

24 March 2026

dorsaVi Commences Development of On-Sensor Intelligence for dorsaVi's Wearable Sensor

Key Highlights:

- **Introduces on-sensor intelligence:** to dorsaVi's FDA and TGA cleared wearable sensor through firmware and embedded processing enhancements, representing the first step toward neuromorphic-capable architectures.
- **Selected analytics and signal interpretation:** will now occur directly within the wearable sensor, reducing latency and improving responsiveness for real-time clinical, workplace and sporting applications.
- **The V6.5 firmware framework:** is designed to support integration of elements of dorsaVi's neuromorphic IP within the sensor processing environment, a first for the Company's sensor platform.
- **V6.5 establishes the firmware and processing foundation:** for future integration of native RRAM and neuromorphic compute in subsequent hardware generations, supporting the Company's Ultra Edge Intelligence strategy.
- **The V6.5 upgrade is delivered via firmware to the current sensor platform:** enabling existing clients — including Select Medical, Dr. Patel's elite sport program and the SEROMA clinical study — to benefit from enhanced capability without hardware replacement.
- **V6.5 represents the foundation:** for future ultra-low-power, intelligent sensing systems, where processing increasingly occurs at the point of data generation, establishing the framework for Ultra Edge Platform 1.0.
- **Establishes the groundwork:** for future ultra-low-power intelligent sensing systems across robotics, medical, sport, industrial and human-machine applications.
- **V6.5's on-sensor intelligence capabilities are aligned with emerging regulatory trends in AI and robotics:** which increasingly emphasise validated, on-device processing in medical and autonomous systems. dorsaVi's participation in European clinical research through SEROMA supports the development and validation of this capability, helping to build the regulatory track record these frameworks are expected to require.
- **Collaborative Robot (Cobot) Compatibility:** dorsaVi is exploring the potential for V6.5's on-sensor intelligence and clinically validated movement data to serve as a proprioceptive input layer within collaborative robot systems, supporting real-time human movement awareness and on-device inference.
- **Reduces reliance on external edge devices and cloud processing:** by enabling data to be processed at the point of capture.

Melbourne, Australia, 24 March 2026 – dorsaVi Limited (ASX: DVL) (“dorsaVi” or “the Company”) is pleased to announce that development has commenced on Sensor V6.5, a significant firmware upgrade to the Company’s existing wearable sensor platform that introduces neuromorphic-capable, on-sensor intelligence for the first time.

V6.5 represents a meaningful step forward in dorsaVi’s Intelligence at the Ultra Edge strategy, moving computation progressively closer to the point of sensing, reducing reliance on edge devices and cloud platforms, and laying the firmware and architectural groundwork for the full integration of RRAM and neuromorphic compute in future hardware generations.

Critically, V6.5 is delivered as a firmware upgrade to the existing sensor hardware. This means the capability enhancement reaches dorsaVi’s current commercial client base including the Select Medical Physical Therapy network, the Dr. Patel elite sport program, and the SEROMA European clinical study without requiring hardware replacement.

Where We Are Today: Sensor V6.0

The current Sensor V6.0 platform captures high-fidelity movement data at the sensor level, with analytics and intelligence primarily derived on edge devices or through cloud-based processing. This architecture has underpinned dorsaVi’s commercial deployment to date, supporting FDA- and TGA-cleared clinical assessments, real-time biofeedback and validated movement metrics across physical therapy, elite sport, workplace safety and clinical research.

However, as client requirements evolve toward real-time analytics, distributed clinical trials with reduced cloud dependency, and continuous monitoring, the demand for intelligence to reside closer to the sensor is increasing. V6.5 represents the Company’s response to this shift.

Sensor V6.5: What Changes and Why It Matters

The V6.5 firmware upgrade introduces four foundational enhancements to the existing sensor platform:

- **On-sensor processing:** selected analytics and signal interpretation will now occur directly within the wearable sensor hardware, reducing the latency inherent in transmitting raw data to an edge device or cloud platform for processing.
- **Enhanced embedded processing capability:** the upgraded firmware expands the computational headroom available within the existing sensor hardware, enabling more sophisticated real-time signal analysis at the sensor level.
- **Neuromorphic-ready architecture:** the firmware framework is specifically designed to support integration of elements of dorsaVi’s neuromorphic IP within the sensor processing environment. This is the first time the Company’s sensor platform has been architected to accommodate neuromorphic processing.
- **Foundation for Ultra-Edge Platform 1.0:** V6.5 establishes the firmware and processing foundation for dorsaVi’s next-generation sensor hardware (Ultra-Edge Platform 1.0), where sensing, processing and decision-making increasingly occur within the wearable device itself.

The result is a sensor that begins to think, not merely measure.

The Sensor Evolution Roadmap: V6.0 → V6.5 → Ultra-Edge Platform 1.0

The table below illustrates dorsaVi’s sensor evolution pathway from today’s V6.0 architecture through V6.5, and toward the full Ultra-Edge Platform, enabled by native RRAM and neuromorphic compute.

Capability	Sensor V6.0 (Current)	Sensor V6.5 (In Development)	Ultra-Edge Platform 1.0 (Roadmap)
Processing location	Edge device / cloud	Sensor + edge device	Primarily on-sensor
Latency	Transmission + cloud processing delay	Reduced — selected analytics on-sensor	Near real-time — sub-millisecond on-device
Neuromorphic capability	None	Neuromorphic-ready architecture	Native neuromorphic compute
RRAM integration	None	Firmware foundation established	Native RRAM embedded memory and compute-in-memory
Power profile	Standard wearable	Improved — reduced data transmission overhead	Ultra-low power — always-on operation
Cloud dependency	High	Reduced	Minimal — edge-first architecture
Delivery mechanism	Hardware	Firmware upgrade to existing hardware	New hardware generation

Figure 1: dorsaVi sensor evolution pathway from V6.0 through V6.5 to the Ultra-Edge Platform 1.0.

Existing Clients as Direct Beneficiaries

Because V6.5 is delivered as a firmware upgrade to the existing sensor hardware, dorsaVi's current commercial client base is positioned to benefit from enhanced on-sensor intelligence without hardware replacement.

Select Medical Network — 100+ US Physical Therapy (physiotherapy) Sites

The Select Medical Physical Therapy operates across >1,900 sites in the United States with >100 sites currently using dorsaVi's technology. V6.5's on-sensor processing capability reduces the latency between movement capture and clinical insight, improving the responsiveness of real-time biofeedback during patient assessments and enabling more seamless clinical workflows across the network.

Dr. Patel Program — Elite Sport and Military Applications

The Dr. Patel commercial project is specifically focused on delivering live, in-game biomechanical metrics for elite athletes. V6.5's on-sensor intelligence is directly aligned with this requirement — reducing the latency between movement event and metric delivery, and establishing the neuromorphic-ready architecture that will ultimately enable sub-millisecond, reflex-speed injury detection as the platform matures toward Ultra-Edge Platform 1.0.

SEROMA — European Clinical Research

The SEROMA study for Axial Spondyloarthritis spans six European clinical sites. On-sensor processing reduces the cloud dependency that creates standardisation and data sovereignty challenges across multi-site, multi-geography trials. V6.5 moves dorsaVi closer to a sensor that generates validated, regulatory-ready metrics at the point of assessment, with no cloud infrastructure required.

V6.5 as a Stepping Stone: The Path to Full RRAM and Neuromorphic Integration

V6.5 is not the destination but is the next deliberate step on a clearly defined technology pathway. The firmware and architectural foundations established in V6.5 are specifically designed to accommodate the progressive integration of dorsaVi's RRAM and neuromorphic IP as those capabilities mature through the ITRI/NTU 22-nm program.

The January 2026 ITRI collaboration targets compute-in-memory efficiency exceeding 20 TOPS/W at the 22-nm node, a capability that when integrated into a future sensor hardware generation, will enable the Ultra-Edge Platform 1.0 envisioned in dorsaVi's roadmap. V6.5 ensures that when that hardware generation arrives, the firmware and processing architecture are already in place to support it.

This stepping-stone approach is deliberate: rather than waiting for full RRAM integration before delivering enhanced capability to clients, dorsaVi is advancing the intelligence of its current platform now generating commercial value in the near term while building toward a transformative hardware architecture for the medium term.

European Robotics Regulation: Why V6.5 Architecture Matters

Europe is in the process of establishing comprehensive regulatory frameworks governing AI and autonomous systems including the EU AI Act and emerging standards for autonomous medical devices and robotic systems. A central requirement across these frameworks is that AI inference occurs in a validated, auditable, and increasingly on-device manner. Cloud-dependent systems, where data is transmitted and processed remotely, face growing regulatory scrutiny in safety-critical, medical and industrial contexts.

V6.5's neuromorphic-ready, on-sensor processing architecture is directly aligned with this regulatory direction. By moving computation progressively closer to the sensor itself, reducing cloud dependency and enabling validated metrics to be generated at the point of measurement, dorsaVi is building a sensor platform whose architecture mirrors what European regulators are increasingly requiring of intelligent medical and autonomous systems.

This matters for two reasons. First, dorsaVi's existing European presence through the SEROMA clinical study across six sites, with the backing of the ASAS research community and three global pharma groups, gives the Company an established foothold in the European clinical network at precisely the moment these regulatory frameworks are taking shape. Second, the biomechanical data generated by dorsaVi's sensors such as spinal mobility vectors, lower-limb joint angles, movement signatures under load, are the precise data categories that European humanoid and rehabilitation robotics developers require to train, validate, and certify their locomotion systems under emerging EU standards.

The combination of V6.5's on-sensor architecture, dorsaVi's clinically validated data, and the Company's active European clinical partnerships positions dorsaVi as a credible technology partner for the European robotics and medical AI ecosystem at a moment when regulatory frameworks are creating clear demand for exactly what dorsaVi is building.

Cobot Compatibility: A Strategic Direction Under Exploration

Beyond data supply to third-party robotics developers, the Company is actively exploring the potential for dorsaVi's sensor platform to serve as the movement intelligence layer within collaborative robot (cobot) systems. Traditional robots are focused on fast, powerful and often fenced off movements, whereas a Cobot system is interactive, flexible, and safety-focused, allowing for safer interaction with and around humans.

A cobot built on dorsaVi's V6.5 sensor architecture would be uniquely differentiated: rather than relying on external cameras, GPS, or generic IMUs, it would sense and interpret human movement in real time, on-device, at clinical grade — enabling a level of human-machine interaction fidelity that current cobot platforms do not achieve.

The requirements of a cobot's movement sensing and response system map directly onto V6.5's capability profile: on-sensor processing for low-latency response, neuromorphic-ready architecture for adaptive, event-driven inference, and clinically validated movement metrics for safe and precise human interaction. As the platform matures toward Ultra-Edge Platform 1.0 — with native RRAM and full neuromorphic compute — the case for dorsaVi-powered cobot intelligence strengthens further.

This is a strategic direction the Company is exploring, not a committed product roadmap. However, management believes the architectural alignment between V6.5 and cobot system requirements is sufficiently compelling to warrant active investigation and that dorsaVi's combination of clinically validated sensors, on-device intelligence, and human movement expertise represents a genuinely differentiated foundation for this application.

CEO Commentary

Mat Regan, Group CEO of dorsaVi, commented:

"V6.5 represents a significant step for dorsaVi — it is the first time on-sensor intelligence has been introduced into our wearable sensor platform, and it signals clearly that Intelligence at the Ultra Edge is no longer a future concept. It is beginning to be deployed within our existing hardware, for our existing clients.

The firmware-based upgrade approach is also strategically important. Our Select Medical network, Dr. Patel program and SEROMA clinical study do not need to wait for new hardware to begin benefiting from on-sensor intelligence. This provides a meaningful commercial advantage.

As our RRAM and neuromorphic capabilities mature through our ITRI collaboration and are integrated into Ultra-Edge Platform 1.0, the firmware and processing foundations we are establishing today will already be in place. We are sequencing this deliberately — delivering near-term client value while building toward longer-term platform transformation."

- ENDS -

This announcement has been approved for release by the Board of Directors of dorsaVi Limited.

CONTACTS

Mathew Regan Group Chief Executive Officer Email: mregan@dorsaVi.com	Gernot Abl Chairman Email: ga@dorsaVi.com
---	--

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 Billiton.
- **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