



Globalstar ™

EBOOK

A Quick Start Guide to Asset Monitoring

Whether you're safeguarding high-value goods, tracking containers across continents, or ensuring cold chain integrity, the faster you can see what's happening with your assets, the faster you can act.

Here's how to set up an effective asset monitoring program from day one.



one

Identify Your High-Risk Assets

Not every shipment or container needs the same level of monitoring. Start by:

- **Mapping** the most vulnerable, valuable, or compliance-sensitive assets
- **Consider** where the risk is highest: long dwell times, border crossings, high-crime areas, or extreme climates
- **Prioritizing** these assets for monitoring first to see quick returns on investment



two

Tracking Hardware to the Environment

Choose monitoring devices that align with how and where your assets move:

- **Form factor:** Compact for small parcels or rugged weatherproof enclosures for containers or heavy equipment
- **Sensors:** GPS for location, accelerometers for impact, temperature/humidity for perishables, and/or tamper sensors for security
- **Power:** Long battery life for extended journey, solar recharge for field or maritime deployments



three

Select the Right Connectivity Path

Connectivity is vital to asset monitoring, so it's essential to choose the connectivity that will work best for your specific needs:

- **Cellular:** Works well in urban areas with dense infrastructure
- **Satellite:** Essential for remote routes, maritime shipping, or regions with unreliable networks
- **Hybrid:** Combines both technologies for uninterrupted coverage and cost-efficiency



four

Integrate into Your Logistics Management System

The value of asset monitoring is in the visibility, not just the tracking. When employing asset monitoring solutions, be sure to:

- **Connect** device data to your transport management or ERP system
- **Create** a single operational dashboard for all tracked assets
- **Ensure** alerts are routed to the right teams in real time for fast action



five

Establish Standard Operating Procedures

Technology is only half of the solution: people and processes matter to deliver optimal efficacy:

- **Define** clear rules for responding to alerts (ex., route deviation, temperature breach, unauthorized access)
- **Train** staff on interpreting data and acting on it quickly
- **Document** escalation paths and responsibility



six

Measure and Optimize

Asset monitoring solutions are not designed to be deployed and then not managed. To ensure long-term benefits:

- **Track** KPIs such as incident response time, percentage of prevented losses, and asset utilization rates
- **Use** analytics to spot trends such as recurring choke points, seasonal risks, or recurring damage causes
- **Adjust** hardware placement, alert thresholds, and processes based on data





Common Mistakes to Avoid in Asset Monitoring

Even the best technology can fall short if the implementation isn't handled strategically. Avoid these frequent pitfalls to get the most value from your asset monitoring program.

MONITORING EVERYTHING, EVERYWHERE



Mistake

Trying to track every asset all the time can lead to unnecessary costs and operational overload.



What to do instead

Focus on your most valuable, vulnerable, or compliance-sensitive assets first. Expand coverage gradually, informed by real-world performance data.

CHOOSING DEVICES WITHOUT CONSIDERING THE ENVIRONMENT



Mistake

Selecting hardware solely on price or availability often leads to failures in the field.



What to do instead

Match device durability, sensor capabilities, and power sources to the actual conditions your assets face, from salt spray and dust to long periods without sunlight.

UNDERESTIMATING CONNECTIVITY NEEDS



Mistake

Not determining connectivity blind spots, which can undermine the entire monitoring program.



What to do instead

Map asset routes to identify coverage gaps. If operations extend beyond cellular footprints, satellite solutions ensure uninterrupted visibility.

IGNORING INTEGRATION WITH EXISTING SYSTEMS



Mistake

Without integration, tracking data remains siloed, slowing down decision-making.



What to do instead

Feed tracking data directly into the TMPs, ERP, or control tower dashboard so teams can view it alongside shipment status, inventory levels, and operational alerts.

NO CLEAR RESPONSE PLAN



Mistake

Alerts without action protocols create confusion and missed opportunities.



What to do instead

Define escalation paths for different incident types, such as who responds, how quickly, and with what authority to intervene. Train your team until responses become second nature.

Turning Visibility into Value

Asset monitoring isn't just about knowing where things are; it's about transforming that knowledge into faster decisions, reduced losses, and stronger operational resilience. By starting with a focused rollout, avoiding common pitfalls, and treating your program as an evolving system, you create a foundation that not only protects high-value assets but also uncovers new efficiencies.

The key is to remember that IoT-powered visibility is a long-term investment. Each step you take – from selecting the right devices to fine-tuning your escalation protocols – compounds over time, delivering greater ROI and positioning your operation to adapt to market shifts, regulatory changes, and customer expectations. When implemented strategically, asset monitoring becomes more than a risk management tool but rather a competitive advantage.



[Learn more](#) about how Globalstar's line of products and satellite connectivity can support your asset monitoring solutions.