For personal use only

10th June 2026

dorsaVi Licenses NTU Singapore's Robotics IP to Accelerate Exoskeleton and Collaborative Robotics Strategy

Key Highlights:

- **Patent & Know-How License:** dorsaVi has entered into an agreement to license two robotics intellectual property assets developed at Nanyang Technological University, Singapore (NTU Singapore) — one of Asia's leading engineering and technology universities.
- **Invention 1:** A patented control system that gives robots the ability to work safely next to people in real time — the critical missing piece that has held back the widespread adoption of collaborative robots in healthcare, manufacturing and defence.
- **Invention 2:** A system that helps robots learn from real-world human movement, turning dorsaVi's existing clinical sensor data into a high-quality training library that robotic and exoskeleton systems can use to become faster and more adaptive.
- **Strategic Expansion:** The licenses directly expand dorsaVi's addressable market into collaborative robotics (cobots), rehabilitation exoskeletons, autonomous industrial systems, and human-machine interface platforms.
- The Missing Piece: Following the exoskeleton strategy announcement, the chip validation, the developer platform and the hardware build program, this NTU Singapore's IP license provide the safety control and data intelligence layers that complete the platform — the final piece of a vertically integrated robotics intelligence stack.
- **IP Synergy with V6.5:** The NTU IP is architecturally complementary to dorsaVi's V6.5 on-sensor intelligence platform, combining clinically validated human movement data with a proven safety control framework for the next generation of human-aware robotics.
- **Market Opportunity:** The global collaborative robotics market is projected to exceed USD 17 billion by 2030[1]; the robotics AI software and data market is forecast to surpass USD 78 billion by 2032[2].
- **Vertical Integration & End-to-End Control:** The NTU license completes dorsaVi's position as a vertically integrated robotics intelligence company owning every critical layer of the stack from sensing, memory, compute and control through to safety and learning. This rare end-to-end ownership is what separates platform companies from component suppliers, and is the foundation for durable, defensible commercial value**.**
- **Clinical Validation Pathways:** dorsaVi's established clinical networks — including the SEROMA European study, Select Medical's 1,900+ US physical therapy sites, and the Dr. Patel elite sports program — provide immediate real-world environments to validate and commercialise the acquired IP.
- **RRAM & Neuromorphic Foundation:** dorsaVi's validated RRAM memory and neuromorphic chip technologies form the compute foundation of the robotics intelligence stack, delivering projected 10x gains in on-device AI inference with ultra-low power consumption, enabling real time autonomous decision making at the edge without cloud dependency.

[1] Collaborative Robot Market Size | Industry Report, 2033
[2] Robot Software Market - Size, Share & Industry Forecast

Melbourne, Australia, 10 June 2026 – dorsaVi Limited (ASX: DVL) ("dorsaVi" or "the Company") is pleased to announce that it has entered into an agreement to license two significant robotics intellectual property assets from Nanyang Technological University Singapore (NTU Singapore), expanding the Company's strategy beyond wearable sensing into collaborative robotics, rehabilitation exoskeletons, and autonomous industrial systems.

The license represents the deliberate conclusion of a carefully sequenced strategy. The Company identified exoskeletons and human-robot collaboration as its primary application target, validated that its RRAM memory and neuromorphic chip technologies work together as a coherent system with projected 10x performance gains, opened a developer platform that gives external partners access to that technology, and commenced the hardware build program that turns it into a manufacturable product. These NTU Singapore's IP license now add the safety control and data acquisition layers above the hardware — completing a vertically integrated robotics intelligence platform that the Company owns from sensing through to autonomous decision-making at the edge.

The Licensed IP: Two Foundational Robotics Inventions

Invention 1: Universal Control Framework for Human-Robot Interaction

This invention delivers a universal control framework for robot manipulators operating in close proximity to humans. Structured around three integrated control sets — a Safety Control Set, a Hard Constraint Set, and a Soft Constraint Set — the framework guarantees human safety while preserving hierarchical task consistency in real time.

The system employs control barrier functions, affine control models, and dynamic optimisation techniques to ensure that safety is never overridden by task demands. It is designed to be platform-agnostic, applicable across industrial cobots, mobile service robots, surgical assistance platforms, and exoskeleton systems.

For dorsaVi, this IP addresses a critical gap in the cobot ecosystem: existing collaborative robots rely on simplistic safety protocols — force limits or basic proximity sensors — that restrict productivity. This framework enables closer, more natural human-robot collaboration with mathematically rigorous safety guarantees, precisely aligned with requirements under ISO/TS 15066 and emerging EU AI Act standards for autonomous systems.

Invention 2: Efficient Data Collection Device for Robotic Manipulation Tasks

This invention introduces a dedicated multimodal data collection device and methodology for robotic systems, designed to streamline the acquisition of high-quality training data — visual, spatial, and motion-related — with automated labelling and minimal human intervention.

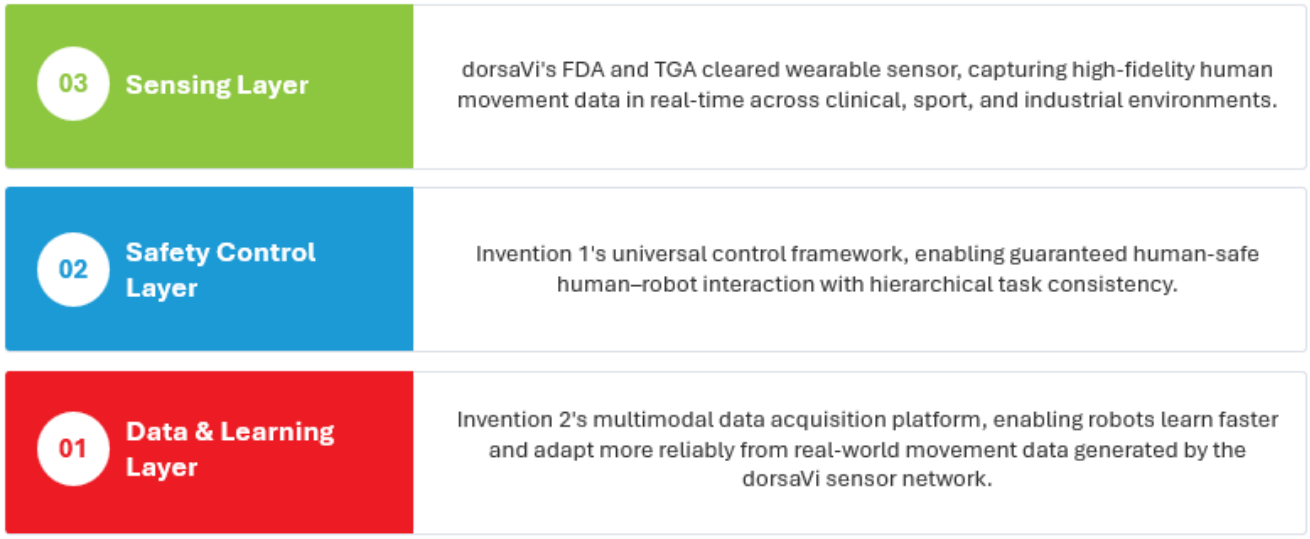
For dorsaVi, this capability is strategically significant. The Company's sensors already capture clinically validated human movement data across physical therapy, elite sport, and occupational health. This invention provides the systematic pipeline to transform that data into high-quality robot training sets — enabling exoskeleton systems, rehabilitation robots, and cobots to learn directly from real human movement patterns captured in clinical and industrial environments.

The platform is platform-agnostic and scalable for cloud robotics, positioning dorsaVi to supply not only hardware intelligence but also data-as-a-service for robotic AI training across its client networks.

Strategic Rationale: Closing the Robotics Intelligence Stack

dorsaVi has to date operated as a clinically validated sensing company. The NTU license marks the transition to a full-stack robotics intelligence provider. The Company now owns or is developing three distinct but complementary layers of the robotics intelligence stack:

For personal use only



For personal use only

When integrated with the V6.5 on-sensor processing architecture and the ITRI/NTU 22-nm neuromorphic compute program, these three layers form a cohesive and differentiated technology platform for the next generation of human-aware autonomous systems.

Exoskeleton and Rehabilitation Robotics: A Priority Vertical

The Company has identified rehabilitation exoskeletons and human-augmentation devices as a priority commercialisation vertical for the combined IP portfolio. The convergence of dorsaVi's clinical-grade biomechanical sensing, Invention 1's safety-assured control framework, and Invention 2's patient movement data acquisition capability creates a uniquely differentiated foundation for exoskeleton development and integration.

Rehabilitation exoskeletons require precisely the capabilities represented by the combined portfolio: real-time, clinically validated movement data at the sensor level; mathematically rigorous safety controls that adapt to individual patient movement patterns; and automated data pipelines that enable machine learning algorithms to tailor therapy programs at scale.

dorsaVi's existing clinical networks — including the SEROMA study for Axial Spondyloarthritis across six European sites and the Select Medical physical therapy network operating across more than 1,900 US sites — provide immediate real-world environments for validation and commercialisation of exoskeleton-oriented applications.

IP Capability Comparison

Capability	Invention 1: Control Framework	Invention 2: Data Collection
Core Function	Guaranteed safety & task consistency in human-robot collaboration	High-quality multimodal data acquisition for robot learning
Primary Value	Safety assurance + hierarchical task execution	Faster AI training, reduced costs, improved adaptability
Technology Basis	Control barrier functions, affine models, constraint optimisation	Multimodal sensors, automated labelling, scalable data pipelines
Key Applications	Manufacturing, healthcare, logistics, defence, exoskeletons	AI robotics, rehabilitation exoskeletons, agriculture, logistics
IP Status	US Patent Application 18/844,417	Know-how (NTU TD Ref: 2024-471)

Figure 1: NTU IP asset comparison across core capabilities and applications.

European Regulatory Alignment

The license strengthens dorsaVi's regulatory positioning in Europe at a critical moment. The EU AI Act and emerging European Machinery Regulation standards for autonomous systems and medical robots place increasing emphasis on validated, on-device AI inference and mathematically documented safety frameworks for human-robot interaction.

Invention 1's control barrier function architecture directly addresses the validated safety documentation requirements embedded in ISO/TS 15066 and the EU AI Act's high-risk AI system requirements. Invention 2's automated data collection methodology supports the data provenance and traceability requirements that European regulators are expected to impose on AI-trained robotic systems.

dorsaVi's existing European foothold through SEROMA — backed by the Assessment of SpondyloArthritis International Society (ASAS) research community and three global pharmaceutical groups — positions the Company to validate the licensed IP within a credentialed clinical research environment ahead of anticipated regulatory deadlines.

Market Opportunity

The NTU license substantially expands dorsaVi's total addressable market across several high-growth segments:

- Collaborative Robotics (Cobots): Global market projected to exceed USD 17 billion by 2030,[3] driven by Industry 4.0, labour shortages, and automation in safety-critical sectors.
- Robotics AI Software & Data: Market forecast to surpass USD 78 billion by 2031[4], with significant demand for structured, validated training datasets for robot learning.
- Rehabilitation Exoskeletons: One of the fastest-growing segments of medical robotics, driven by ageing populations, neurological rehabilitation demand, and workforce augmentation.
- Industrial Human-Robot Collaboration: Expanding across automotive, aerospace, logistics and construction as fenceless cobot deployments grow under new safety standards.

Commercialisation Pathways

The Company intends to pursue commercialisation of the NTU IP across three primary pathways:

- Licensing to cobot OEMs and industrial automation integrators (including ABB, Fanuc, KUKA, and Universal Robots) for embedding Invention 1's safety controller as a middleware layer aligned with ISO/TS 15066 compliance.
- Data-as-a-Service for robotics AI training, leveraging Invention 2's license methodology in combination with dorsaVi's existing clinical sensor networks to generate proprietary, high-quality movement datasets for third-party robotics AI developers.
- Integrated exoskeleton and rehabilitation robotics partnerships, combining dorsaVi's sensor platform, Invention 1's safety framework, and Invention 2's data pipelines into co-development agreements with medical robotics and exoskeleton manufacturers.

Transaction Terms

The commercial licence grants the Company an exclusive worldwide right to develop and commercialise the licensed IP portfolio within the Field of Application, being Human-Robot Collaboration Safety Systems.

[3] Collaborative Robot Market Size | Industry Report, 2033
[4] Robot Software Market - Size, Share & Industry Forecast

For personal use only

The total consideration over the ten (10) year licence period comprises:

- The total consideration over the ten (10) year licence period is SGD$290,000, exclusive of patent cost recovery obligations, no royalty payments on product sales; and
- the issue of 5,000,000 fully paid ordinary shares in the capital of the Company to Clayton Capital Pty Ltd (Clayton Capital) as Consideration Shares, issued concurrently with execution of the Licence Agreement.

CEO Commentary

Mat Regan, Group CEO of dorsaVi, commented:

"The license completes an important part of a strategy we have been building step by step. We identified exoskeletons and human-robot collaboration as priority application markets. We validated that our RRAM and neuromorphic technologies can operate together as a coherent architecture, with modelling and technical evaluation indicating the potential for approximately 10x performance improvements in targeted robotics and exoskeleton applications. We launched the developer platform to enable partner engagement and commenced the hardware build program to translate the technology into a manufacturable product. With the NTU IP license, we now add the safety control and robot learning capabilities that complement the sensing, compute and memory technologies already under development.

The strategic logic is clear. dorsaVi's sensors already generate clinically validated human movement data in real-world environments. Invention 1 provides a safety control framework designed for human-robot interaction. Invention 2 provides a methodology for acquiring and organising movement data that may support robot training and adaptation. Together, these capabilities expand the potential application of dorsaVi's technology into collaborative robotics, rehabilitation systems and human-machine interfaces. These are foundational capabilities for the exoskeleton and cobot markets and are now part of dorsaVi's growing intellectual property portfolio.

We have validated key elements of our semiconductor architecture, launched the developer platform, commenced the hardware program and now secured robotics-focused intellectual property that complements those initiatives. Collectively, these programs establish the foundations of a differentiated robotics intelligence platform spanning sensing, memory, compute, safety and learning. We have been building this deliberately and sequentially, and this license represents another important step in that strategy."

This release has been authorised for lodgement to the ASX by the Board.

- ENDS –

Mathew Regan **Group Chief Executive Officer** **+61 427 477 298** **Email: mregan@dorsaVi.com**	**Gernot Abl** **Chairman** **+61 419 802 653** **Email: ga@dorsaVi.com**

For personal use only

Forward-Looking Statements

This announcement may contain certain forward-looking statements and projections. Such forward-looking statements/projections are estimates for discussion purposes only and should not be relied upon. Forward looking statements/projections are inherently uncertain and may therefore differ materially from results ultimately achieved. dorsaVi Limited does not make any representations and provides no warranties concerning the accuracy of the projections and disclaims any obligation to update or revise any forward-looking statements/projections based on new information, future events or otherwise, except to the extent required by applicable laws.

About dorsaVi

dorsaVi Ltd (ASX: DVL) is an ASX company focused on delivering intelligence at the ultra-edge. Enabling real time AI-driven decisions to be made locally, at the point of sensing, without reliance on cloud connectivity. dorsaVi's wearable sensor technology captures, quantifies, and assesses detailed human movement and position outside a biomechanics lab, in both real-time and real situations for up to 24 hours, across clinical applications, elite sports, and occupational health and safety. Underpinning this vision, dorsaVi is building the hardware foundations of the ultra-edge through strategic investments in neuromorphic computing and RRAM memory technology. dorsaVi's focus is on three major markets:

- Ultra-Edge Intelligence: dorsaVi's sensor platforms are designed to process and act on data locally, embedding AI-driven inference directly at the point of capture. By investing in neuromorphic computing and RRAM memory technology, dorsaVi enables real-time decision-making without round-tripping to the cloud, delivering lower latency, lower power consumption, and reliable operation in latency- and connectivity-constrained environments across industrial, clinical, and autonomous systems applications.

- Workplace: dorsaVi enables employers to assess risk of injury for employees as well as test the effectiveness of proposed changes to OHS workplace design, equipment or methods based on objective evidence. dorsaVi works either directly with major corporations, or through an insurance company's customer base with the aim of reducing workplace compensation and claims. dorsaVi has been used by major corporations including London Underground, Vinci Construction, Crown Resorts, Caterpillar (US), Boeing, Monash Health, Coles, Woolworths, Toll, Toyota, Orora, Mineral Resources and BHP.

- Clinical: dorsaVi is transforming the management of patients with its clinical solutions (ViMove+) which provide objective assessment, monitoring outside the clinic and immediate biofeedback. The clinical market is broken down into physical therapy (physiotherapists), hospital in the home and elite sports. Hospital in the home refers to the remote management of patients by clinicians outside of physical therapy (i.e. for orthopaedic conditions). Elite sports refer to the management and optimisation of athletes through objective evidence for decisions on return to play, measurement of biomechanics and immediate biofeedback to enable peak performance.

Further information is available at www.dorsavi.com

For personal use only