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THE ROLE OF SATELLITE DATA IN ENHANCING EU MEMBERS' PORT SECURITY AGAINST
MARITIME TERRORISM AND DISASTERS

Abstract

Ports, nuclear facilities, LNG facilities, urban areas, bridges, chemical plants and other critical infrastructure are all potential targets for terrorist attacks in Europe. Being the direct point of entry into Europe, especially ports constitute a key element in the comprehensive security system of Europe. In February 2002, the Council for Security Cooperation in the Asia-Pacific (CSCAP) defined maritime terrorism as “the undertaking of terrorist acts and activities (1) within the marine environment, (2) using or against vessels or fixed platforms at sea or in port, or against any one of their passengers or personnel, (3) against coastal facilities or settlements, including tourist resorts, port areas, and port town or cities”. This definition is perfectly suitable for the European case.

After 9/11, the International Maritime Organisation (IMO) has amended the 1974 Safety of Life At Sea (SOLAS) Convention to include new ‘Special Measures to Enhance Maritime Safety’. These measures include the International Ship and Port Facilities Security (ISPS) Code, which requires governments to carry out security assessments to “identify and evaluate important assets and infrastructures that are critical to the port facility as well as those areas or structures that, if damaged, could cause significant loss of life or damage to the port facility’s economy or environment”. Satellite technologies may offer benefits to Europe’s maritime regions and marine environment. They have enabled the EU and its agencies to monitor large numbers of ships sailing its waters under the Long-Range Identification and Tracking System (LRIT), and have enhanced security by tracking ships that could carry lethal weapons, logistic material or terrorists themselves. Member states can now assess the security risks posed by a ship and take action to reduce that risk.

This paper collates a number of research strands in the use of satellites to support maritime security in port areas and for port protection against both terrorist attacks and maritime disasters, and also in how satellite images can be used to identify terrorism risks.