Australian Stock Exchange
Regulatory Release
June 7th 2021
CODE : SOR

SOR Defence and Security V-con Presentation

Innovation Company Strategic Elements Ltd (ASX:SOR) is pleased to provide a copy of the presentation delivered by the Company's Executive Director, Elliot Nicholls, during V-con Defence and Security 2021.

A video of the presentation can be viewed via the link below:

https://vimeo.com/558779784

A copy of the presentation is also attached.

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 to encourage innovation. The company is a 'venture builder' generating high risk-high reward ventures from combining teams of leading scientists or innovators.

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

STRATEGIC
ELEMENTS

Autonomous technologies and robotics for security and defence. V-con presentation.

Forward Looking Statements

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The Company

Strategic Elements generates 100% owned ventures from combining teams of leading scientists or innovators.

1. **The Australian Federal Government has registered Strategic Elements as a Pooled Development Fund with a mandate to back Australian innovation.**

- The aim of the Pooled Development Funds programme is to increase the supply of capital to Australian small and medium-size enterprises (SMEs).
- PDFs are venture capital funds registered under the Pooled Development Funds Act 1992
- **PDFs and their shareholders receive tax benefits on the capital gains and income derived from their investment.** This is to help compensate for the higher risk of investing in SMEs.

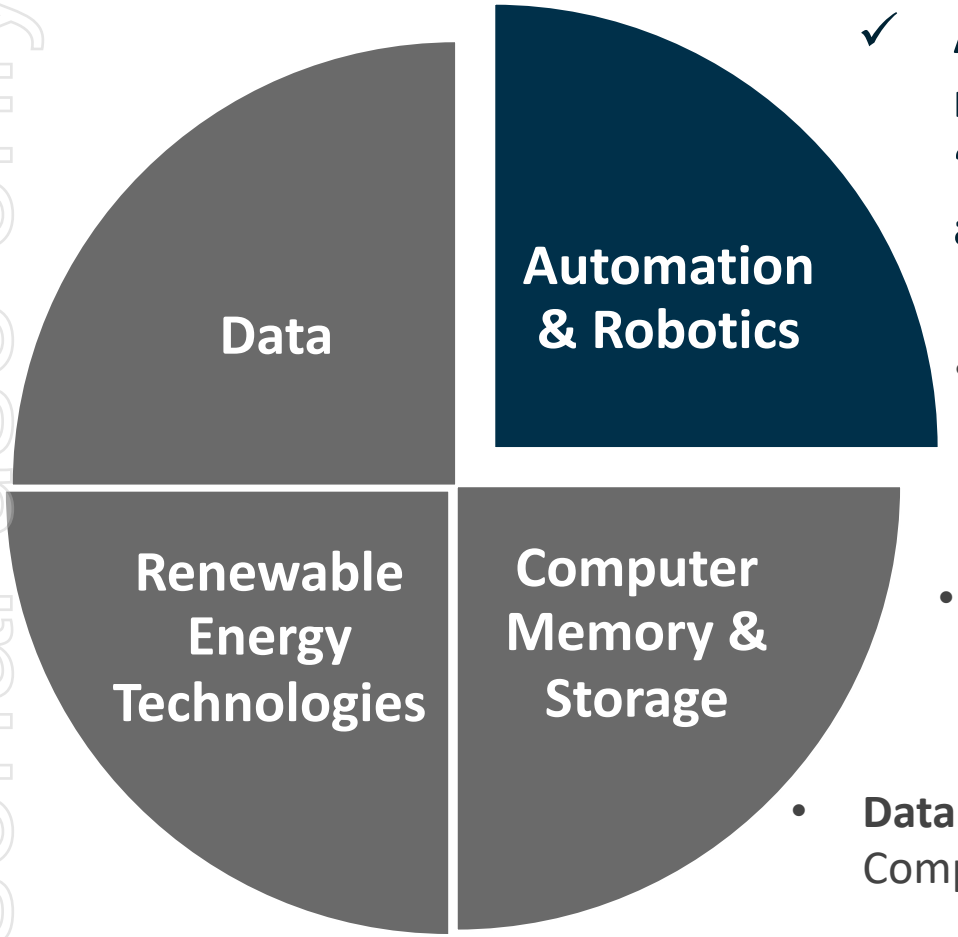
2. **However the Company does not operate like a typical venture fund.**

- **The Company doesn't seek a large portfolio of minority 10-20% investments. Instead it seeks to generate 100% owned companies in collaboration with teams of leading scientists or innovators.**
- Access to $50M+ of institutional technical infrastructure and equipment, government grants and R&D cash back $$ significantly reduces up front expenditure.
- SOR seeks returns through a trade sale or listing of a subsidiary, a licensing deal or income generated from a subsidiary.

High risk – high reward innovation

Sector Focus

1. The Company is developing technologies in four of the largest megatrends.



✓ **Autonomous technologies and robotics for security, defence resources etc. Collaborating with Fortune 100 Company 'Honeywell' for Autonomous Security Vehicles[1]. Further agreements with UWA and CSIRO and USA based partners.**

- **Self-charging battery** technology in collaboration with the University of New South Wales[2]. Uses humidity in air to generate electricity. Extremely small, thin, light weight flexible battery cells.
- **Transparent flexible memory** technology working with the UNSW, CSIRO[3] and VTT (Finland). Enabling flexible plastic and glass surfaces to store and process data instead of needing silicon chips.
- **Data related** technology acquisition/development by the Company as its next potential area of venture generation.

2. The technologies are held in 100% owned subsidiary companies.

[1]*Announced 16/10/2020*
[2]*Announced 1/12/2020*
[3]*Announced 30/07/2020*

Developing the AxV Autonomous Robotics Platform

STEALTH AUTODRIVE HARDWARE

Autonomous vehicle technology scalable to multiple vehicle sizes

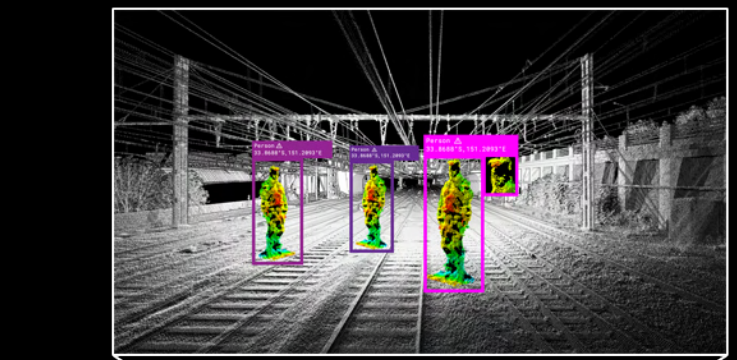
STEALTH OS SOFTWARE

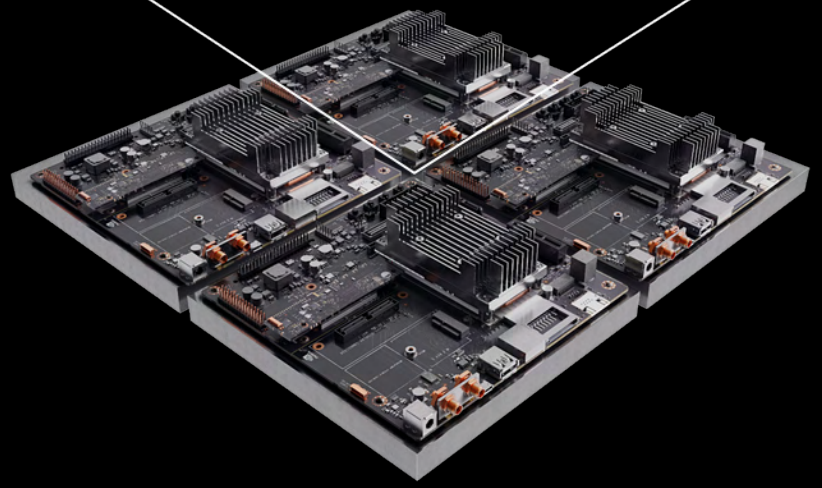
Sensor Fusion
Computer Vision
AI and Neural Networks

STEALTH CUSTOM ROBOTICS

Purpose built robotics adaptable to meet industry specific use cases

"Scalable to any size"





"Adaptable to any physical task"

"Purpose built for outdoor environments and all weather conditions"

The Company has been collaborating with USD 100 Billion Company Honeywell on Autonomous Security Vehicles for prisons.

STRATEGIC ELEMENTS

STEALTH TECHNOLOGIES

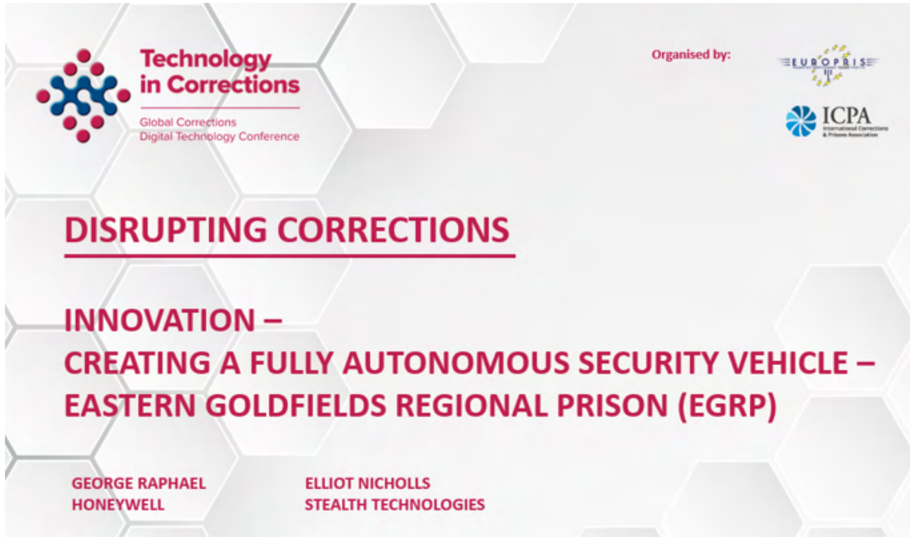
➢ Honeywell Autonomous Security Vehicle Collaboration

Stealth has been collaborating with US giant ‘Honeywell’ to build autonomous security vehicles for the Correctional Justice sector (primarily prisons).Honeywell is a **Fortune 100** technology company.

- Real-time integration has been completed with the Honeywell Enterprise Buildings Integrator software which connects, monitor and manages core building functions. There are thousands of EBI systems deployed globally.
- Honeywell Building Technologies is a global business with more than 23,000 employees and creates products, software and technologies found in more than 10 million buildings worldwide.

➢ Autonomous Perimeter Security– Outside Honeywell Collaboration

Under the collaboration Stealth provided Honeywell with exclusivity for the correctional justice sector. However Stealth is free to market independently to sectors such as transport, energy, defence, government and utilities providing critical services.



Perimeter security intrusion system testing and surveillance by a fully autonomous vehicle with customised robotics

STRATEGIC ELEMENTS

STEALTH TECHNOLOGIES

Perimeter Intrusion Detection Systems - PIDS

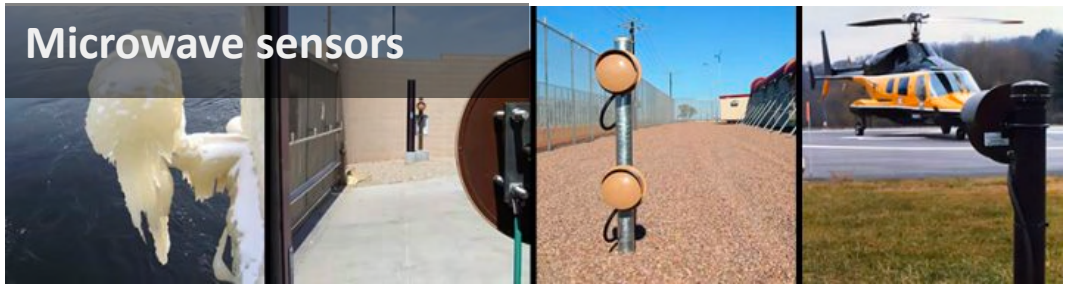
PIDS are used to detect intruders attempting to breach a perimeter. In high security facilities they are physically tested multiple times a day to ensure they are functioning correctly.

➢ The Problem in PIDS Testing

- Testing is a costly **manual** process – 2 staff 3 times a day.
- Using skilled staff for routine mundane jobs.
- Manual testing can cause significant damage.
- Generates inconsistent testing accuracy and quality.

➢ The Solution – Automated PIDS Testing & Surveillance

- ASV autonomous vehicle with custom robotics enabling fully automated PIDS testing 365 days a year, 24 hours a day.
- Physical testing of sophisticated PIDS with a robotic actuator that simulates cutting or climbing of perimeter fencing.
- Military grade camera that provides 360-degree high definition video surveillance.
- Reporting in real time to the Honeywell Security Manager System.



STEALTH
TECHNOLOGIES

- **Stealth & Honeywell have built and deployed a fully autonomous security vehicle for the WA Department of Justice at the Eastern Goldfields Regional Prison.**

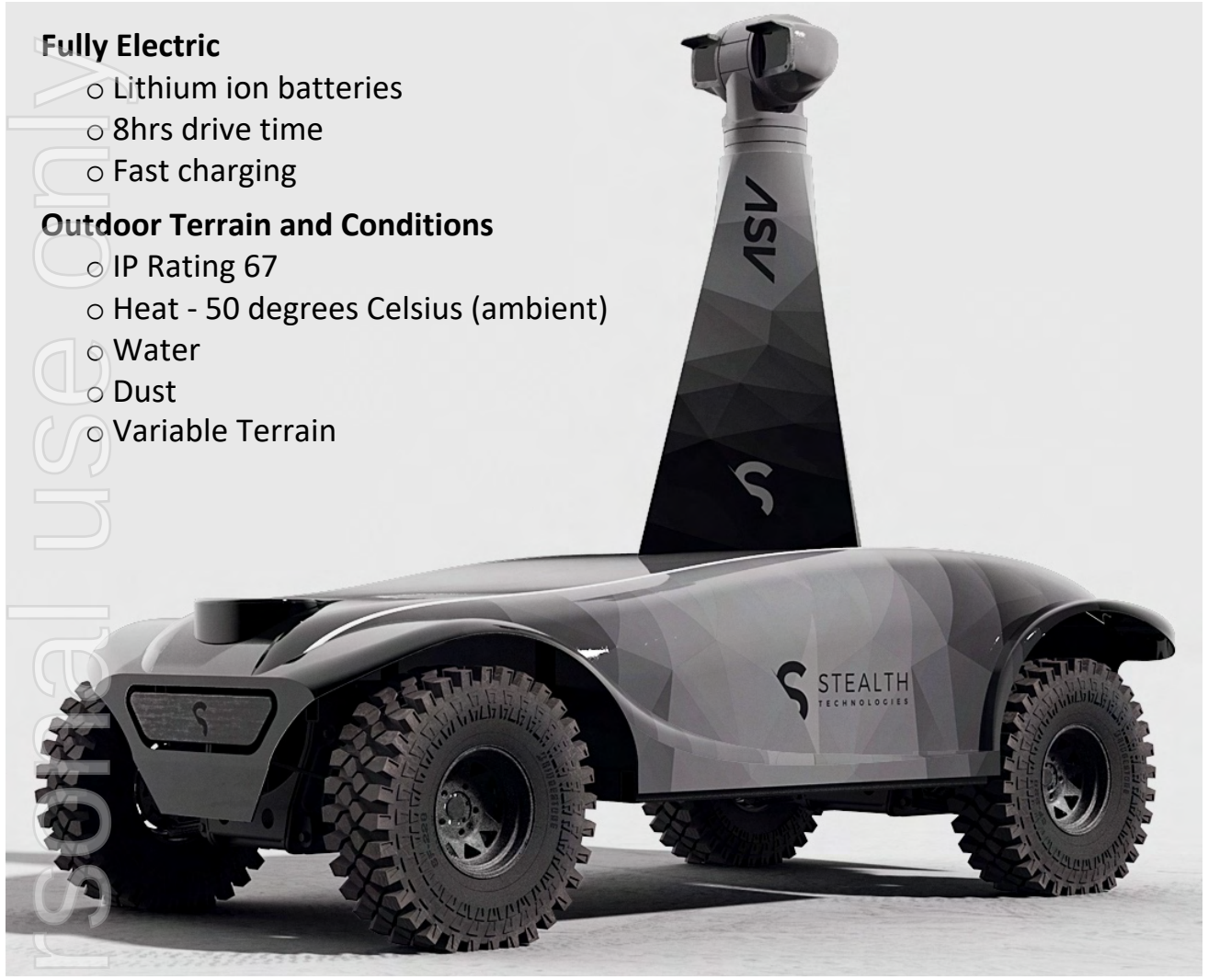
1. Custom robotics built on top of the AxV Platform to develop the first ‘automated perimeter security solution’ of its kind anywhere in the world.

2. 3x fully autonomous missions a day around the perimeter of the facility. Completes automated testing of the facilities inner and outer perimeter security systems (zone by zone)
   - Microphonics Sensor testing
   - Microwave Beam testing
   - Photo Electric Beam testing (PE)
   - Electro Magnetic Field testing (EM)
3. Recently successfully passed Site Acceptance Testing completing full testing and surveillance missions.

Features of the generation 1 ASV release from the AxV Platform

Fully Electric
- Lithium ion batteries
- 8hrs drive time
- Fast charging

Outdoor Terrain and Conditions
- IP Rating 67
- Heat - 50 degrees Celsius (ambient)
- Water
- Dust
- Variable Terrain



1. **Autonomous Perimeter Security Patrol & Surveillance**
   - 24*7 365 Day Operational Capability - Day and Night Vision
   - Collision Avoidance System
   - Autonomous Navigation Between Map Points
   - Emergency Braking System
   - Imposing Physical Presence
2. **Autonomous Perimeter Intrusion Detection System Testing**
   - Perimeter fence sensor testing - Microphonic and Fibre Optic (Purpose Built Robotic Actuators)
   - Microwave sensor testing
   - Photo electric sensor testing (PE)
   - Electro magnetic sensor testing (EM)
3. **On Board Surveillance Features**
   - Autonomous Object Tracking System
   - Incident Alert Lighting
   - Live Military Grade Video Feed
   - High Definition 30x Camera Zoom
   - Day and Night Vision Surveillance Distance: 400m
   - Two-Way Intercom
4. **System Integration**
   - Fully Integrated Into Honeywell's EBI Platform (DVM)
   - Capable of Operating within Secure Isolated Networks
   - Capable of Advanced Computer Vision – Facial and Number Plate Recognition

Multiple sector opportunity for the Company to provide autonomous security technology.

"The security industry is ripe for disruption by way of robotics. The industry itself is quite mature yet has remained reliant upon manual efforts. Innovation in the field of robotics is leading the effort to evolve the security industry"

– United States Security Industry Association

"Government regulations, pandemic and terrorist activities are providing lucrative growth opportunities. Perimeter security is an important part of an overall security solution, especially for critical locations. The Global Perimeter Security Market is forecast to be growing quickly reaching USD 282.26 Billion by 2025[1]"

– United States Security Industry Association




DEFENCE | ENERGY | COMMUNICATIONS | UTILITIES | TRANSPORT | GOVERNMENT

[1] https://bit.ly/30bmVhf

Autonomous sensing and search of chemical, biological, radiological and nuclear (CBRN) sources.

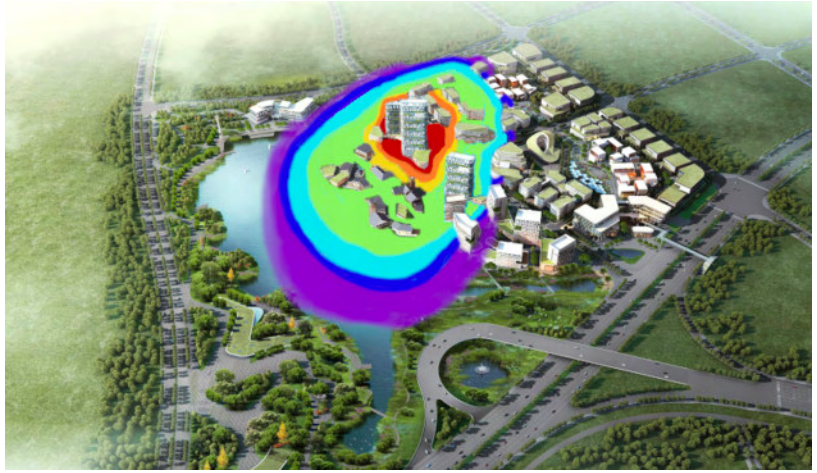
- The threat of Chemical, Biological, Radiological and Nuclear (CBRN) attacks against military forces and civilian populations is growing.

- State and non-state actors are increasingly willing to use these indiscriminate methods, and knowledge of CBRN agent manufacturing processes is proliferating.

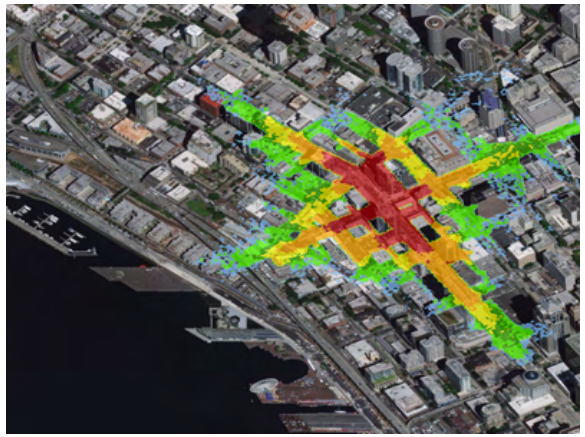
'CBRN defence is undergoing a global transformation as it adapts to the challenge of multi-threat scenarios. Modern forces need to be equipped to operate within chemical, biological, radiological and nuclear and toxic industrial material threat environments.'

- Vice Chief of Defence Force Directive 04/2019

- Autonomous technologies have the capability to:
  - Enable teams to respond faster and more flexibly to CBRN events.
  - Achieve enhanced situational awareness .
  - Enable teams to manoeuvre safely and effectively in complex contaminated environments for prolonged periods of time.



Conducting feasibility and scoping with DST for Autonomous sensing and search of chemical, biological, radiological and nuclear (CBRN) sources.



- Conducting a feasibility and scoping study to integrate DST Group developed search algorithms for locating CBRN sources within a geographic area, into a UAV (drone) that is autonomously launched and landed by a Stealth autonomous UGV (ground vehicle)[1].
- The DST Group is part of the **Australian Department of Defence** dedicated to providing science and technology support to safeguard Australia and its national interests.
- One of the key DST Group priorities is to improve the Australian Defence Forces' CBRN defence capability through the protection of personnel from the strategic, tactical and physiological impacts of exposure to toxic chemicals and materials and CBRN weapons.
- The Stealth autonomous ground vehicle to carry drones and sensors into the target environment keeping humans at a safe distance.
- The autonomous UAV enables rapid traversing of the area using sensors to map and/or monitor the location of CBRN sources.

1Announced 03/06/21

STEALTH TECHNOLOGIES

➢ Stealth Collaborations

Along with US Company 'Honeywell' the Company has a number of key technical collaborations.

Planck AeroSystems

- World leader in autonomous drone launch and land technologies.
- Technology being used by **US DoD, Homeland Security and others**.
- Collaboration to allow Autonomous Drones to launch and land autonomous surveillance flights from a moving ASV platform[1].

CSIRO (Australian Federal Government Agency for Scientific Research)

- Wildcat SLAM technology – won DARPA Subterranean Challenge.
- Technology allows robot teaming and autonomy for robotic vehicles in GPS-denied environments.
- Collaboration[2] to enable 'robot perception', allowing the ASV to perceive, comprehend and reason about the surrounding environment.

The University of Western Australia

- Funded by the Australian Federal Government.
- Professor Thomas Bräunl – automotive and robotics experience (DaimlerChrysler/Mercedes-Benz, BMW and others).
- Collaboration[3] through the Renewable Energy Vehicle Project – Autonomous and Electric Vehicles.

[1]*Announced 04/11/2020*
[2]*Announced 12/11/2020*
[3]*Announced 29/04/2020*

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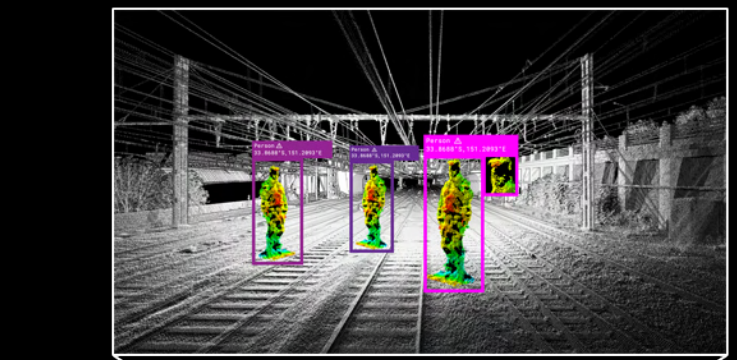

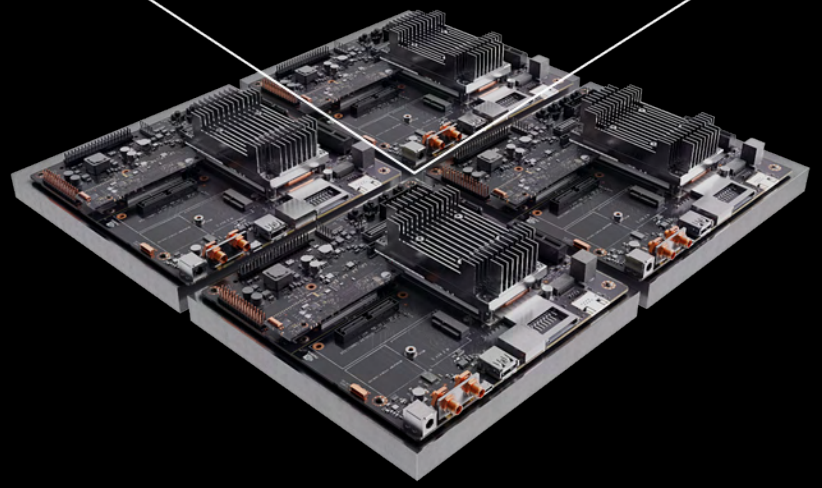

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➢ AxV Platform and ASV Brief Summary

1. Initial commercialisation is occurring through the the ASV – Autonomous Security Vehicle. We have collaborated with US giant Honeywell to deploy an ASV for the WA Department of Justice at the Eastern Goldfields Regional Prison.

2. With the ASV successfully passing Site Acceptance Testing in May 2021, further potential facilities and deployments of the perimeter security testing focused ASV can now be pursued.

3. Initial Honeywell collaboration agreement term concluded in April 2021. Discussions on a further agreement with Honeywell are ongoing.

4. The company is also currently investigating multiple potential use cases for both the ASV and the AxV Platform with third parties. The company is seeking to work closely with early adopters to deeply understand their use cases and solve their specific problems.

5. Feasibility and scoping study with DST Group (a part of the Australian Department of Defence) to integrate their search algorithms into the Stealth autonomous technology stack is currently underway and is scheduled to be completed by June 30th 2021.

6. Please see the Company's website at www.strategicelements.com.au for the other activities being pursued in Stealth Technologies, self-charging battery and printable memory technology developments.