Chunghwa System Integration to Showcase 5G + LEO Maritime Sentry System at XPONENTIAL 2026

CSI will present an integrated maritime sentry platform combining UAV operations, 5G connectivity and LEO satellite communication for critical infrastructure security.

Detroit, Michigan Apr 30, 2026 (Issuewire.com) - Chunghwa System Integration Co., Ltd. (CSI) will showcase its **Integrated 5G + LEO Maritime Sentry System for Critical Infrastructure Security** at **XPONENTIAL 2026**, one of the world's leading events for unmanned systems, autonomy, and advanced drone technologies.

The solution is based on CSI's **5G + LEO maritime UAV GRC system**, combining 5G communications, Low Earth Orbit satellite connectivity, unmanned aerial vehicle operations, and remote mission management into an integrated offshore monitoring platform. CSI's 5G drone platform information is available at:
https://en.ch-si.com.tw/5gservice/5g-drone/droneplatform/

Designed for offshore and near-shore operating environments, the system supports real-time aerial inspection, vessel tracking, remote asset monitoring, and rapid response. The solution is positioned for applications including submarine cable protection, offshore energy facility monitoring, harbor security, maritime patrol, and critical infrastructure surveillance.

A key element of the system is the integration of a long-endurance VTOL UAV platform from **Hsuan Yuan Tech / HY Tech**. Its **SKYVTOL 2** platform is presented as an electric long-endurance UAV, with published specifications including more than 180 minutes of flight time, more than 200 km of flight distance, and more than 5 kg of mission payload capacity. The platform also supports satellite relay as an optional payload function, which aligns with long-range and remote-area mission requirements.
Partner platform reference:
https://www.uashytech.com/skyvtol-2

In addition to UAV operations, CSI's exhibit highlights an AI-enabled ground control and maritime monitoring concept. The system supports an integrated GRC operating interface for mission planning, UAV monitoring, maritime event visualization, and remote decision support. This allows operators to combine aerial inspection results with maritime and geospatial intelligence for a broader operational picture.

Another strategic partner in the solution is **ingeniSPACE**, which provides geospatial business intelligence and remote sensing data services. ingeniSPACE describes its platform as supporting imagery acquisition across multiple constellation providers, multi-sensor data viewing and processing, analysis, alerts, and data fusion to create new operational perspectives.
Partner reference:
https://www.ingenispace.com/

For maritime applications, this capability can support the fusion of **AIS vessel information, SAR radar data, and satellite imagery** to enhance maritime domain awareness. ingeniSPACE also identifies maritime domain awareness, supply chain monitoring, illegal fishing, disaster management, and national missions among its application areas, making it relevant to offshore infrastructure and maritime security use cases.
Video reference:
https://www.youtube.com/shorts/HGGWeA8wMf0

The solution also incorporates a 5G O-RAN system provided by Transnet Technology Co., Ltd., supporting the private 5G communication layer within the overall maritime UAV operating architecture.
Partner reference:
https://www.transnet-si.com/

The CSI system is designed around three core technology layers:

- **CSI 5G + LEO Maritime UAV GRC System**
  An integrated command, communication, and remote-control architecture for offshore UAV operations, combining 5G and LEO connectivity to improve operational continuity beyond conventional terrestrial network coverage.
- **Long-Endurance VTOL UAV Platform – SKYVTOL 2**
  A partner UAV platform from Hsuan Yuan Tech / HY Tech, supporting long-range missions, modular payloads, public safety, logistics, inspection, and communication relay applications.
- **AI-Based Multi-Source Data Fusion Platform**
  A partner intelligence layer from ingeniSPACE, integrating geospatial data, satellite imagery, SAR-related analysis, AIS vessel information, and mission-specific analytics to improve maritime situational awareness.

"Offshore infrastructure security requires more than a drone platform alone," said a CSI representative. "It requires resilient communication, long-endurance flight capability, remote command and control, and

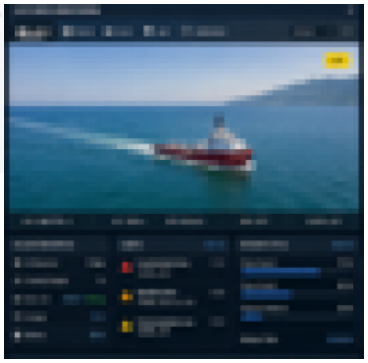
the ability to fuse multiple data sources into actionable intelligence. Through this integrated 5G + LEO maritime UAV system, CSI aims to demonstrate a practical solution for next-generation offshore monitoring and critical infrastructure protection.”

With increasing global attention on subsea cable security, offshore energy resilience, and unmanned maritime operations, CSI’s 5G + LEO Maritime Sentry System demonstrates how Taiwan’s system integration capabilities can support international infrastructure protection, maritime safety, and unmanned systems deployment.

CSI will present the solution during XPONENTIAL 2026 in Detroit and welcomes discussions with international partners, UAV system integrators, satellite communication providers, maritime security agencies, and critical infrastructure operators.

About Chunghwa System Integration

Chunghwa System Integration Co., Ltd. (CSI), a 100% subsidiary of Chunghwa Telecom Co., Ltd. (NYSE: CHT), provides system integration services across telecommunications, ICT infrastructure, 5G applications, AIoT, and enterprise solutions.



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