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SOR to Develop Autonomous Vehicle for Defence with DST

Western Australia - July 6th 2021 - Strategic Elements Ltd (ASX:SOR) is pleased to report that subsidiary 'Stealth Technologies' will design **and deliver** an autonomous drone carrying vehicle that automates detection and sensing of chemical, biological, radiological and nuclear agents. The Company will collaborate with Defence Science Technology Group (DSTG), part of the **Australian Department of Defence**, and the University of Western Australia to build the solution and conduct a live demonstration to Army. The Western Australian Defence Science Centre has agreed to part fund the collaborative work.

The autonomous vehicle will carry drones and sensors into a target environment keeping humans at a safe distance. The autonomous drone will enable rapid traversing of the target area using sensors to map and/or monitor the location of chemical, biological, radiological and nuclear (CBRN) sources.

- The collaboration will result in a **live demonstration** of the Autonomous CBRN Vehicle **to Defence (both DSTG and Army)** and investigate advanced **manufacturing** capabilities and facilities for **production** in Western Australia.

- Other outcomes include the potential to leverage the autonomous capability to **other Australian Defence Force problems** – for example other Resupply, Intelligence, Surveillance, and Reconnaissance use cases.

*Managing Director Charles Murphy said "The Autonomous CBRN Vehicle has the ability to mitigate certain risks that our Australian Defence personnel face in CBRN environments whilst increasing the efficiency and accuracy of CBRN detection and sensing. I am proud of our Stealth team, the AxV Autonomous Platform is gaining significant credibility and trust amongst some very serious players looking for autonomous solutions. We see significant commercial opportunities to build its value **across multiple sectors** such as security, defence, mining and logistics".*

Stealth Autonomous Technology
The Company's AxV autonomous vehicle platform is currently deployed in perimeter security applications through the Stealth ASV (Autonomous Security Vehicle). The CBRN collaboration will leverage existing IP, and collaborative work conducted with organisations such as Honeywell, WA Department of Justice, UWA, CSIRO and Planck AeroSystems.

CBRN Defence refers to the various procedures and equipment used to protect, detect, and decontaminate chemical, biological, radiological, and nuclear agents, which can cause mass destruction. CBRN incidents can occur accidentally, intentionally, or naturally. Amid the COVID-19 crisis, the global market for CBRN Defence estimated at US$16.2 Billion in the year 2020, is projected to reach a revised size of US$21.9 Billion by 2027[1].

Defence Science Technology Group
DSTG is part of the Australian Department of Defence dedicated to providing science and technology support to safeguard Australia and its national interests. The Company previously announced a scoping study to integrate DSTG developed CBRN search algorithms with a Stealth autonomous drone carrying vehicle. The collaboration will carry out the integration of these algorithms with Stealth's technology.

DSTG will provide personnel, existing DSTG developed CBRN search algorithms and access to ongoing search algorithm development and implementation support. **Critically**, DSTG will also provide access to facilities and equipment and assistance with arranging access to Defence test sites.

Western Australian Defence Science Centre
In recognition of the potential for the Western Australian defence industry the Western Australian Defence Science Centre (DSC) has agreed to provide $150,000 in funding towards developing the autonomous solution and investigating potential manufacturing opportunities in Western Australia.

The award of the Collaborative Research Grant funding supports the strategic goals of the State Government's Western Australian Defence and Defence Industries Strategic Plan, which aims to grow the local defence industry and create jobs.

Expertise & Commitments
The DSTG team is led by Dr Robert Hunjet, Research Leader of Land Division's Protection and Networked Autonomy Major Science and Technology Capability. Dr Hunjet also serves as the Deputy Theme Lead for Trusted Autonomous Systems within the Federal Government's $730M Next Generation Technology Fund.

The UWA team is led by Professor Thomas Bräunl (ex-BMW and Daimler-Chrysler/Mercedes-Benz) developed autonomous BMW X5, SAE racing car and shuttle bus, public-use EV charging network (Perth) and EV conversions. Professor Bräunl has been actively collaborating with the Stealth team over many years.

DSTG, UWA and the WA Defence Science Centre has committed to provide $350,000 of cash and in-kind services to the collaboration and Stealth Technologies will invest approx. $350,000. Under the funding agreement Stealth Technologies retains 100% of the IP and associated commercialisation rights for CBRN and other defence force related applications.

1. The collaboration **will deliver** an Autonomous CBRN Vehicle that can navigate itself through an environment using Stealth Autodrive Hardware (autonomous technologies) and Stealth OS Software (sensor fusion, computer vision, AI & Neural Networks).
2. Hatch doors in the vehicle will enable Stealth customised drone(s) carried on board to autonomously launch, carry out CBRN detection and sensing missions (using DSTG algorithms and sensors) and land back onboard the autonomous vehicle. Data will be communicated back to the mission control centre.
3. A **live demonstration** of the Autonomous CBRN Vehicle will be carried out **to DSTG and Army.**
4. The collaboration will also investigate advanced manufacturing capabilities and facilities for production in Western Australia.
5. Other outcomes include potential to **leverage the autonomous capability to other Australian Defence Force problems** – for example other Resupply, Intelligence, Surveillance, and Reconnaissance use cases.

Initial concept design of the autonomous vehicle and drone launch and land system is expected to be completed in Q3, 2021.

The collaboration is an important potential pathway to faster adoption of the Stealth Autonomous CBRN Vehicle technology by Defence.

Strategic Elements Background
Investors in SOR potentially **pay no tax on capital gains from selling their SOR shares** as the Company operates under a Federal Government program setup to encourage investment into innovation. Strategic Elements operates as a 'venture builder' where it generates high risk-high reward ventures and projects from combining teams of leading scientists or innovators in the technology or resources sectors. More information Charles Murphy, Managing Director Phone: +61 8 9278 2788 admin@strategicelements.com.au www.strategicelements.com.au

This announcement was authorised for release by Strategic Elements' Board of Directors

[1]*https://www.researchandmarkets.com/reports/4804669/cbrn-defense-global-market-trajectory-and*