DeepSeaGuard: Real-Time Compliance & Environmental Monitoring

Mining data, not destruction.

What is DeepSeaGuard?

DeepSeaGuard (DSG) is a real-time monitoring and compliance dashboard for deep-sea mining and ocean operations. It automates environmental data collection, reporting, and compliance submission to regulators like the International Seabed Authority (ISA) and NOAA.

The Problem:

- Companies spend weeks compiling compliance reports.
- Manual processes risk delays, penalties, or shutdowns.
- Regulators demand standardized digital, georeferenced data.

The Solution:

DSG gives operators:

- **Real-Time Dashboards** – live monitoring of activity, alerts, and ISA zones.
- **Automated Compliance Reports** – formatted and ready for submission.
- **MapView** – overlays of nodules, AUV locations, and ISA contract zones.
- **Alerts System** – instant notifications if operations fall out of compliance.
- **Data Export** – ISA-approved formats for geology, environment, and metadata.

Benefits:

- Save weeks of manual reporting.

- Lower risk of fines or operational shutdown.

- Build trust with regulators and investors.

- Operate with full transparency.