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ASX: NVU

Nanoveu To Acquire Spinoff Robotics, Driving Expansion of Defence and Commercial Drone Capabilities

Acquisition to add two proprietary drone platforms in active commercial deployment, alongside the underlying airframe and sensing engineering team, completing Nanoveu's in-house ownership of every layer of the drone autonomy stack.

Highlights

- **Strategic acquisition of Spinoff Robotics**, a Singapore deep-tech company that develops and operates proprietary drone platforms, bringing aerial robotics, mechanical design, fluid dynamics and engineering capabilities in-house.
- **The transaction completes Nanoveu's full-stack vertical integration** across silicon (ECS-DoT), airframe (Spinoff), tethered station-keeping (ALICE), sub-millimetre sensing (METRON) and on-device AI. Owning silicon and airframe together enables engineering the ECS-DoT chip into the drone from the outset rather than bolting it on as a payload, creating a strong structural moat.
- **Defence markets and commercial applications to be priority targets**, with the global military drone (UAV) market forecasted to grow to ~US$98.24B by 2033[1].
- **ALICE** is a proprietary tethered drone delivering high payloads without GPS, RF or hijack surface resulting in high resistance to jamming and spoofing.
- **METRON** is a compact camera-based 3D measurement system (photogrammetry) with a pre-trained AI deviation-detection pipeline delivering millimetre-level precision, suitable for surveillance and other target applications.
- **Foundation for an expanding mission stack** using Spinoff's in-house airframe design capabilities and proprietary aerial platforms on which the Company can progressively layer next generation mission capabilities with ECS-DoT.
- **Integrated value-chain advantage building on prior simulation results**: the acquisition will substantially expand the Company's drone application opportunities, with EMASS' hardware-in-the-loop flight endurance results on ECS-DoT silicon currently being validated in live drone trials with specialist US partner.
- **Dr Chee How Tan**, Spinoff co-founder and lead researcher in lean sensing and embodied perception for lightweight aerial robotics autonomy to join the Nanoveu team, expanding the Company's in-house drone expertise.
- **Spinoff has previously validated both ALICE and METRON with Tier-1 customers**, including Gardens by the Bay, Land Transport Authority and Home Team Science and Technology Agency, Singapore.

[1] Military Drone Market Size, Share | Industry Report, 2026 to 2033, GVR January 2026.

Nanoveu Limited (ASX: NVU, OTCQB: NNVUF) ("Nanoveu" or the "Company"), a technology company specialising in advanced semiconductor, visualisation and materials sciences, is pleased to announce that it has entered into a binding sale and purchase agreement regarding the acquisition of Spinoff Robotics Pte Ltd ("Spinoff"), a Singapore-based deep-tech spinout from the Singapore University of Technology and Design ("SUTD").

Spinoff develops clean-sheet aerial platforms engineered from first principles, with full in-house control over airframe, aerodynamics, flight control and on-board sensing, to meet mission-specific requirements. The acquisition will add two technologies validated by tier 1 customers, along with in-house-developed proprietary drone products (the ALICE tethered drone and the METRON sub-millimetre photogrammetry system). Furthermore, the acquisition will bring underlying engineering capability to design and build next generation purpose-built drones for identified target verticals.

This acquisition is a strategic step for the Company as it continues to build out solutions for major drone markets. The 22nm and 16nm ECS-DoT System-on-Chip ("SoC"), combined with Spinoff's aerial robotics expertise will provide optionality for the Company to engineer its SoC technology into the drone from the outset. In doing so, sensor placement, power envelope and control-loop latency can be designed around ECS-DoT, unlocking better on-device intelligence and flight responsiveness.

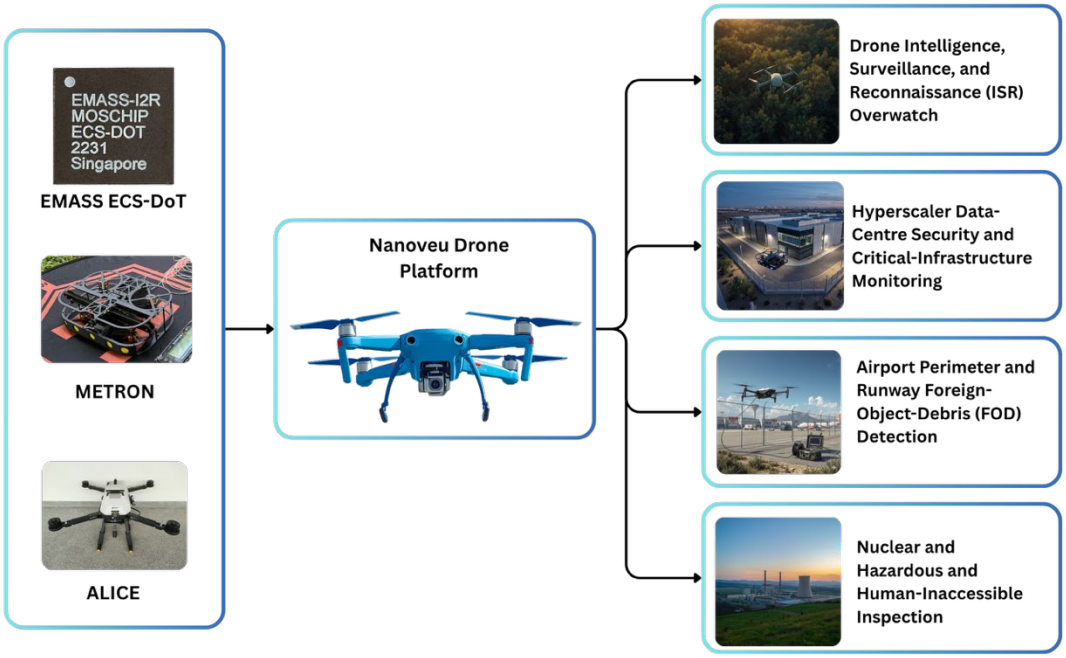

Figure 1: Integration image showcasing the combined intelligence of ECS-DoT, METRON and ALICE into high value target markets

Full-Stack Drone Vertical Integration: Silicon to Airframe

With the acquisition, the Company will hold every foundational layer required to design and field its own proprietary drone platforms from the ground up across mission profiles ranging from persistent ISR overwatch to battlefield-grade tactical platforms.

The integrated capabilities stack provides the following:

- **Edge AI Silicon - EMASS ECS-DoT**: 22nm/16nm ultra-low-power RISC-V SoC runs all analytics, vision processing and flight control on-device at sub-milliwatt power with no off-platform compute, comms or cloud dependency.

- **Airframe and Aerodynamics - Spinoff**: proprietary in-house drone design capability, with mechanical design, fluid dynamics expertise covering form factor, payload integration and mission-specific optimisation.
- **High Payload Capacity:** ground-side power offloads the power-electronics weight from the airframe, freeing lift budget for higher-grade sensor payloads.
- **Sub-Millimetre Sensing & Analytics - METRON**: photogrammetry and pre-trained baseline-deviation AI for 3D scene capture and real-time anomaly detection, which can be executed on ECS-DoT at the edge.
- **Navigation & Swarm Coordination:** GPS-free localisation and formation-control IP for operation in GPS-denied or contested environments, designed for integration on the same ECS-DoT platform.

The combination of EMASS' technology and in-house aerial robotics expertise and drone-building capability positions the Company to target four priority verticals where conventional surveillance and inspection technologies are currently constrained:

1. **Defence:** forward-base persistent ISR (intelligence, surveillance, and reconnaissance) overwatch, electronic warfare-resilient surveillance and sovereign drone capability.
2. **Surveillance:** hyperscaler data-centre and critical-infrastructure perimeter security and structural monitoring, plus airport perimeter security and runway foreign-object-debris (FOD) detection.
3. **Battlefield and tactical operations:** purpose-built tactical-grade drones leveraging clean-sheet airframe design coordination and on-device AI (ECS-DoT) for operations in GPS-denied and contested electromagnetic environments.
4. **Other:** nuclear, hazardous and human-inaccessible facility decontamination and inspection.

Figure 2: Spinoff-engineered drone with proprietary mechanical and flight control, the foundation on which ECS-DoT silicon, METRON and ALICE combine into Nanoveu's full-stack drone platform.

About Spinoff Robotics

Spinoff Robotics was founded in 2021 with the mandate of commercialising aerial robotics innovations.

Spinoff designs and custom-builds its own drones from the ground up; including airframes, flight control, and sensor integration. Both ALICE and METRON are proprietary, in-house platforms engineered from first principles and purpose built to address their target use cases. This vertical integration allows the team to engineer drones for each problem and customer rather than retrofitting generic platforms.

Spinoff has also validated both ALICE and METRON with tier 1 Singaporean customers:

- Gardens by the Bay (ALICE)
- Home Team Science and Technology Agency (ALICE)
- Land Transport Authority (METRON)

The core team consists of aerial robotics researchers, with specialist expertise in mechanical design, fluid dynamics, computer vision and autonomous navigation.

ALICE - The Proprietary Tethered Drone Platform

ALICE is a proprietary tethered aerial platform powered continuously from a ground-based supply, delivering uninterrupted fixed-point presence for missions where coverage gaps are not acceptable. ALICE has been validated in commercial operations, and the next-generation platform architecture is well-suited to redeployment as a persistent fixed-point surveillance asset for perimeter security, border monitoring and critical-infrastructure protection.

ALICE's key benefits include:

- **High payload capacity:** ground-side power offloads the power-electronics weight from the airframe, freeing lift budget for higher-grade sensor payloads;
- **Electronic Warfare resilience**: hardened tether eliminates the GPS-spoofing, RF-jamming and hijack vulnerabilities;
- **Sub-degree payload stabilisation**: proprietary control algorithm (which can be deployed on ECS-DoT) locks camera, EO/IR or sensor payloads on target under wind, tether tension and dynamic payload reaction forces;
- **Rapid deployment**: single-operator, sub-hour deployable as a persistent fixed-point surveillance asset;

Figure 3: showcasing ALICE in live deployment

ALICE's key advantages in high-value markets

Market	Next Gen ALICE Advantage
Drone (ISR) Overwatch	24/7 perimeter overwatch suited to forward operating bases and command outposts. Tether eliminates GPS-spoofing and RF-jamming vulnerabilities. Sub-hour, single-operator deployable.
Surveillance - Hyperscaler & Critical Infrastructure	Persistent perimeter security and thermal-anomaly monitoring for hyperscaler facilities. Continuous overwatch of cooling towers, substations and switchgear with optional thermal-imaging payload. No bandwidth-intensive off-site video uplink required.
Surveillance - Airport & FOD Detection	Tethered platform sited beside taxiways and runways for continuous FOD detection, perimeter security and apron monitoring. Tether eliminates the airspace-conflict issue that prevents free-flying drones operating airside, a critical regulatory advantage in aviation contexts.
Battlefield / Tactical Operations	Rapidly deployable persistent overwatch suited to forward operating bases. Electronic-warfare-resilient by design. Combined with GPS-free IP and ECS-DoT on-device AI, the platform is positioned for tactical operations in contested electromagnetic environments.
CBRN Decontamination & Hazardous Inspection	Tethered platform delivering persistent stable hover inside reactor halls, spent-fuel facilities and decommissioning zones. Ground-side power supports heavy shielded sensor payloads and removes the battery-swap cycles that would otherwise require human entry into contaminated areas.

METRON - Sub-Millimetre Sensing and AI Deviation Detection

METRON ('Measurement Extraction for Targeted Region Observation in Narrow-space') is a camera-based 3D measurement (photogrammetry) system built around a proprietary camera assembly and multi-image measurement algorithm, delivering sub-millimetre dimensional accuracy in confined spaces that human inspectors cannot easily reach. The same hardware functions as a persistent scene-mapping and change-detection tool for surveillance and high-fidelity infrastructure monitoring.

Pre-trained AI Deviation Detection Pipeline

METRON's analytics pipeline is the computer-vision layer that sits on top of its 3D output. Originally trained for principal inspection of critical bridge infrastructure by detecting deviation from a baseline appearance, the technology transfers directly to surveillance and inspection anomaly detection with millimetre-level precision.

METRON's benefits include:

- **Sub-millimetre dimensional accuracy**: camera-based photogrammetry delivering precision measurement in confined and inaccessible spaces;
- **Dual-function hardware**: the same camera assembly operates as both a precision measurement tool and a persistent scene-mapping and change-detection sensor;
- **Pre-trained analytics pipeline**: baseline-deviation detection proven on real-world data, enabling real-time flagging of intrusions, displaced objects, structural damage and FOD;
- **On-device processing:** analytics can be executed at the edge on ECS-DoT with no off-platform compute, comms or cloud dependency.

Figure 4: showcasing METRON in live deployment

Why METRON is positioned for high-value markets

Market	Next Gen METRON Advantage
Drone (ISR) Overwatch	3D-baselines the perimeter on day one; analytics pipeline flags intrusions, displaced objects and unauthorised aerial activity against baseline without streaming raw video off-platform.
Surveillance - Hyperscaler & Critical Infrastructure	Sub-millimetre change-detection on cooling towers, transformer infrastructure and power-distribution surfaces. Genuinely differentiated against incumbent CCTV-and-thermal-only approaches for structural monitoring.
Surveillance - Airport FOD Detection	3D-baselines the runway surface and flags any object displacement in real time. A single ingested fastener can ground an airframe; METRON provides the fidelity to detect debris at sub-millimetre scale that visual inspection misses.
Battlefield / Tactical Operations	Forward-area scene baselining and anomaly detection executed entirely on-device on ECS-DoT supporting tactical operations where comms back-haul is unavailable, denied or operationally undesirable.

Market	Next Gen METRON Advantage
Nuclear & Hazardous Inspection	Sub-millimetre structural monitoring of reactor cores, spent-fuel pools, containment vessels and pressure piping at fidelity human inspectors physically cannot achieve. The system is suited to global decommissioning programmes including legacy facility remediation.

The Defence Market

Following completion of the acquisition, the Company will prioritise high-value defence and critical-infrastructure applications, integrating EMASS' ECS-DoT edge-AI silicon with Spinoff's drone technology to deliver fully-owned drone platforms purpose-built for each target market. The acquisition arrives at a moment when defence procurement globally is accelerating, allied governments are mandating sovereign and trusted-supply-chain drone capability, and recent geopolitical events have exposed the operational vulnerability of GPS-dependent and RF-reliant aerial platforms.

Post-completion, the combined platform will seek to address the core requirements of defence customers in this segment:

- **Next Gen ALICE** to deliver persistent 24/7 tethered ISR overwatch with no GPS, no RF surface and no hijack vector to be jammed, spoofed or disabled eliminating the failure modes that have grounded conventional drone fleets in contested environments.
- **Next Gen METRON** to provide 3D-baselining of perimeters and on-device deviation detection, removing the need to stream raw video off-platform.
- **EMASS ECS-DoT** runs all flight control, sensing and AI inference on-device at sub-milliwatt power with no cloud dependency, no off-platform compute, no comms surface.
- **GPS-free localisation and swarm IP** provides navigation and formation control in GPS-denied environments, evaluated for integration on the same ECS-DoT platform.

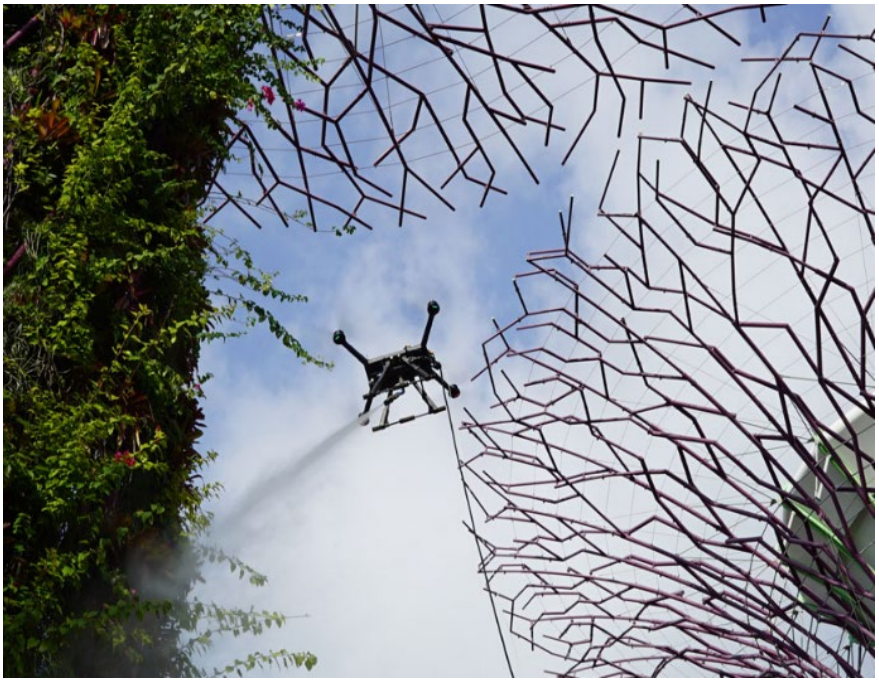

Figure 5: tethered ALICE deployed at Gardens By The Bay

Surveillance in Hyperscaler, Critical Infrastructure and Airports

The Company will target two surveillance sub-segments where ALICE and METRON, integrated with on-device ECS-DoT AI, offer differentiation against incumbent CCTV-and-thermal approaches in hyperscaler / critical-infrastructure security, and airport perimeter / runway FOD detection.

Hyperscaler Data-Centre and Critical-Infrastructure Security

Hyperscaler capital expenditure on data-centre buildout is one of the dominant investment themes of the current cycle. Global hyperscale data centre market is estimated to be approximately US$205.48B in 2026, forecast to reach approximately US$595B by 2030[2]. Each new facility requires perimeter security, thermal-anomaly detection across cooling infrastructure, and continuous structural monitoring of substations, switchgear and cooling towers. ALICE could provide persistent perimeter overwatch with optional thermal payload; METRON could deliver sub-millimetre change-detection on cooling towers, transformer infrastructure and power-distribution surfaces. All AI inference could run on-device on EMASS ECS-DoT, removing bandwidth-intensive off-site video uplink requirements creating a meaningful operational and cost advantage in hyperscaler facilities.

Airport Perimeter and Runway Foreign-Object-Debris (FOD) Detection

A tethered platform sited beside taxiways and runways could perform continuous FOD detection, perimeter security and apron monitoring. The tether eliminates the airspace-conflict issue that prevents free-flying drones operating airside, providing a stable, repeatable, certifiable presence marking a meaningful regulatory advantage in aviation contexts.

The global airport FOD detection systems market is forecast to grow from approximately US$869M in 2025 to approximately US$1.5B by 2034[3], with tier-1 airport authorities globally an immediately addressable target market.

Figure 6: Conceptual Image of ALICE potentially providing tethered detection at airport perimeter.

Battlefield and Tactical Operations

The acquisition unlocks this market with the ability to design and field purpose-built tactical and battlefield-grade drones from a clean-sheet airframe.

With Spinoff's in-house mechanical design, fluid dynamics and flight control capability, Nanoveu plans to iterate rapidly across mission profiles from squad-deployable platforms to extended-range tactical surveillance using a single integrated design loop spanning silicon, airframe, sensing and software.

Combined with GPS-free swarm and formation-control IP and EMASS's ECS-DoT on-device AI engine, the platform can be positioned to address:

[2] Hyperscale Datacenter Market Size & Share Analysis, Research Report 2026 - 2031, MI Research, January 2026.
[3] Airport Runway Foreign Object Debris (FOD) Detection Systems Market, Research Report 2025 - 2034, DI Research, April 2026.

- Squad-deployable autonomous platforms operable in GPS-denied or contested electromagnetic environments;
- Multi-drone formation coordination using on-device sensing only — no external infrastructure required;
- Electronic warfare-resilient sensing and command pathways with no comms surface to be jammed or spoofed;
- Sub-milliwatt always-on inference, enabling extended mission endurance on small-form-factor airframes.

Nuclear and Human Inaccessible Inspection

Deployment in radioactive, contaminated or otherwise human-inaccessible facilities and post-disaster industrial sites, capturing data at a fidelity human inspectors physically cannot achieve. METRON's sub-millimetre dimensional accuracy applied to reactor cores, spent-fuel pools, containment vessels and pressure piping can address requirements that incumbent inspection methods cannot meet.

The IAEA estimates several hundred billion dollars of global nuclear decommissioning spend between now and 2050[4]. The annual nuclear decommissioning services market is forecasted to reach approximately US$9.5B by 2030[5].

Figure 7: Conceptual Image of Nuclear Plant where METRON could provide surveillance and maintenance.

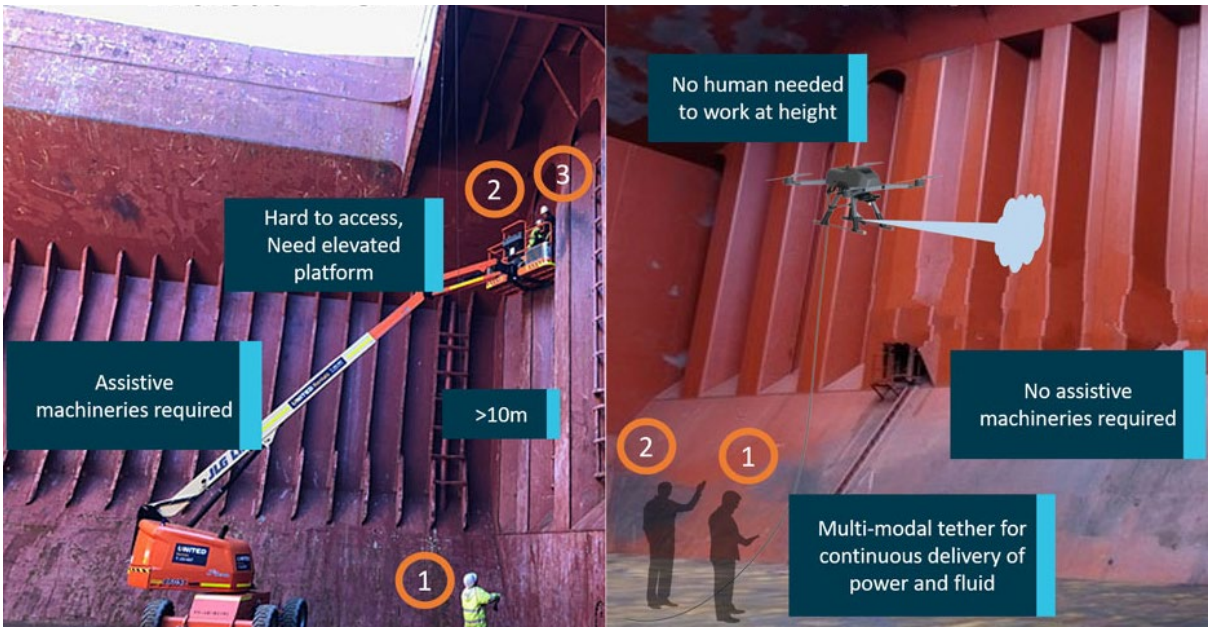

Figure 8: Spinoff's autonomous tethered rotorcraft platform replaces hazardous at-height inspection and cleaning work, delivering continuous power and fluid to the drone via a multi-modal tether.

[4] Nuclear Decommissioning Market Set to Boom | International Atomic Energy Agency, April 2023
[5] Nuclear Decommissioning Services Market Size & Analysis, Growth Trends 2025 – 2030 Report; MI, July 2025.

Drone Expertise

The acquisition will bring significant aerial robotics expertise into the Company. Dr Chee How Tan, co-founder of Spinoff and lead researcher in lean sensing and embodied perception for light aerial robotics autonomy, will join the team. Dr Tan holds a Ph.D. in aerial robotics and lightweight autonomous systems and has spent more than 4 years as a research fellow at SUTD and Director of Spinoff Robotics.

The Company has agreed to issue Dr Tan, 2,000,000 incentive performance rights, which will vest in equal portions upon: (i) the earlier of NVU achieving a 20 day VWAP of AU$0.20 or Dr Tan's continuous employment with the group for 24 months, and (ii) the earlier of NVU achieving a 20 day VWAP of AU$0.30 or Dr Tan's continuous employment with the group for 36 months. All Performance Rights are only eligible to be exercised while Dr Tan is employed with the Company. The Performance Rights will expire and lapse on the earlier of: (i) the Vesting Condition becoming incapable of satisfaction due to the cessation of employment of the holder with the Company; and (ii) 5 years from their issue date.

The incentive performance rights to be issued to Dr Tan will be issued pursuant to the Company's available ASX Listing Rule 7.1 capacity.

Nanoveu maintains active research collaborations with Singapore-based universities and innovation offices, supporting an ongoing pipeline of IP that aims to extend the Company's drone capabilities into major target markets.

Drone Edge-AI Program — Next Steps

The Spinoff acquisition will accelerate Nanoveu's drone-vertical strategy within the broader ECS-DoT commercialisation program. Drones are one of several priority markets for the chip alongside wearables, healthcare and industrial IoT, and the acquisition will give EMASS a vertically-integrated deployment surface for the silicon in one of the highest-volume edge-AI markets.

Near-term workstreams include:

- Live drone trials advancing on ECS-DoT silicon: EMASS' live drone trials with a specialist US partner continue to progress, validating Phase 2 flight endurance simulation results in real-world conditions. The Company is moving to protect novel outcomes from this work through near-term IP filings.
- Advanced edge-AI solutions for the drone market. EMASS will progressively develop ECS-DoT-based solutions targeting next-generation drone functions, including multi-chip configurations, GPS-free navigation, counter-drone detection and AI-driven flight optimisation, deployable on Spinoff airframes and through external channels to drone OEMs.
- Drone OEM and end-user engagement. The Company will pursue direct engagement with drone OEMs, system integrators and end users across military and commercial applications.
- Bespoke airframe development around ECS-DoT. With airframe engineering capability now in-house, the Company has the option to design new airframes purpose-built around the ECS-DoT system-on-chip where commercially attractive.
- Continued IP expansion. The Company maintains active research collaborations and will continue to evaluate additional drone-related IP, with the integrated platform providing a clearer integration pathway for new technologies.

Key Transaction Terms

Under the terms of the binding sale and purchase agreement, the Company has agreed to acquire 100% of the issued share capital of Spinoff Robotics Pte Ltd in consideration for:

- Consideration Shares: At completion, the Company will issue 3,000,000 fully paid NVU shares, to be issued at a deemed issue price equal to the volume weighted average price of Shares on ASX over the 10 trading days immediately preceding the Settlement Date, subject to 12 months escrow; and

- Performance Rights: At completion, the Company will issue 4,000,000 NVU performance rights which will convert into NVU Shares subject to achievement of the following performance milestones:

  - 2,000,000 Class A performance rights: shall vest upon Spinoff Robotics having executed one or more legally binding unconditional contracts for the sale of products or services incorporating its technology with customers resulting in the actual physical receipting of a cumulative revenue of not less than SGD$1,000,000 over the initial 24 month period from the Class A performance rights issue date;

  - 1,000,000 Class B performance rights: shall vest upon Spinoff Robotics integrating into a commercial product or solution at least 3 items of intellectual property licensed to Spinoff Robotics from any Institute of Higher Learning in Singapore, none of which were owned or used by Spinoff Robotics prior to the Settlement Date, as verified and approved by the Board of the NVU, within 5 years from the Class B performance rights issue date;

  - 1,000,000 Class C performance rights: shall vest upon NVU achieving a Volume Weighted Average Share Price (VWAP) over 20 consecutive trading days of at least AU$0.20 per share within 5 years from the Class C performance rights issue date.

    (together, the **Milestones** and each, a **Milestone**).

The performance rights will expire on the earlier of (i) the Milestone becoming incapable of satisfaction due to expiration of the Milestone Date, or, (ii) the date that is five years from the date of issue (Expiry Date). If the relevant Milestones attached to the Performance Rights have been achieved by the Expiry Date however not exercised, all unconverted Performance Rights of the relevant class of Performance Rights will automatically lapse at that time.

The acquisition is subject to due diligence to the Company's satisfaction and receipt of any required regulatory, statutory and governmental consents and approvals and escrow agreements. Settlement is required to be completed by 31 August 2026. The vendors are unrelated parties of the Company. The abovementioned consideration securities will be issued pursuant to the Company's placement capacity under ASX Listing Rule 7.1.

Nanoveu's Executive Chairman, Dr David Pevcic, commented: *"The proposed acquisition of Spinoff Robotics is a defining step in the build-out of Nanoveu's autonomous drone platform, providing the in-house deployment surface to scale ECS-DoT silicon and validate next-generation edge-AI functions — including multi-chip configurations, GPS-free navigation and mission-specific perception workloads — in one of the highest-volume edge-AI markets. With proprietary airframes and sensing sitting alongside the Company's silicon, edge-AI IP and autonomy algorithms, Nanoveu is placed to own every layer of the stack required to ship validated reference designs into defence, critical-infrastructure security and industrial inspection."*

This announcement has been authorised for release by the Board of Directors.

-ENDS-

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About Nanoveu Limited

Further details on the Company can be found at https://nanoveu.com/.

EMASS is a pioneering technology company specialising in the design and development of advanced systems-on-chip (SoC) solutions. These SoCs enable ultra-low-power, AI-driven processing for smart devices, IoT applications, and 3D content transformation. With its industry-leading technology, EMASS will enhance Nanoveu's portfolio, empowering a wide range of industries with efficient, scalable AI capabilities, further positioning Nanoveu as a key player in the rapidly growing 3D content, AI and edge computing markets.

EyeFly3D™ is a comprehensive platform solution for delivering glasses-free 3D experiences across a range of devices and industries. At its core, EyeFly3D™ combines advanced screen technology, sophisticated software for content processing, and now, with the integration of EMASS's ultra-low-power SoC, powerful hardware.

Nanoshield™ is a self-disinfecting film that uses a patented polymer of embedded Cuprous nanoparticles to provide antiviral and antimicrobial protection for a range of applications, from mobile covers to industrial surfaces. Applications include *Nanoshield™ Marine*, which prevents the growth of aquatic organisms on submerged surfaces like ship hulls, and *Nanoshield™ Solar*, designed to prevent surface debris on solar panels, thereby maintaining optimal power output.

Forward Looking Statements This announcement contains 'forward-looking information' that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the Company's business strategy, plans, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations and related expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'ambition', 'anticipate', 'project', 'target', 'potential', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'mission', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance, or achievements to be materially different from those expressed or implied by such forward looking information.