



SOR Partners to Develop AI Software for Mines

WESTERN AUSTRALIA, Perth, Sept. 19, 2019 – **Strategic Elements Ltd** (ASX: SOR) is pleased to announce that its artificial intelligence and robotics company Stealth Technologies has signed a binding Heads of Agreement to apply **artificial intelligence to fixed plant operations in mining and deliver a Software as a Service (SaaS) solution**.

A binding Heads of Agreement was signed today with Global Integrated Operations (Global io), who focuses on assisting some of the world's leading mining companies to transform the way they manage their production value chains through Integrated Operations. Clients previously include large global mining companies such as BHP, Barrick, Teck Resources and Goldcorp.

The Heads of Agreement facilitates the implementation of a working prototype system with a resources industry end user or customer to demonstrate the functionality and feasibility of applying artificial intelligence to fixed plant processing in mining.

The Opportunity

1. Using sophisticated analytical techniques to **reduce production variability and increase productivity** has been successfully used in mining, even though analysis is still largely a manually driven exercise.
2. The parties aim to develop an AI solution that would make the identification and implementation of **control room variability reduction opportunities** much more cost effective and sustainable, enabling a great amount of value to be unlocked in current mining operations globally.
3. US\$680 billion is generated annually by the top 40 mining companies globally. Even a moderate reduction in variability in the fixed plant component of minerals processing by mining companies could have dramatic upside in value delivered through increased reliability, throughput and ultimately revenues realized by the client.
4. The application of artificial intelligence and advanced data analytics is consistent with some of the top trends that mining company companies are pursuing world-wide.
5. The global mine automation market is expected to grow to around US\$6.2 billion dollars by 2025, which will lead to an explosion in the amount of data that will be generated for optimisation purposes.

The Agreement

The parties will use all reasonable endeavours to execute a Joint Venture agreement before 10 January 2020 (exclusivity period). The JV terms will substantially be the same as the following:

- a. The Parties will complete a proof of concept applying AI to fixed plant **operations and deliver a software as a service solution (SaaS)**
- b. The JV interests are to be **60% Stealth Technologies and 40% Global io**
- c. Each party will own their own IPR (background and project) and make it available to the JV
- d. Ownership of all artificial intelligence related models created in the Joint Venture will **vest in Stealth Technologies** on their creation.
- e. If a party withdraws from the Joint Venture, the remaining party has the right to continue and may at their sole discretion allow new parties to enter the Joint Venture.
- f. The Parties will appoint one person each to jointly manage the Joint Venture budget, business plan, marketing and operations.
- g. The JV will be unincorporated however the Parties **may incorporate a Company** with Articles of Association and Shareholders Agreement consistent with the Joint Venture agreement.

Managing Director Mr Charles Murphy said "Data analytics, automation and robotics technologies continue to transform the resources sector. We look forward to working with an end-user/ customer to develop the proof of concept and demonstrate the functionality and feasibility of applying artificial intelligence to fixed plant processing in mining. Global io is a trusted Company and there is a great strategic fit between the skills and experiences of the teams".

Software as a Service

The agreement is to apply artificial intelligence to fixed plant operations in mining **and deliver a Software as a Service solution**. Software as a service (SaaS) is a model for the distribution of software where **customers access software for a recurring service fee**.

This is in contrast to software sold for a one-off licensing fee. SaaS is also known as hosted software or on-demand software. In SaaS, a service provider usually hosts the application and a customer has accesses for an agreed monthly fee. SaaS providers include updates and improvements to their software as part of the monthly fee paid by customers.

The SaaS model can be lucrative for software developers, allowing a single set of infrastructure to be leveraged to host the software for multiple customers, reducing the costs of providing the service to customers and giving rise to high profit margins.

Advantage of Being Based in Western Australia

The Company has a **strong local opportunity being based in Western Australia** where most of the largest mining companies in the world are represented. According to the Australian Trade Commission:

- Australia's Exploration and Mining software (EMS) sector is comprised of at least 100 firms ranging in size from less than A\$1 million to more than A\$100 million in annual sales in the case of specialised software houses. A majority of those firms are based in Western Australia and Queensland.
- Australian EMS technology has been the focus of a multi-billion dollar merger and acquisition (M&A) drive by international companies over the past decade. Australian-based and owned enterprises have also been involved in M&A, creating a larger, stronger and less fragmented sector with wider global reach, though many relatively small firms remain with unique intellectual property (IP) amongst their assets.
- Australia's EMS sector has produced many of the international mining industry's iconic software brands.
- Some sixty percent of global exploration and mining software has been developed in Australia and generates \$600 million a year in revenues

Stealth Technologies

The Stealth Technologies team has an experienced in-house team of international award-winning PhD and Masters qualified research engineers with deep capabilities in artificial intelligence, computer vision and robotics (hardware and software). The team is augmented by members of Strategic Elements Ltd and key advisors who have strong commercial expertise in complex data analytics and software development with large multi-national corporates. Stealth Technologies has the capability to custom build artificial intelligence and robotic systems for its own proprietary technologies and in collaboration with commercial/government partners for their own specific business cases. Most artificial intelligence companies only focus on software development. Stealth Technologies' point of difference is the multi-disciplinary capability to physically custom build automated robotic machines, integrate computer vision capabilities enabling a computer to see (through cameras and sensors) and create artificial intelligence through machine learning and software development.

Global io

Global io specialises in the deployment of large scale integrated remote operations programs in mining, and the team have experience in the field for well over a decade. Founded in Perth, Western Australia, Global io has since expanded into both Chile and Canada. Global io have been at the core of most of the largest integrated operations deployments globally, and focuses on assisting some of the world's leading mining companies to transform the way they manage their production value chains. Clients previously include large companies such as BHP, Barrick, Teck Resources and GoldCorp.

Strategic Elements Ltd

The Australian Federal Government has registered Strategic Elements as a Pooled Development Fund with a mandate to back Australian innovation. Strategic Elements operates as a 'venture builder' where it generates ventures and projects from combining teams of leading scientists or innovators in the technology or resources sectors. Due to the Pooled Development Fund program that Strategic Elements operates under, most shareholders pay no tax on capital gains or dividends. The Company is listed on the ASX under the code "SOR".

More Information:

Mr Charles Murphy, Managing Director

Phone: +61 8 9278 2788 Email: admin@strategielements.com.au www.strategielements.com.au