

NON-LETHAL RESPONSE IN PORT PROTECTION

MISSION IN BRIEF

Advance concepts and technologies in non-lethal response for reducing the risk to military forces of a terrorist attack by small boats or underwater intruders in ports and harbours.

OVERVIEW

One challenge that NATO faces is the vulnerability of its military forces and critical infrastructure to terrorist attack from the waterside in ports and harbours. An open waterside exposes NATO ships and port facilities to attack by small boats or underwater intruders. In this environment—outside of a combat or war zone—requirements include warning, proof of hostile intent and responding with a force that matches the threat.

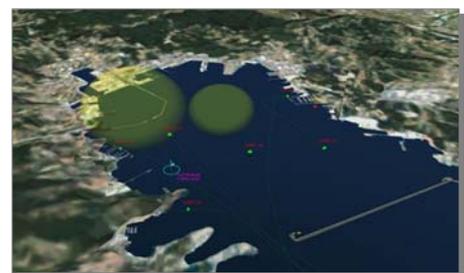
Researchers at CMRE are tackling port protection from a variety of angles. First, high-readiness technologies have been analyzed for their suitability in delivering unambiguous warnings, determining proof of hostile intent and incapacitating intruders. Technologies include hailing devices, dazzlers, entanglement systems, underwater air guns and more. Many find application elsewhere in counter piracy and energy security (for example, oil platforms, pipelines, LNG tankers).

CMRE is also bringing experts together in a variety of fields to share ideas and build ways forward in this new area of research. The Centre is facilitating collaboration by hosting conferences, offering courses and developing simulation software (*OpenSea Tactical Theatre Simulator*) to exercise and evaluate new concepts of technology use in port protection.

Finally, CMRE is developing a system concept for early contact designation and warning for above water and underwater threats in ports. Mission responsibilities are divided optimally between security providers and autonomous systems, capitalizing on the strengths of each. Goals of this system are affordability, scalability and open architecture for ease of integration into existing systems and for interoperability among NATO nations.

CONTACT

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Top: Testing hailing devices at the Centre. Middle: Testing a laser dazzler for unambiguous warning. Bottom: An aerial view from the OpenSea Tactical Theatre Simulator.