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ELECTRO OPTIC SYSTEMS SPACE SECTOR UPDATE:

EOS TO COMMENCE DEPLOYMENT OF TRACKING SENSORS

Canberra, 5 August 2014

EOS Space Systems Pty Ltd (EOS Space), a wholly-owned subsidiary of ASX-listed Electro Optic Systems Holdings Ltd (ASX: EOS) will begin the commercial deployment of its advanced space tracking systems later this year, with operation of a significantly expanded capability expected to commence by-2016.

EOS Space first demonstrated the feasibility of its new tracking sensors in 1998, with audited space tracking trials successfully undertaken in 2004. Since then, in collaboration with its customers, EOS has continually refined and adapted its sensors to meet commercial space data requirements for accurate orbit determination for both satellites and space debris.

This information is required to mitigate the risk of collisions between satellite and space debris, and due to the unstable nature of the orbits and trajectories, must be updated daily.

With over US\$500 billion invested in vulnerable space assets, the potential revenue for space data and services is significant. However the barriers to entry in this market are high because of simultaneous requirements for higher levels of accuracy, greater global coverage and higher data density than has been achieved previously. In addition, there has until now been no business model that allows incremental investment because a high minimum threshold of volume and quality is normally required before data is commercially useful.

EOS has implemented a long-term strategic plan to overcome these barriers to entry and is now positioned to commence commercial deployment.

BACKGROUND

During 2014 EOS Space has completed all pre-requisite developments for commercialisation of its space tracking sensors. These developments cover 5 key areas:

- a) Assuring Technology Maturity
- b) Securing Funding for Strategic R&D
- c) Defence Application Development
- d) International Partnerships and Sites
- e) Business Model Development

A. Assuring Technology Maturity

Since 2004, EOS has invested substantial funds, including more than \$18 million of customer co-investment, to achieve specific sensor performance improvements relating to:

- **Automation.** Space sensors must be fully automated because they are often located in remote and harsh environments. EOS space sensors are now fully automated and incorporate advanced built-in-test capabilities for reduced maintenance.
- **Cost-Effectiveness.** For generating the same volume of data, EOS costs have fallen by more than 90% over 10 years.
- **Compatibility.** EOS control software and data architectures can now operate alongside existing space tracking infrastructure.

Breakthroughs in these areas were achieved from early 2014 and over the past 90 days these key developments have been re-confirmed and are now ready for operational use.

EOS sensors can now cost-effectively meet commercial demand for space debris data and collision mitigation services. The company is not aware of any alternative commercial data collection system with comparable efficiency, range, sensitivity or industry compatibility.

B. Securing Funding for Strategic R&D

By late 2013 EOS had completed development of space tracking sensors suitable for commercial deployment. This allowed EOS to divide its R&D effort into near-term and long-term (strategic) programs, and EOS' strategic R&D program was offered as a fully-funded core capability to form the basis of an international centre of excellence, in the form of a Cooperative Research Centre for Space Environment Management ("CRC") initially specialising in space debris.

In March 2014 the Commonwealth of Australia announced the formation of the CRC, with an initial five-year research budget of \$60 million of which the Commonwealth and EOS will provide \$20 million and \$17.3 million respectively. The majority of the EOS contribution has been pre-funded and already expensed against income in the period up to and including 2014.

Joining EOS in the CRC is a group of international leaders in space technology including:

- Australian National University [Australia]
- Lockheed Martin [USA]
- National Institute of Information and Communications Technology [Japan]
- Optus [Australia]
- RMIT University [Australia]

EOS expects the benefits of pooling funds, resources and technology with its CRC partners to outweigh the obligation to share R&D outcomes amongst the participants. The pooled resource of \$60 million funding is more likely than EOS' own funding to reach the critical mass of effort required to achieve the next generation of technology. Based on its funding contribution, EOS would, in future, receive around 30% of all CRC research outcomes.

Although funding availability was announced in March, only in the past 14 days have all proposed CRC participants classified by the Commonwealth as essential to the CRC formally accepted the pre-requisite Commonwealth legal agreements. It is now very likely that the CRC will be fully funded and operational by 30 September 2014.

By arrangement with the Commonwealth, Dr Ben Greene, CEO of EOS also leads the CRC as its CEO.

C. Defence Application Development

The Department of Defence long term plans have evolved over the past few years to clearly recognize the requirement for accurate space tracking data to preserve access to defence space assets. A series of announcements to this effect by Australian Ministers for Defence have been made over that period, usually coinciding with Australia-USA AUSMIN minister-level meetings.

On 28 July 2014 the Minister for Defence, Senator David Johnston, further announced the awarding of funds to EOS from the Defence Innovation Realisation Fund (DIRF). These funds will be applied by EOS directly to the expansion of EOS tracking capacity which will commence within 2014, to ensure that expansion will conform to longer-term Defence requirements.

EOS is confident that its plans announced here for immediate expansion of space tracking capability by deploying sensors to a new site, will meet both the long-term needs of Defence and its own commercial objectives.

D. International Partners and Sites

During 2014 EOS intensified its negotiations with international partners who are candidates for collaboration with EOS in global sensor deployment. These partners will facilitate access to operational sites outside Australia. Negotiations with partners in the Americas, Europe and Asia are moving on schedule towards satisfactory outcomes.

In the past 21 days 3 countries have announced space debris management initiatives that conform to the EOS collaboration model, and two of these have already implemented a formal relationship with EOS.

In some cases EOS is allowing partners to acquire and deploy EOS' sensors on sites outside Australia, provided those sites enter into long-term data exchange agreements with EOS. EOS is already holding approximately AU\$7 million of orders for sensor components from selected foreign entities under these arrangements. This backlog is expected to increase.

E. Business Model Development

Global investment in space assets has increased in the past decade. In parallel, the space debris population and therefore risk of collision have also increased significantly. As a consequence, space is now an even more risky environment than 10 years ago. The need for and value of, accurate space data has therefore increased while, simultaneously, EOS significantly reduced costs of generating that data. Data value and EOS cost curves have now crossed, and commercial space operations are now viable for EOS.

EOS has been able to work closely with space asset owners over several years to develop proprietary business models and market data relating to the volume and quality of space data required, as well as the commercial pricing to apply to each level of data delivery.

The EOS business models provide a proprietary framework for the staged investments in infrastructure necessary to meet customer requirements for space data and services. These models represent intellectual property of the company whose value is comparable to the tracking technology itself.

In the past 60 days these models have allowed in-depth trade studies to be undertaken with key customers to determine applicable operational concepts and capacity growth rates for escalating service levels.

CURRENT STATUS

EOS in its own right now has the sensor technology, unique test and calibration site, key initial contracts, global partner network, proprietary business plan, market momentum and the customer confidence to commence a prudent deployment of capital assets for the acquisition of space data and the delivery of space services.

At this time EOS has sufficient available resources to develop a new sensor site in a remote Australian location, including site preparation, utilities access, construction of laboratories and operating facilities, sensor enclosures, data communications and security, and some additional sensors. Development of the new site will commence in late 2014 and when operational in early 2016 it will approximately double EOS' current capability to meet customer data requirements. However the business model supports considerably more investment, which EOS cannot make immediately with only its own resources.

EOS is now entering negotiations with potential strategic partners and investors with a view to accelerating the deployment of space tracking capability. These discussions will take place through the rest of 2014 in parallel with the increase announced here of EOS' current space tracking capability.

The Chief Executive Officer of EOS, Dr. Ben Greene said:

“It is pleasing, after a prolonged effort, to be able to report significant positive developments on a broad front towards EOS' space business objectives.

“EOS laser-based sensors can quickly and cost-effectively find and track space debris. These sensors are technically mature and will now be applied to commercial space operations. EOS expects, progressively, to establish larger and more accurate databases of space debris and to provide responsive services that enable space assets to be protected from collision with space debris.”

“The current expansion involves adding one new site to EOS' current single site operations, but it will more than double the company's current space data capacity. EOS is funding this initial expansion from existing resources. Once two sites are established, EOS can add more sensors cost-effectively at each site and rapidly escalate capability.

“This expansion will establish EOS clearly as the largest private sector entity in space tracking. Further expansion is likely to occur as strategic partners align their space tracking and debris management plans with those of EOS, and contribute funds, sites and sensors.”

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ABOUT ELECTRO OPTIC SYSTEMS (ASX: EOS; OTC: EOPSY)

EOS is an Australian aerospace company which develops and produces products incorporating advanced electro-optic technologies for the global aerospace market.

EOS products are developed through internal research and development programs based on EOS core technologies in software, lasers, electronics, optics, gimbals, telescopes and beam directors, optical coatings, precision mechanisms and highly ruggedized assemblies.

EOS employs 100 staff and operates two sectors: **Space Systems** and **Defence Systems**.

Defence Systems

EOS is a key global company in the market for remotely weapon systems [RWS], unmanned remote turrets, and autonomous military surveillance and combat systems.

Over 1,000 RWS from EOS have been sold or deployed throughout the world for reconnaissance vehicles, infantry combat vehicles, naval platforms, and remote controlled autonomous vehicles. EOS is a development centre for leading RWS users globally.

The Company's RWS product family is based on a common module hardware design and fully-qualified and battle-tested fire control software. Hardware modules include high resolution cameras, thermal vision systems, image processing systems, computer systems, laser systems, sensor systems and power management systems, all qualified for the military environment. Around 90% of all EOS research and development for RWS is performed in Australia.

Space Systems [SSA]

The EOS Space Systems sector focuses on both commercial and defence requirements for space information. EOS specializes in obtaining space information based on the use of EOS-developed optical instruments and sensors to detect, track, classify and characterise objects in space. This information is required for both military and commercial space applications, and particularly for managing space assets to avoid collisions in space with space debris.