



Sentinel

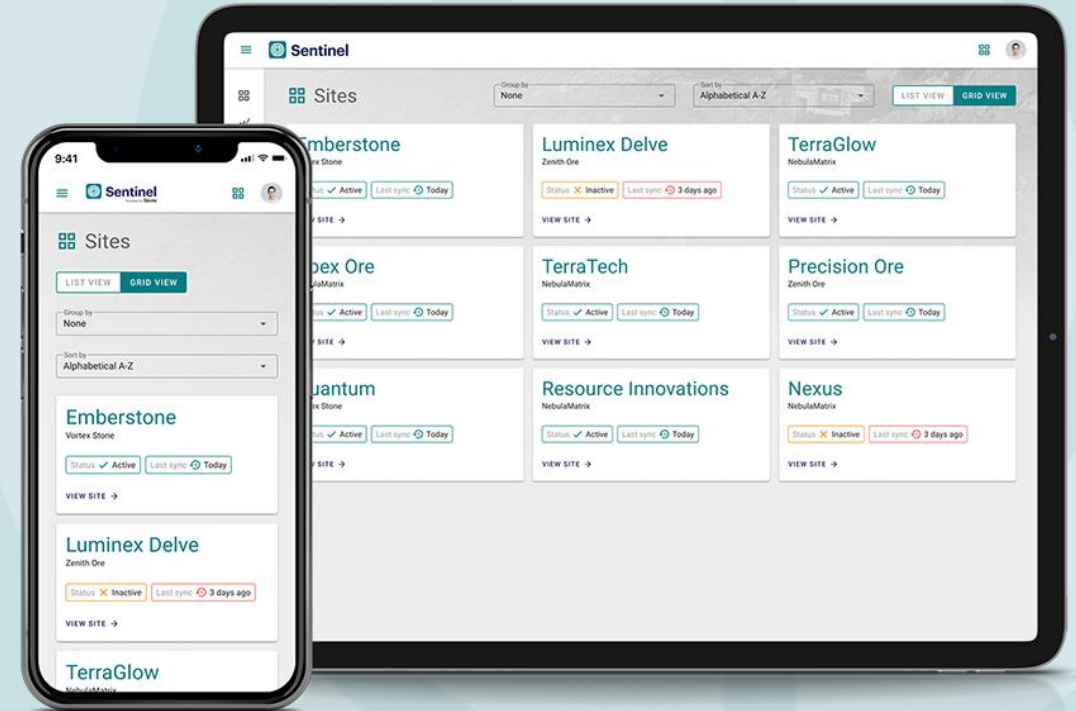
Powered by **Davra**



Remote monitoring solution for dam safety & compliance



In partnership with the European Space Agency,
funded as part of the InCubed program.



TSF Management Problems



Operational Inefficiencies

Manual readings are slow, infrequent, and error prone. Manual data entry is slow and inefficient – 1000's of spreadsheets!



Reporting Requirements

Manual report writing costs TSF management companies ~ 6 business days per year per site.



Response Plans

Too complex - hundreds of rules, multiple sites, various response levels. Error prone.
Too slow – up to 3 weeks from event to response plan triggering.



Regulatory Compliance

August 2025 deadline for all remaining TSF. Risk fines, penalties, reputational damage, impact on stock price. Reduce impact through application of best practices.



TSF Failure

4 major dam failures per year for the past decade, resulting in 668 deaths & missing persons, long-term environmental damage, fines, penalties, cleanup and rehabilitation costs, & stock price collapse.

Sentinel: Safe, Efficient, Compliant Tailings



Remote Monitoring

- Continuous monitoring of critical infrastructure.
- Remote data from ground sensors, satellite imaging, and more.
- Trigger alerts automatically.
- Integrated weather reports.



Operational Efficiency

- View and manage all sites in one centralised platform.
- Access from anywhere in the world.
- No more manual data collection. No more spreadsheets.
- Save thousands of hours of manual collection, processing, and report writing.



Safety

- Reduce risk of TSF failure with up-to-date, accurate measurements.
- Remote data collection reduces risk to workers.
- Send automated alerts to key personnel ensures fast action and quick resolution.
- Integrated response plans ensure correct action is always taken.



Regulatory Compliance

- Simplify GISTM compliance.
- Collect, manage, and report tailings data using approved templates.
- Enhance regulatory adherence, and safeguard against environmental and reputational damage.

Sentinel: Remote Monitoring & Compliance Solution



- Davra Sentinel is a remote monitoring application for safe, efficient, and compliant tailings management.
- Developed in partnership with ESA, Sentinel uses the latest in satellite and Internet of Things (IoT) technology to monitor your tailings 24/7. When it detects a problem, it raises an alert in line with your response plan.
- Streamline your operations, manage all your sites from anywhere in the world, simplify regulatory compliance, and create reports with just a few clicks.



Streamline operations with Remote Data Collection & Report Generation



Simplify your GISTM compliance journey



Instant alerts in line with response plan



Reduce risk of TSF failure

Reduce
Operational
Costs

Simplify
Compliance

Improve TSF
Safety

Ideal for:



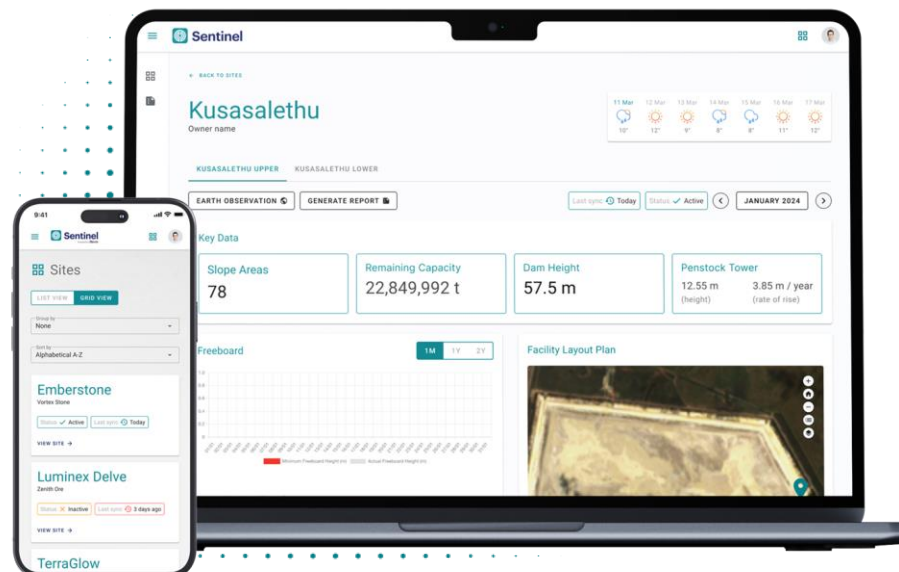
Mine Owners/
Operators



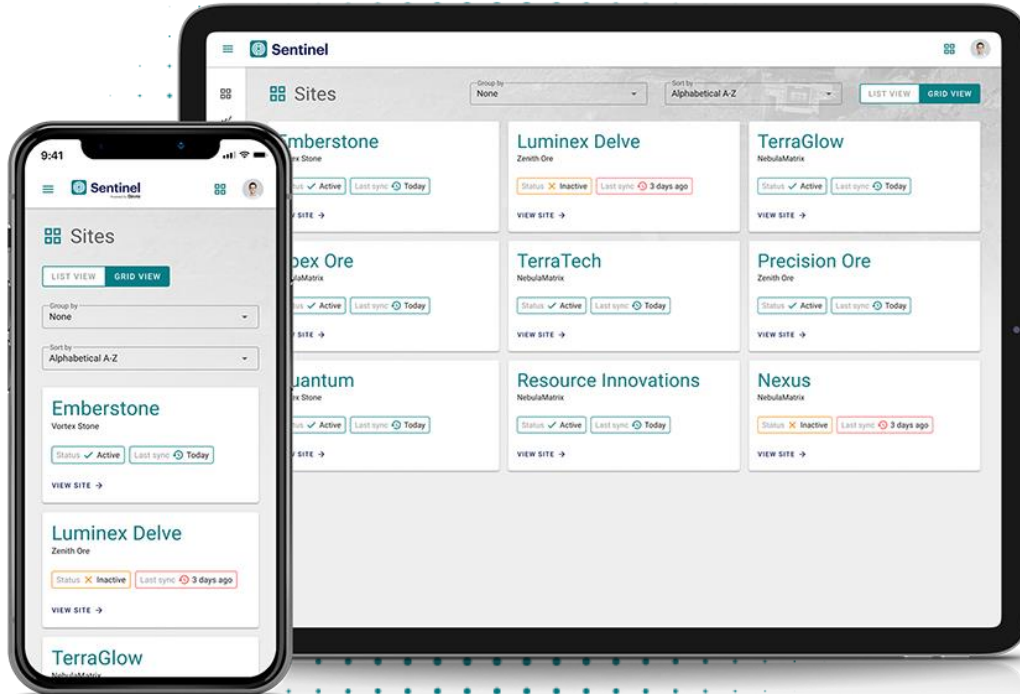
Tailings Service
Providers



Regulatory
bodies

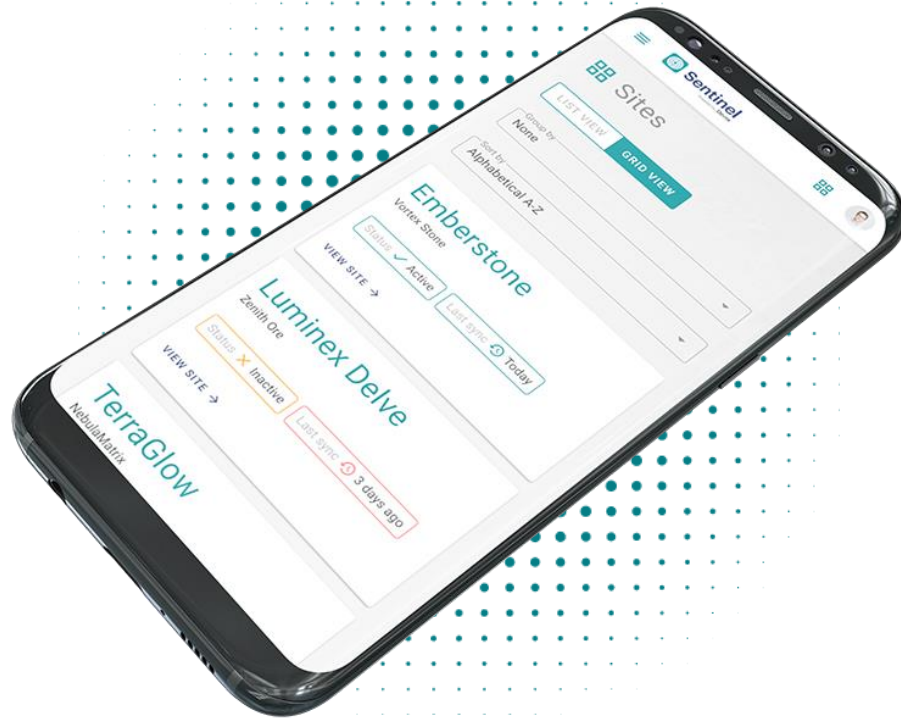


Operational Dashboard



- Collect, display and manage your data
- Unlimited number of dams
- More than 10 trackable metrics
- Integrated weather reports
- Customise alerts to response plans

Mobile Application



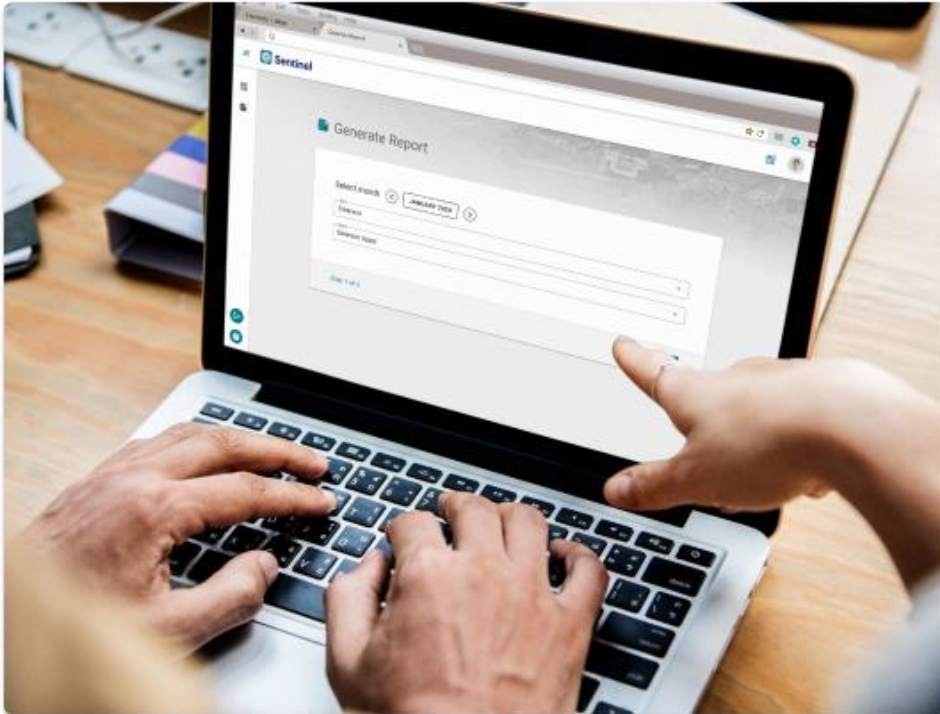
- Secure login with 2FA and RBAC
- Easy-to-use manual data entry
- Context-aware inputs
- Offline data storage
- Automatic network sync

Automated Data Collection



- Integrated remote sensor data
- Automated analysis & processing
- CCTV, satellite, LiDAR, drones, and ground sensors
- LoRa, cellular, & Wi-Fi connectivity

Report Generation



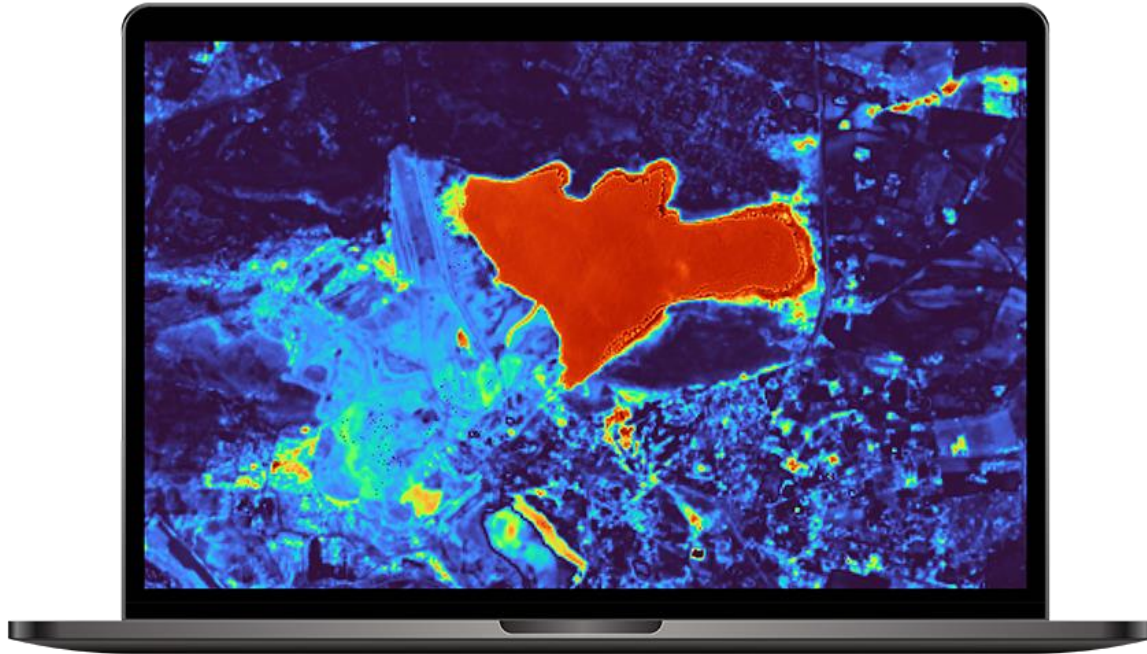
- Automated report generation
- Integrated IoT data
- Flexible templates
- Fully compliant with GISTM standards

Earth Observation



- ESA-powered satellite imagery
- EO dashboard & reporting tools
- Multiple measurements type supported
- Millimetre accurate displacement
- Automated alert system

Geo-Monitoring



- Multiple remote-sensing methodologies
- Displacement monitoring (inSAR)
- Soil moisture analysis (OPTRAM)
- Vegetation health assessment (NDVI)
- Land classification capabilities

About Davra

Founded in 2011 by a team of Big Data and Data Analytics veterans, Davra is a pioneering Internet of Things company that helped coin the term Application Enablement Platform (AEP).

At a glance

1000+

Customers

4,000,000+

End points (Sensors, Gateways, Cameras, Drones etc)

4 Countries

Global Offices
60+ Employees

6 Regions

Globally connected partners

Target Industries

- Equipment Manufacturing
- Mining & Natural Resources
- Transport & Logistics



US
Offices
Partners



LATAM
Partners



UK &
Ireland
Offices
Partners



Europe
Offices
Partners



Middle East
Partners



CIS
Partners



IOTDC



Asia Pacific
Partner



Founded
2011



Office locations:
Ireland
Italy
United Kingdom
United States



Highest Ranked
Privately Owned
Company in Gartner
IIOT Magic Quadrant



Accolades:
ISO 9001
ISO 27001
SOC-2 Type 1
Gartner MQ 2019 - 2023
Fedramp Compliant
DOD IL5