



## SUCCESS STORY

# Terrex Seismic Delivers Australia's First SSC DS4 Operation Through Secure Connect and Starlink

Ten fleets. Three-stage TD control. Approximately 4,000 source points in eight hours—delivered with complete operational visibility and a strong commitment to safety.

**Client:** Terrex Seismic    **Location:** Queensland, Australia

**Technology:** DS4 · Secure Connect · Starlink · NavLink · SourceLink · UE3 · Force3

Queensland-based Terrex Seismic has successfully completed the first field deployment of Seismic Source Co.'s DS4 mode in Australia, demonstrating how high-

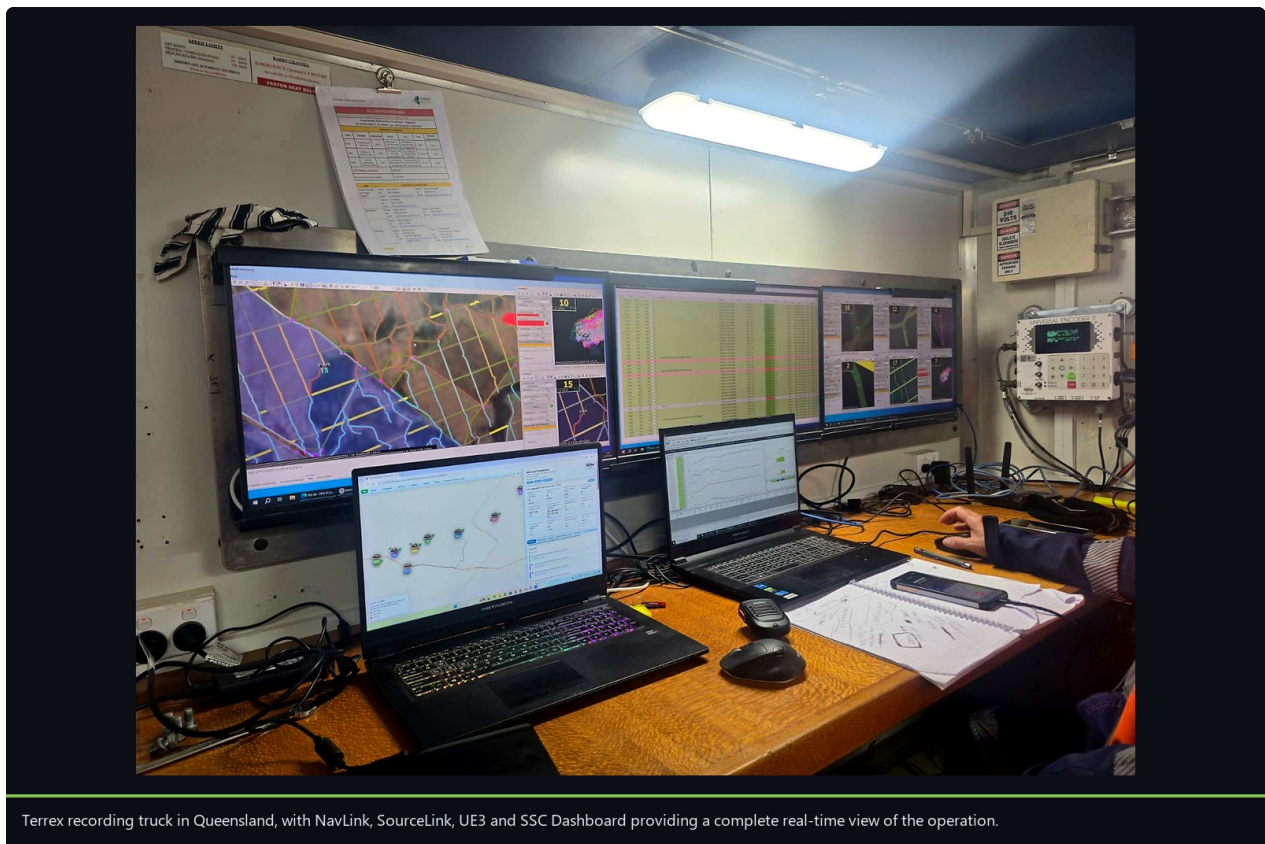
production vibroseis acquisition can be combined with strict HSE control, real-time fleet visibility and internet-based communication.

The operation uses 10 single-vibrator fleets, with all operational communication running through SSC Secure Connect over a Starlink internet connection.

In an eight-hour production period, the team consistently achieves approximately 4,000 source points, equivalent to around 500 source points per hour.

But production speed is only part of the story.

The real achievement is that this performance is being delivered with controlled vibrator separation, active movement monitoring, configurable no-drive-zone warnings, speed supervision and complete visibility of the operation—from the vibrator operator to project management.



*Terrex recording truck in Queensland, with NavLink, SourceLink, UE3 and SSC Dashboard providing a complete real-time view of the operation.*

## **A Fully Connected DS4 Operation**

Each vibrator uses NavLink with Secure Connect, while the recording crew operates SourceLink, Secure Connect and the UE3 Encoder at the recorder.

The Force3 vibrator control systems and UE3 communicate through Secure Connect using the Starlink connection, allowing DS4 production to continue without depending on conventional radio coverage across the project area.

This architecture provides Terrex with:

- Ten independently operating single-vibrator fleets
- DS4 operation with three-stage Time/Distance separation control
- Live communication between the vibrators and recorder
- Real-time operational status and production reporting
- Central monitoring through Windows and Android dashboards
- Reduced dependency on local radio conditions

There is no need to relocate recording equipment because of poor radio coverage, and there is no unnecessary production delay while waiting to re-establish communication.

The system remains connected across the project through Starlink and Secure Connect.

Every second is accounted for—because in high-production acquisition, every second matters.

## **Production Speed Without Losing Control**

DS4 allows multiple fleets to operate efficiently while the system continuously supervises the required TD separation rules.

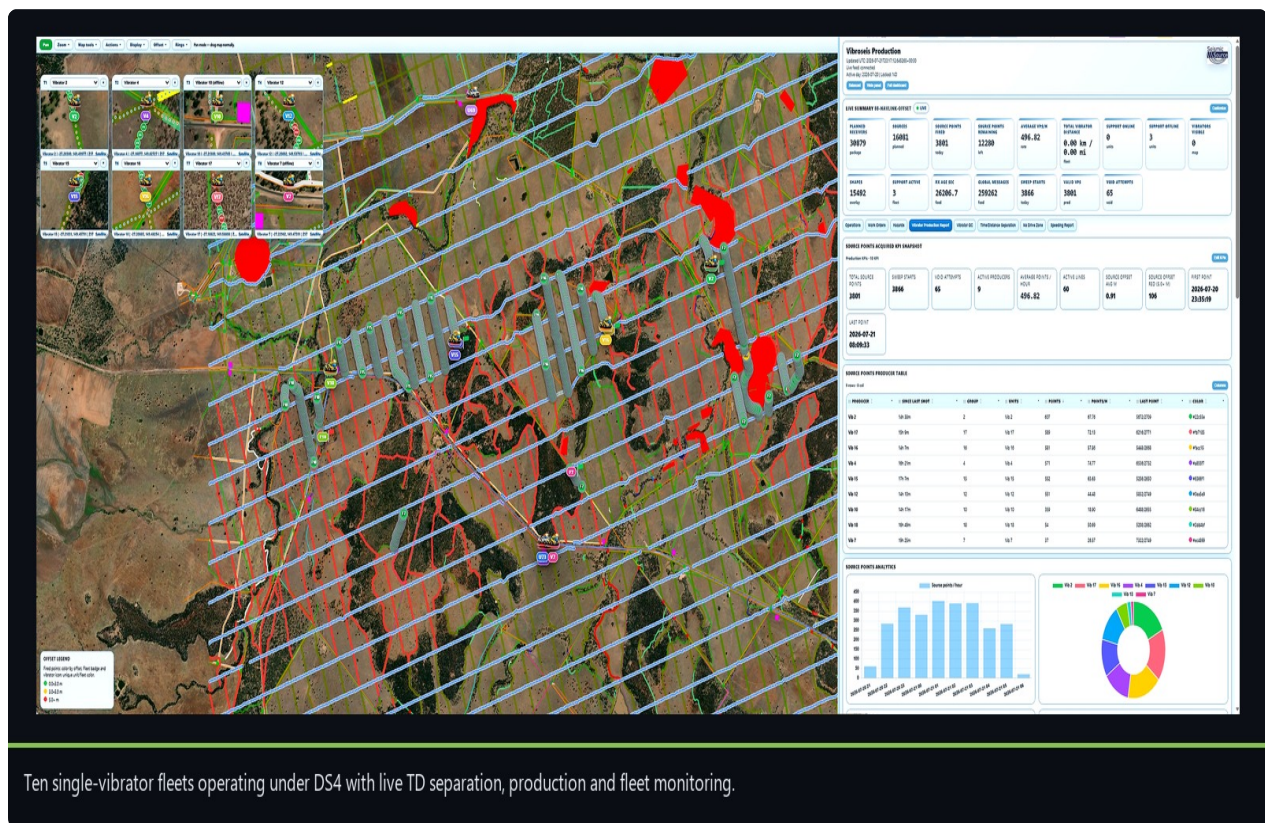
Instead of relying only on manual observation, the separation between active fleets is monitored directly from live operational data.

Terrex's team can see:

- Current vibrator and fleet positions
- Time and distance separation status
- Production rate by fleet and unit
- Source points completed
- Sweep starts and void attempts
- Active and inactive units
- Fleet movement and operational history

The result is faster acquisition without sacrificing control.

Operators understand what is happening in the field, the recorder can supervise the complete operation, and managers can make informed decisions immediately rather than waiting for delayed reports.



*Ten single-vibrator fleets operating under DS4 with live TD separation, production and fleet monitoring.*

# HSE and Movement Monitoring Built Into the Workflow

The project operates in an area with limited access and clearly defined movement restrictions. Preventing vehicles from entering restricted or environmentally sensitive areas is therefore an essential part of daily operations.

- Project boundaries and no-drive zones are imported into NavLink as shape files and displayed directly on the vibrator operator's navigation screen.

As a vibrator approaches a restricted zone, NavLink provides:

- A clear visual indication of the no-drive zone

- The live distance between the vibrator and the restricted boundary

- An audible warning to alert the operator

- A user-configurable alarm distance

The project team can determine how far from the boundary the warning should begin, giving operators enough time to react safely and select an alternative route.

This transforms no-drive-zone compliance from a passive map reference into an active field safety tool.

Movement monitoring also extends beyond the vibrators. Support units can be followed through the operational dashboard, providing a broader view of vehicle activity throughout the project.



Live operational information allows the recording team to supervise production, fleet movement and field compliance from one connected workspace.

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## One Operation, Visible From Anywhere

Through the SSC Windows and Android Dashboards, authorized Terrex Seismic personnel can monitor the project from the recording truck, office, camp or mobile device.

The dashboards bring together live information from Secure Connect, including:

- Vibroseis production
- Vibrator and support-unit locations
- Fleet performance
- TD separation compliance
- No-drive zones and movement restrictions
- Speed monitoring and violations

- Operational alerts
- Production statistics and reporting

Managers no longer need to depend on fragmented radio updates, screenshots or end-of-shift summaries to understand what is happening.

The live feed provides a common operational picture for the vibrator operators, recording crew, supervisors and management.

This creates faster decision-making, clearer communication and greater confidence throughout the organization.

## **More Than Faster Production**

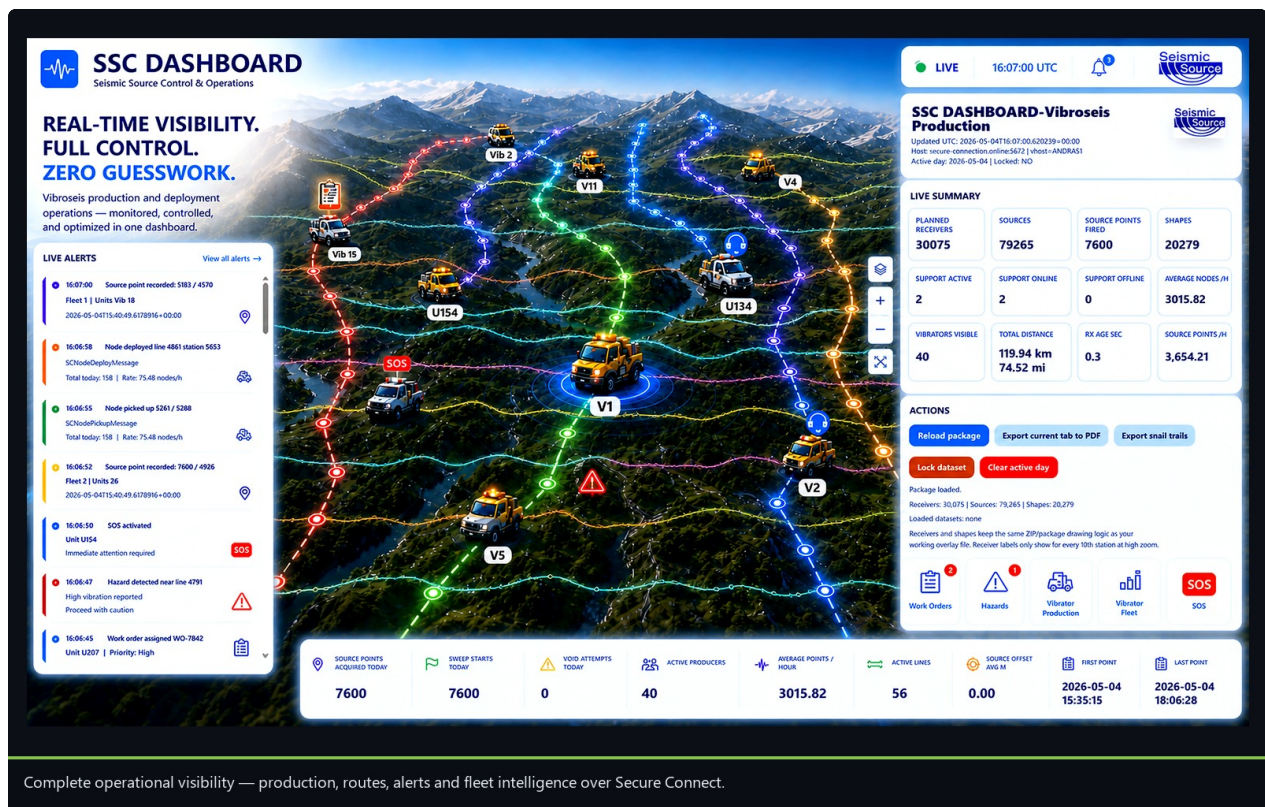
The benefits of the connected DS4 workflow extend beyond the number of source points completed.

Terrex Seismic has gained:

- Faster recording through coordinated multi-fleet production.
- Faster decision-making through real-time information.
- Greater operational control through three-stage TD supervision.
- Improved HSE visibility through movement monitoring and active no-drive-zone warnings.
- Reduced downtime by removing dependence on inconsistent radio coverage.
- Immediate reporting through live Secure Connect data.

Most importantly, the project team has achieved this performance while maintaining a strong focus on safe execution.

High production has not replaced HSE discipline—it has been achieved through better visibility, stronger controls and informed field operations.



*Complete operational visibility — production, routes, alerts and fleet intelligence over Secure Connect.*

## Technology Supported by Teamwork

Technology can provide the connection, automation and information, but successful field operations still depend on the people using it.

The cooperation between Terrex and Seismic Source Co. has been outstanding. The Terrex team has embraced the technology, incorporated it into its operational workflow and demonstrated what can be achieved when production, HSE and field experience work together.

The client is highly satisfied, the system is performing smoothly, and both teams are proud of the results.

We are praising Terrex for the quality of its operation, while their team is praising the visibility, control and performance provided by the SSC technology.

That is what a successful partnership should look like.