

AEMO Operations team

14 August 2026

Re: Transmission System Operational Capability Framework (TSOCF)

VIOTAS supports the objective of AEMO's draft Transmission System Operational Capability Framework (TSOCF): to establish a clear, common understanding of the operational capabilities transmission network service providers (TNSPs) will require as the power system transitions.

This submission draws on VIOTAS' experience connecting, monitoring and controlling large energy users and distributed assets using real-time telemetry, forecasting, optimisation and automated dispatch. That experience indicates that several of the proposed capabilities can be supported by a common technology, data and control layer spanning transmission interfaces and connected assets.

In finalising and applying the TSOCF, AEMO should recognise that some capabilities will require further development by TNSPs. Implementation should therefore be outcome-based, accurate, reliable and cost-effective for consumers. The framework should also remain technology-neutral, allowing TNSPs to develop capabilities internally or use suitably qualified third parties where specialised systems can meet the required outcomes more efficiently.

Working with TNSPs, technology providers can support delivery of the draft TSOCF outcomes by:

- **Improving operational visibility:** High-resolution, time-synchronised telemetry data to provide monitoring across substations, feeders, distributed energy resources (DER), battery energy storage systems (BESS) and large energy users including large inverter-based loads (LIBL).
- **Supporting planning and forecasting:** demand, asset and flexibility forecasting, complemented by network modelling inputs.
- **Strengthening real-time operations:** market participant SCADA and related system integration, live dashboards, disturbance detection, automated alerts and multi-site event correlation.
- **Enhancing asset and compliance assurance:** Power-quality monitoring, waveform capture, asset condition insights, conformance testing and traceable performance reports.
- **Enabling emergency dispatch and restoration:** Secure orchestration of BESS and flexible demand, including local deterministic control, continuous availability monitoring and restart-sequence support.

- **Building operational resilience:** Edge-based operation, data buffering and alternative communications pathways when central systems or telecommunications are degraded.
- **Providing measurable evidence:** Verification of frequency response, voltage support, reactive-power capability, ride-through performance and contracted service delivery.

Together, these measures would provide a practical technology, data and control layer across the framework's eight operational domains, while complementing existing TNSP personnel, processes and operational systems.

VIOTAS encourages TNSPs to engage specialist technology providers to explore their existing capabilities where they can demonstrate the required performance, assurance, resilience and scalability, to provide the right outcomes for the TNSPs and value for consumers.

VIOTAS would welcome further technical engagement with AEMO and TNSPs to provide visibility of existing capabilities in the market and collaborate to develop solutions that are fit for purpose.

Sincerely,

Amelia Bennett

Market Operations Manager

