



COUNTER-PIRACY

MISSION IN BRIEF

To increase NATO's ability to protect merchant ships from attacks by pirates.

OVERVIEW

Since 2008, NATO has been providing protection from piracy in international waters in the Gulf of Aden and the Horn of Africa. The solution to piracy, which may be some time in coming, ultimately lies on shore. Until then, counter-piracy includes multinational policing operations and fortifying merchant vessels for pirate avoidance and the prevention of boarding. The Centre addresses elements of these in several projects.

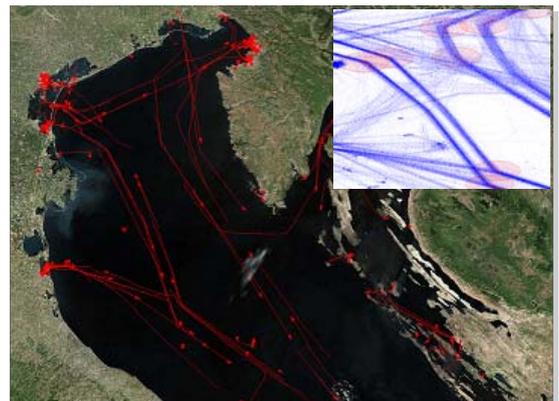
Early ship self-protection—The Centre works with the shipping industry and the providers of self-protective technologies for independent test and evaluation, concepts of use, and requirements for emerging non-lethal anti-boarding measures and pirate avoidance. The transition of new technologies into operations depends in large part on the business case that can be made for the use of emerging technologies, which includes quantitative estimates of vulnerability reduction owing both to military policing and self-protective measures.

Forecasting risk—The risk of pirate attack changes with the level of pirate activity, seasonal weather conditions, number of policing units, and other factors. CMRE, in collaboration with others, is working on a decision support system to merge real-time meteorological and oceanographic data with pirate activity reports to produce risk forecasts, presented in a way that NATO operations personnel would find useful for pirate interdiction or avoidance. A prototype that assesses the risk of pirate attacks based on meteorological and oceanographic forecasts has been developed.

Collaboration in maritime surveillance—CMRE is promoting international collaboration to improve maritime surveillance. One aspect is the Collaborative Multi-Sensor/Source Fusion and Tracking (COMSSOFT) framework, which aims to combine and exploit the information and capabilities from multiple analysis tools and surveillance systems. This activity includes collaborating with 16 other partners on the New Service Capabilities for Integrated and Advanced Maritime Surveillance (NEREIDS) project to evaluate the use of space-based technologies in maritime surveillance.

CONTACT

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Top: During counter-piracy operations, the Belgium Frigate Louise-Marie tested technologies on loan from CMRE. Bottom: Machine learning algorithms developed at the Centre help define typical shipping behaviour so that anomalies can be detected.