



**Electro Optic Systems Holdings Limited**

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## **EOS Acquires US Space Communications Business**

**Canberra, 28 January 2020**

Electro Optic Systems Holdings Limited (“EOS” or “Company”) (ASX: EOS), acting through its wholly-owned US subsidiary EOS Defense Systems USA, Inc. (“EOSDS”), has executed an agreement to acquire all of the business and assets of Audacy Corporation, a space communications company based in the US (“Acquisition”). EOSDS will outlay approximately AU\$10 million in cash for the Acquisition including substantial costs associated with securing mandatory US government spectrum licenses and other acquisition costs.

EOSDS is an Alabama corporation with its principal place of business in Huntsville, Alabama. Until recently, EOSDS was principally focused on the establishment of US production capacity for EOS remotely controlled weapon systems and counter-unmanned aerial systems products. EOSDS production capacity establishment in Huntsville is on schedule, and EOSDS has been restructured during 2019 to support a wider range of EOS business activities in the US in the areas of space, missile defence and space communications.

Audacy Corporation was granted a space station (satellite) spectrum license by the US Federal Communications Commission (“FCC”) on 4 June 2018, authorizing it to use specific microwave spectrum bands for communications to, from and among specific satellites and ground-based communication terminals. Implementation of the license requires the launch of a constellation of new mid-earth orbit (“MEO”) satellites to establish a wideband communications capability for continuous, real-time data transfer with low earth orbit (“LEO”) satellites and other space vehicles. The spectrum license requires the licensor to launch the MEO satellite constellation by June 2024.

Space station licenses are legal permits which allow an entity to establish, operate and maintain communications satellites, including authorization for use of specific spectrum bands. Such licenses are a statutory requirement for all microwave communications, and are controlled and coordinated globally by the International Telecommunications Union (“ITU”) and for US operators by the FCC. The ITU, the FCC and related government organisations regulate the microwave spectrum because microwave transmitting sources can interfere with each other and must be separated physically in space and in spectrum.

EOS has an established space communications business with advanced technologies for both microwave and optical (or laser) communications. In the long-term EOS expects most space communications to be implemented with optical communications - a technology that is not regulated or controlled because it cannot interfere with other users. However, 99% of all space communications presently employs microwave technology, with existing sunk costs for this technology of over AU\$700 billion.

Acknowledging the current dominance of microwave technology, EOS has decided to enter the regulated microwave communications domain through the Acquisition, as one of several channels the Company intends to apply to commercialise its optical, microwave, and hybrid microwave-optical communication technologies.

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The Acquisition opens a channel in space for EOS communications technologies to support market demand, leveraging the following EOS advantages in the space communications domain:

- A. EOS' acquisition of EM Solutions in 2019 will enable the Company to develop its own ground terminals for wideband communication. A key factor in the profitability of the constellation will be the performance and cost-effectiveness of the multiple ground terminals required to be deployed and EM Solutions is a leader in this domain.
- B. The bandwidth permitted under the current spectrum licenses enables approximately 40 giga-bits-per-second of communications capacity and this can be expanded without further licensing requirements using optical technologies. The anticipated EOS MEO satellite constellation orbiting the Earth at around 14,000 km altitude will provide a substantial platform for deploying EOS optical communications technology, as customers increasingly require more bandwidth.
- C. EOS Space Systems sector currently operates the only privately-owned space domain sensors capable of protecting the proposed EOS satellite constellation from both current and emerging threats in the space environment, such as collisions with space debris.

The transfer of control of Audacy Corporation's spectrum licenses to EOSDS is subject to review and approval by the FCC. EOSDS will also file for review of the Acquisition by the US Committee on Foreign Investment in the US ("CFIUS").

Although the Company believes the Acquisition is compliant with all statutory and regulatory requirements, approval of the Acquisition by the FCC and CFIUS cannot be assured. In the normal course, and subject to those government approvals and other customary conditions, EOS anticipates the Acquisition to close in mid-2020 ("Completion").

EOSDS is not required to make any material payment for the Acquisition until Completion has occurred. EOS will fund the AU\$10 million required during 2020 for the Acquisition and related activities from its cash holdings.

In a statement today, Ambassador John Berry (Ret), the Chairman of EOSDS said:

"Following Completion of this Acquisition EOS will be able to build a satellite network that will provide a comprehensive, end-to-end communications and data transfer service to government and commercial customers globally through a new constellation of EOS satellites in MEO.

We are confident of achieving all mandatory milestones required by the spectrum licenses granted to Audacy Corporation including a requirement to build and launch satellites that will achieve a capability in space by June 2024.

Using new technology, including technology from EOS Space Systems Sector and EOS Communications Sector, our satellite constellation is expected to provide a combination of higher performance, higher resilience and lower cost than is available currently.

EOSDS has been preparing for this Acquisition for many months. We have already assembled a team of space communications specialists with, collectively, centuries of experience with satellite constellations and space communications including work on some of the largest space communications infrastructure programs ever undertaken.”

Dr Ben Greene, the Group CEO of EOS added:

“EOS has previously disclosed its intention to enter the space communications market, and the Acquisition represents a logical next step towards that goal.

The MEO satellite constellation EOS will deploy after completion of the Acquisition will allow continuous, real-time data communications among many LEO satellites and ground terminals. Up to now the only options for responsive LEO communications were either to launch many satellites in LEO to allow communications to be passed from satellite-to-satellite until a suitable ground station was reached (which is the approach being taken by the Space-X STARLINK constellation and others), or to send data up to a Geostationary Earth Orbit (“GEO”) satellite for relay to a ground station, which involves significant transmission delays.

Many space communications requirements are not suited to either of those options. For example, most LEO satellite missions do not require large numbers of satellites, but still require responsive communications. The EOS constellation will be the most accessible form of responsive communications available to those missions.

Over fifty potential customers have executed non-binding memoranda relating to the proposed space communications service, and EOS expects to finalise the initial constellation design soon so that those memoranda can be progressively converted to service contracts after Completion.

The Company will face challenges building and launching a new constellation of MEO satellites by June 2024. Therefore satellite capacity and the related funding requirements will be scaled to meet regulatory and customer commitments. EOS will later decide whether to implement the new satellite constellation on its own or through a partnership with an existing space communications entity. Potential partnerships are in early stages of development with major space entities which EOS has worked with before.

The EOS senior executive has absorbed the effort associated with this opportunity and a dedicated EOSDS technical team is already in place to undertake the satellite and constellation design activity required. The space communications marketing team has recently expanded to address the large number of potential customers.

EOS expects this Acquisition and any related activity to have no material impact on the EBIT guidance given for 2019 or 2020, as updated on 21 November 2019. EOS production of RWS is tracking ahead of requirements for 2020 deliveries, and market development for our Defence and Space businesses continues as planned.

All 2019 and 2020 costs for this activity by the EOS Communication Systems segment, up to Completion, have been included in current guidance.”

The Company has scheduled an investor teleconference at 11:00 on Tuesday 28 January 2020. The details to access this teleconference are provided below.

**Further information:**

**Ben Greene**  
**Group CEO**  
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## TELECONFERENCE ACCESS:

Please join the event 5-10 minutes prior to scheduled start time. When prompted, provide the confirmation code or event title.

Event Conference Title: Electro Optic Systems Investor Conference Call  
Start Time/Date: 11:00 Tuesday, January 28, 2020 [Sydney Time]  
Duration: 60 minutes  
Confirmation Code: 6761809

Location	Phone Number
Australia	1 800 870 865
Australia , Sydney	+61 (0)2 9094 5107
Hong Kong	800 961 245
Malaysia	1 800 806 876
New Zealand	0800 968 407
Singapore	800 186 5111
United Kingdom	+44 (0)330 336 9601
United States	+1 323-701-0160

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

### EOS operates in three sectors: Defence, Space and Communications

- **EOS Defence Systems** specialises in technology for weapon systems optimisation and integration, as well as ISR (Intelligence, Surveillance and Reconnaissance) for land warfare. Its key products are next-generation vehicle turrets and remote weapon systems.
- **EOS Space Systems** specialises in applying EOS-developed optical sensors to detect, track, classify and characterise objects in space. This information has both military and commercial applications, including managing space assets to avoid collisions with space debris, missile defence, and space control.
- **EOS Communication Systems** specialises in innovative optical, microwave and on-the-move radio and satellite products that help to deliver high speed, resilient and assured telecommunications anywhere in the world.