided weapon in the ADF inventory. The broader the scope, the more that core technologies can be leveraged over multiple applications.

On the issue of which weapons should be given priority, we believe that is best answered by a comprehensive study that covers: the operationally and strategically high-demand guided weapons required in a conflict; the systems that represent the easiest and quickest to transfer to local production;

in-service systems providers prepared to transfer full IP to the sovereign enterprise (not all will be prepared to do this); supply chain risk; and other strategic considerations balanced against industrial and technical risks. The highest priority system strategically may also be the most complex system industrially. It may be better to start with simpler systems and grow the skills and industrial base rather than embarking on an expensive and time consuming activity that risks cancellation due to its initial high-level complexity.

The speed with which this could occur depends on how committed the Government and ADF are in establishing a capability and how much support it gets from our allies. With a concerted effort and support from allies, with established guided weapons capabilities, we could have a limited domestic capability in three to five years and completely sovereign designed, manufactured, tested and supported capability in 10 to 12 years.

Some other Australian companies that we have been working with include:

- Nova Systems (test and qualification)
- NIOA (energetics)
- Gilmore Space (rocket and missile bodies, propellants, guidance and telemetry systems)
- AW Bell, Real Steel, NuPress (precision metal components)
- XTEK (composite components)
- Hydris, Design Technology Company (engineering and design support)
- CEA Technologies (Radar target acquisition and guidance systems)
- Cabelex, LASS, Thomas Global (electronics and cable sub component manufacturing)
- Applied Virtual Simulation (simulation and training systems)
- Athena AI (artificial intelligence guidance systems)