

Oil & Gas Solutions Overview



Market forces and new technologies drive innovation and opportunity in the Oil and Gas industry. In the current economic environment, increasing efficiency and lowering costs is a top priority. Providing faster and lower cost access to critical offshore operational data, from in situ ocean conditions to undersea sensor data, allows companies to improve efficiency, lower costs and enable new capabilities and services.

Oil & Gas Solutions Overview (continued)

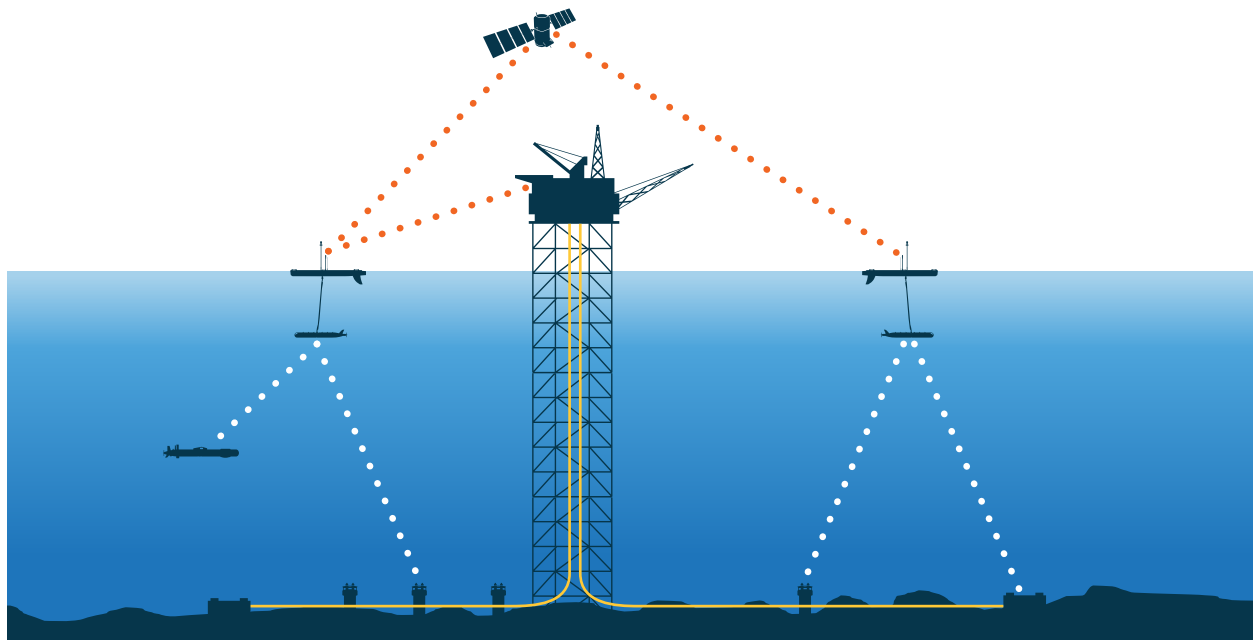
A New Approach to Data Collection for Offshore Oil & Gas

Technology often plays an important role by improving efficiency and enabling new capabilities. Remotely operated vehicles (ROVs), which were once new and uncertain, are now indispensable. Autonomous systems represent a new generation of robotic systems that can improve efficiency and lower costs. They have already demonstrated their value across the lifecycle of projects.

The Wave Glider is the industry-leading, long-duration, uncrewed surface vehicle (USV). It revolutionizes how we understand and operate in the world's oceans by gathering data in ways or locations previously too costly or challenging to operate.

Powered by waves and solar energy, these vehicles allow organizations to establish new capabilities.

- Lower cost of data acquisition: Up to 10X less daily operating cost of other vessels
- Reduce personnel & vessel risks: Use Wave Gliders instead of ships when possible
- New and improved capabilities: Real-time data, force multiplier to existing assets



Wave Gliders communicate with AUVs and subsea infrastructure while gathering in situ metocean data

Applications and Use Cases

- Real-time data link: Manage AUVs and harvest subsea sensors data
- Metocean monitoring: currents, temperature, wind speed, etc.
- Environmental monitoring: turbidity, hydrocarbon detection, marine mammals
- Maritime security: surface vessel detection and alerts
- Seismic operations: current monitoring for (close pass operations) and seismic acquisition

Wave Gliders have operated on missions for major Oil and Gas companies and service providers over the last decade in locations around the world, including the Gulf of Mexico, Australia, the Arctic, South America, and Africa. The list of applications and operations continues to grow as we work with partners to identify areas where USVs can improve efficiency and reduce costs.