



REAL-TIME FISHERIES PROTECTION

EXACTVIEW™ REAL-TIME SATELLITE AUTOMATIC IDENTIFICATION SYSTEM POWERED BY HARRIS

BUSINESS PROBLEM

Illegal, unreported, and unregulated (IUU) fishing is a global problem that threatens ocean ecosystems and sustainable fisheries. The United Nation's Food and Agriculture Organization (UN FAO) reports that 52 percent of the world's marine fishery resources are fully fished or fished to the maximum sustainable level. IUU fishing is a major threat to achieving sustainable fisheries and also jeopardizes a multi-billion-dollar industry.

BENEFITS

Monitors vessels, in real time over an extended area, to identify violators on the spot

Detects changes in AIS state (on/off) – immediately

Provides complete vessel tracking history without time gaps



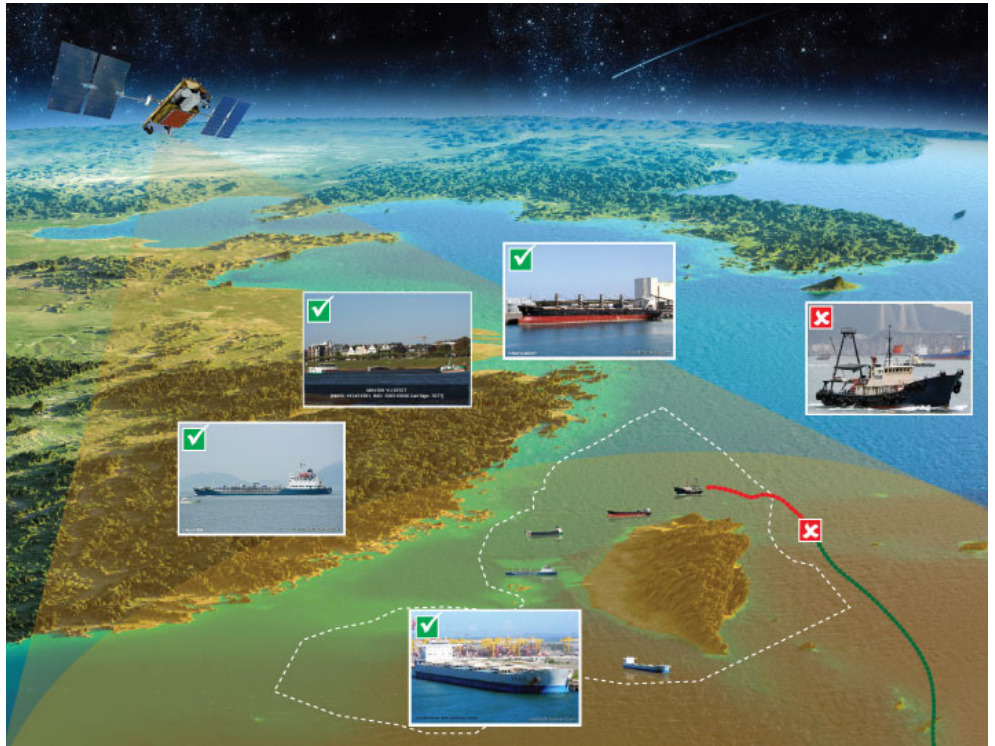
BACKGROUND

IUU vessels operate in areas populated with legitimate fishing vessels, and often near a mother ship for transshipment. The illegitimate vessels may or may not be using an automatic identification system (AIS). Traditionally, national and regional fishery management agencies use vessel monitoring systems (VMS) to monitor fishing activities to prevent IUU fishing. UN FAO guidelines suggest VMS should transmit every 1 to 2 hours. However, IUU crews continually try to defeat VMS by spoofing the information. To counteract IUU activities, it is critical to improve monitoring technologies.

THE GAME CHANGER

exactView™ RT Powered by Harris is a real-time (RT) S-AIS that supports identification and tracking of fishing activity worldwide. The rapid revisit rate provides a high density of data. Analysis of this data can reveal fishing patterns and activities, including those that violate fishing or Marine Protected Area regulations. In addition, overlapping satellite coverage provides accurate vessel location regardless of what's reported.

Sometimes, as shown in the image to the right, a vessel may try to hide its position or suspicious behavior by turning off its AIS. exactView™ RT powered by Harris immediately detects this change of AIS state and can alert local marine patrol officials to intercept possible illegal activities on the spot. Also, in cases where a ship is not self-reporting (i.e., AIS is constantly off or not installed), satellite radar imagery can be correlated with S-AIS data to detect these "dark targets".



exactView™ RT Powered by Harris provides true, global, real-time maritime domain awareness, particularly for the vast Arctic polar region that has proven to be difficult to monitor. This technology provides unprecedented improvements in domain awareness for this remote region with real benefits that enhance monitoring of vessels for safety, coordination, and compliance purposes.

THE EXACTVIEW™ RT POWERED BY HARRIS ADVANTAGE

Constellation of at least 58 AIS satellites in 6 orbital planes

- Offers constant, often overlapping coverage over the entire Earth
- Provides high geolocation accuracy

**Global revisit time < 1 minute
Data delivery latency < 1 minute**

- Monitors vessels, in real time over an extended area, to identify violators
- Detects changes in AIS state (on/off) immediately
- Delivers a high density of data that offers complete vessel track history without time gaps

High-density, current and historic tracking data

- Validates vessel positions received by the VMS to detect spoofing
- Tracks vessels used for transshipment of suspected IUU catches
- Applies pattern matching to verify maneuvers consistent with fishing activities
- Improves patrol tasking by isolating fishing vessels

Correlated Collection

- Correlates AIS data with satellite radar imagery to identify "dark targets" that may be fishing illegally

About Harris Corporation

Harris Corporation is a leading technology innovator, solving customers' toughest mission-critical challenges by providing solutions that connect, inform and protect. Harris supports government and commercial customers around the world. [Learn more at harris.com.](http://harris.com)

CONTACT US

EMAIL: exactAIS@harris.com

PHONE: (US) 1-888-206-9919
(Canada) 1-519-622 4445

FLORIDA | NEW YORK | VIRGINIA | BRAZIL | UNITED KINGDOM | UAE | SINGAPORE

Non-Export Controlled Information

Harris is a registered trademark of Harris Corporation. Trademarks and tradenames are the property of their respective companies.

© 2017 Harris Corporation 9/16 rev. 5/17 VIS-AL

HARRIS® TECHNOLOGY TO CONNECT,
INFORM AND PROTECT™