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ASX RELEASE **22 July 2026**

ASX: NVU

ECS-DoT Edge-AI Chip Validated in Real-World Trials as Nanoveu Grows Commercial Engagement Across Target Markets

June 2026 quarter marked by real-world validation of the ECS-DoT edge-AI chip, growing commercial engagement across the 22nm platform, new always-on voice AI demonstrations, continued progress on the 16nm program, and the acquisition of Spinoff Robotics to strengthen the Company's drone edge-AI program

Quarterly Activities Report for the Quarter ended 30 June 2026

Highlights

- **Spinoff Robotics acquisition secured:** Nanoveu entered into a binding sale and purchase agreement to acquire 100% of Spinoff Robotics Pte Ltd, a Singapore-based deep-tech spinout from the Singapore University of Technology and Design, adding the ALICE tethered drone and METRON sub-millimetre photogrammetry platforms together with in-house aerial robotics engineering capability. The acquisition completed on 2 July 2026.
- **Live drone trials validate ECS-DoT:** First live drone flight trials confirmed EMASS's simulation results under real-world conditions, delivering cruise-efficiency gains of up to 27.8% (average 27.2%) against a PX4 open-source baseline with no modifications to battery, airframe or propulsion, and with onboard AI consuming less than 1 milliwatt. Second-phase trials completed subsequent to the end of the Quarter delivered peak gains of up to 51.0% on more complex flight paths — further confirming significant endurance benefits consistent with our simulation results.
- **Microphone-free keyword spotting demonstrated:** EMASS achieved fully functional, real-time keyword spotting on ECS-DoT using bone-conduction vibration sensing at under 1 milliwatt of computational power, advancing the hearables reference design announced in March 2026.
- **AI function fusion achieved:** EMASS demonstrated keyword detection and voice recognition running simultaneously on a single always-on ECS-DoT co-processor, each application operating at under half a milliwatt of average power with approximately 4ms inference latency.
- **Commercial engagement ramped up:** Commercial engagement for the 22nm ECS-DoT platform stepped up during the Quarter, with active evaluations and design engagements across the platform's target verticals and the appointment of a distribution partner in China. Nanoveu ended the Quarter with cash of $5.139 million.

Nanoveu Limited (ASX: NVU) ("Nanoveu" or the "Company"), a technology innovator across advanced semiconductor, visualisation, and materials science applications, is pleased to provide this activity report for the quarter ended 30 June 2026 ("June Quarter"), along with the Company's Appendix 4C cash flow report.

The June Quarter saw a material expansion of Nanoveu's drone strategy, with the Company agreeing to acquire Spinoff Robotics to bring proprietary aerial platforms and airframe engineering capability in-house, and the first real-world validation of the ECS-DoT platform through live drone flight trials. EMASS also broadened the demonstrated capabilities of ECS-DoT in always-on voice AI and ramped up commercial engagement across the 22nm ECS-DoT platform, while the Company completed its Annual General Meeting and associated capital initiatives.

Dr David Pevcic, Executive Chairman of NVU, commented: "*The June Quarter delivered progress across every part of the ECS-DoT program. Commercial engagement on the 22nm platform grew markedly, with evaluations and design engagements running across each of our target markets and a new distribution partner appointed in China. Our technology was also proven in the field: the first live drone flight trials confirmed the simulation results, with cruise-efficiency gains of up to 27.8% and ECS-DoT the only variable, and EMASS demonstrated microphone-free keyword spotting and, for the first time, two AI functions running at once on a single co-processor at sub-milliwatt power. The 16nm chip is in fabrication at TSMC and we are awaiting first engineering samples. The acquisition of Spinoff Robotics, completed shortly after quarter-end, adds proprietary aerial platforms and airframe engineering to our drone program. The job now is to convert this activity into commercial agreements across our core markets: wearables and hearables, smart home and security, asset tracking, industrial monitoring, and drone and robotics applications.*"

EMASS – Edge AI Semiconductor Division

Acquisition of Spinoff Robotics – Full-Stack Drone Vertical Integration

On 15 May 2026, Nanoveu announced that it had entered into a binding sale and purchase agreement to acquire 100% of the issued share capital 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. The acquisition adds two proprietary drone platforms in active commercial deployment: ALICE, a tethered aerial platform delivering high payloads with strong resistance to jamming and spoofing, and METRON, a camera-based 3D measurement (photogrammetry) system with a pre-trained AI deviation-detection pipeline delivering millimetre-level precision. Both platforms have been validated with Tier-1 Singaporean customers including Gardens by the Bay, the Land Transport Authority and the Home Team Science and Technology Agency.

The Company stated that 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, with defence markets and commercial applications to be priority targets. Priority verticals identified include defence ISR overwatch, surveillance of hyperscaler data centres, critical infrastructure and airports, battlefield and tactical operations, and nuclear and hazardous facility inspection. Dr Chee How Tan, Spinoff co-founder and lead researcher in lean sensing and embodied perception for lightweight aerial robotics autonomy, agreed to join the Nanoveu team as part of the transaction.

Consideration for the acquisition comprises 3,000,000 fully paid ordinary shares, subject to 12 months escrow, and 4,000,000 performance rights subject to revenue, IP-integration and share-price milestones. The acquisition completed on 2 July 2026.

Live Drone Flight Trials – ECS-DoT Energy Efficiency Validation

On 22 June 2026, Nanoveu announced the completion of its first live drone flight trials, confirming previously announced simulation results under real-world conditions. Testing recorded cruise-efficiency gains of 27.8% at 4 m/s (16.69 to 21.33 metres per watt-hour) and 26.7% at 6 m/s (26.62 to 33.72 metres per watt-hour), an average improvement of 27.2%, with no modifications to the drone's battery, airframe or propulsion.

The trials followed a four-phase empirical methodology comparing identical flight paths flown under a PX4 open-source autopilot baseline and with ECS-DoT active, making ECS-DoT the only variable. Efficiency gains were achieved by holding cruise speed tightly at the aerodynamic optimum through a 64Hz control loop, with the onboard AI consuming less than 1 milliwatt and total system power, including continuous telemetry, below 10 milliwatts.

Always-On Voice AI – Microphone-Free Keyword Spotting and AI Function Fusion

On 16 June 2026, Nanoveu announced that it had achieved fully functional, real-time keyword spotting on the ECS-DoT edge AI SoC using bone-conduction vibration sensing at under 1 milliwatt of computational power, with no microphone in the detection path. The demonstration advances the bone-conduction hearables reference design

announced in March 2026, excludes ambient noise at the source, and was implemented using a standard STMicroelectronics inertial measurement unit paired with ECS-DoT, with no specialised hardware required.

On 25 June 2026, Nanoveu announced the first demonstration of two AI functions – keyword detection and voice recognition – running simultaneously on a single always-on ECS-DoT co-processor, the first time ECS-DoT has run two AI models at once. Each application operates always-on at under half a milliwatt of average power with approximately 4ms inference latency, and the keyword-detection model achieved 92% top-1 and 97% top-3 accuracy across more than 1,500 tests, implemented on an ECS-DoT evaluation board with a standard digital MEMS microphone. In both announcements, Nanoveu advised it is in active discussions with device manufacturers and platform integrators and continues to pursue design-ins, with next steps including expanded keyword vocabularies, hardened detection performance and production-ready reference designs.

ECS-DoT Semiconductor Programs – 22nm Commercialisation and 16nm Development

Commercial engagement for the 22nm ECS-DoT platform, EMASS's commercially available edge-AI SoC, was significantly ramped up during the June Quarter, with a growing number of active evaluations and design engagements underway with prospective customers and partners across the platform's target verticals, including consumer wearables and smart rings, hearables and hearing aids, smart glasses, smart home and security devices, AI-enabled cameras, asset tracking and telematics, industrial monitoring and predictive maintenance, gaming and PC accessories, and drone and robotics applications. Engagements range from initial technical evaluation to active design engineering, and are supported by proof-of-concept programs with international technology partners and continued development of the ECS-DoT software development environment and AI model toolchain. During the June Quarter, the Company also appointed a distribution partner in China to support customer engagement in the region. EMASS also progressed preparation for the full mask tape-out of the 22nm ECS-DoT chip, which is expected to commence in the second half of 2026.

The 16nm ECS-DoT program continued to advance during the June Quarter. Following the successful completion of tape-out and the commencement of fabrication at TSMC in January 2026 (announced 27 January 2026), wafer fabrication continued through the June Quarter and the Company is awaiting first engineering samples. Once samples are received, EMASS intends to run a silicon validation program covering power, performance and functional testing ahead of customer sampling. The 16nm device scales the proven 22nm platform with an integrated Bluetooth Low Energy subsystem, expanded on-chip memory and enhanced AI acceleration, while maintaining software compatibility across ECS-DoT generations.

EyeFly3D™ and Nanoshield™ Divisions

While the June Quarter's principal announcements were centred on EMASS and the expansion of the Company's drone strategy, the Company continues to maintain a portfolio approach across its EyeFly3D™ and Nanoshield Solar™ divisions alongside its semiconductor activities. This reflects Nanoveu's strategy of advancing complementary technologies across visualisation and materials science applications, supporting broader long-term commercial opportunities across multiple sectors.

Corporate and Financial

On 26 June 2026, following shareholder approval at the Company's Annual General Meeting held on 29 May 2026 (at which all 13 resolutions were passed), the Company completed the director placement of 1,363,637 shares at an issue price of $0.088 per share and 681,819 attaching options, and issued 5,000,000 performance rights pertaining to the board appointment of Mohamed M. Sabry on 1 December 2025. Earlier in the June Quarter, the Company announced a change of auditor (2 April 2026) and released the notice of meeting for the AGM (29 April 2026). The Company also hosted an investor webinar in June 2026 to update shareholders on its strategy and recent milestones.

Expenditure for the Quarter ended 30 June 2026 included:

- Staff costs of $983k comprising the costs of all staff employed by the Company and directors' remuneration;
- Research and development costs of $142k relating to ongoing development activities across the Company's core technology platforms;

- Advertising and marketing costs of $170k relating to continued engagement with OEMs and commercial partners, including customer outreach, technical marketing materials, and activities aimed at advancing commercialisation of the Company's technology platforms.

During the June Quarter, the Company continued to invest in progressing its semiconductor commercialisation strategy, including customer evaluation, testing and design-in support activities. The Company recorded proceeds from issues of shares of $120,000 (before costs) from the completion of the shareholder-approved director placement.

The Company's cash position as at 30 June 2026 was $5.139 million.

During the June Quarter, payments to related parties totalled $252k, comprising directors' fees, executive remuneration and associated superannuation obligations.

Subsequent Events

On 2 July 2026 Nanoveu announced the completion of the acquisition of Spinoff Robotics. Pursuant to the sale and purchase agreement, the Company issued 3,000,000 fully paid ordinary shares, subject to a 12-month voluntary escrow period, and 4,000,000 performance rights subject to revenue, IP integration and share price milestones. Dr Chee How Tan has joined the Nanoveu team to lead the Company's drone vertical initiatives, and the Company is now evaluating next-generation ALICE and METRON applications across active aerial defence, critical infrastructure protection and major inspection markets.

On 13 July 2026, Nanoveu announced results from the second phase of its live drone evaluation program. Using the same controlled methodology as the first-phase trials, testing across three more complex flight trajectories – featuring dense zigzags, irregular polygons and diagonal crossings, more representative of commercial drone operations – recorded peak cruise-efficiency gains of up to 51.0% at 7 m/s and average gains of 48.5% at 7 m/s across all trajectories tested. Efficiency gains increased consistently with flight speed, with ECS-DoT executing continuous real-time flight optimisation while consuming less than 10 mW of total system power and without additional battery capacity or hardware modifications.

Outlook

Nanoveu's near-term priorities are integrating ECS-DoT with the newly acquired Spinoff platforms, advancing the drone edge-AI program and associated IP filings, progressing always-on voice AI toward production-ready reference designs, and converting active customer and partner discussions into design-ins.

Looking ahead, Nanoveu remains focused on:

- Advancing the 16nm ECS-DoT program toward receipt of engineering samples and silicon validation, while progressing 22nm ECS-DoT commercial engagement and design-in activity and preparing for the full mask tape-out of the 22nm chip, expected to commence in the second half of 2026.
- Integrating ECS-DoT silicon with the ALICE and METRON platforms and developing next-generation versions of both platforms for identified target verticals.
- Progressing the drone edge-AI program, including preparations of IP filings, integration with proprietary flight controllers via telemetry, and engagement with drone OEMs, system integrators and end users.
- Expanding always-on voice AI capabilities, including broader keyword vocabularies, hardened detection performance and production-ready reference designs.
- Maintaining disciplined capital management while supporting commercialisation across the Company's operating divisions.

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

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About Nanoveu Limited

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

EMASS is a fabless semiconductor company specialising in ultra-low-power, AI-enabled system-on-chip (SoC) solutions for always-on sensing and intelligent processing at the edge. Its ECS-DoT architecture enables real-time AI inference at milliwatt-level power, supporting next-generation applications across drones, wearables, hearables, smart devices, industrial IoT, robotics and autonomous systems.

Spinoff is a Singapore-based aerial robotics company that designs and builds proprietary drone platforms. Its two current platforms are ALICE, a tethered aerial system engineered for high-payload, extended-duration operations with resistance to GPS and radio-frequency jamming and spoofing, and METRON, a camera-based 3D measurement system delivering millimetre-level precision with AI-driven deviation detection. Both platforms have been validated in commercial deployments with Tier-1 Singaporean customers. Spinoff Robotics provides airframe and sensing capabilities complementing its ECS-DoT edge-AI silicon for major drone market applications.

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 the potential for integration with ultra-low-power SoC hardware.

Nanoshield™ includes protective and functional coating technologies designed for use across a range of applications, including solar and other industrial surfaces.

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.

Appendix 4C

Quarterly cash flow report for entities subject to Listing Rule 4.7B

Name of entity	
Nanoveu Limited	
ABN	**Quarter ended ("current quarter")**
97 624 421 085	30 June 2026

Consolidated statement of cash flows		**Current quarter $A'000**	**Year to date (6 months) $A'000**
1.	**Cash flows from operating activities**		
1.1	Receipts from customers	22	220
1.2	Payments for		
	(a) research and development	(142)	(764)
	(b) product manufacturing and operating costs	(87)	(238)
	(c) advertising and marketing	(170)	(334)
	(d) leased assets	-	-
	(e) staff costs	(983)	(1,912)
	(f) administration and corporate costs	(266)	(773)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	32	56
1.5	Interest and other costs of finance paid	-	(12)
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (provide details if material)	-	-
1.9	**Net cash from / (used in) operating activities**	**(1,594)**	**(3,757)**

2.	**Cash flows from investing activities**		
2.1	Payments to acquire:		
	(a) entities	-	-
	(b) businesses	-	-
	(c) property, plant and equipment	(41)	(58)
	(d) investments	-	-
	(e) intellectual property	-	-
	(f) other non-current assets	(17)	(17)

Consolidated statement of cash flows		Current quarter $A'000	Year to date (6 months) $A'000
2.2	Proceeds from disposal of:		
	(a) entities	-	-
	(b) businesses	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) intellectual property	-	-
	(f) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	**Net cash from / (used in) investing activities**	**(58)**	**(75)**

3.	**Cash flows from financing activities**		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	120	7,500
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	190
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	(512)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	**Net cash from / (used in) financing activities**	**120**	**7,178**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	6,672	1,808
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,594)	(3,757)

Consolidated statement of cash flows		Current quarter $A'000	Year to date (6 months) $A'000
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(58)	(75)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	120	7,178
4.5	Effect of movement in exchange rates on cash held	(1)	(15)
4.6	**Cash and cash equivalents at end of period**	**5,139**	**5,139**

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter $A'000	Previous quarter $A'000
5.1	Bank balances	2,339	3,658
5.2	Call deposits	2,800	3,014
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	**Cash and cash equivalents at end of quarter (should equal item 4.6 above)**	**5,139**	**6,672**

6.	Payments to related parties of the entity and their associates	Current quarter $A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	252
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments

7.	**Financing facilities** *Note: the term "facility' includes all forms of financing arrangements available to the entity.* *Add notes as necessary for an understanding of the sources of finance available to the entity.*	**Total facility amount at quarter end $A'000**	**Amount drawn at quarter end $A'000**
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	**Total financing facilities**	-	-

7.5	**Unused financing facilities available at quarter end**	-

7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.

8.	**Estimated cash available for future operating activities**	**$A'000**
8.1	Net cash from / (used in) operating activities (Item 1.9)	(1,594)
8.2	Cash and cash equivalents at quarter end (Item 4.6)	5,139
8.3	Unused finance facilities available at quarter end (Item 7.5)	-
8.4	Total available funding (Item 8.2 + Item 8.3)	5,139
8.5	**Estimated quarters of funding available (Item 8.4 divided by Item 8.1)**	3.2

8.6 If Item 8.5 is less than 2 quarters, please provide answers to the following questions:

1. Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: N/A

2. Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer: N/A

3. Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: N/A

Compliance statement

1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.

2 This statement gives a true and fair view of the matters disclosed.

22 July 2026

Date: .....

Managing Director and CEO

Authorised by: .....
(Name of body or officer authorising release – see note 4)

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.

2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standard applies to this report.

3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [*name of board committee – eg Audit and Risk Committee*]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".

5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.