NATO Foundation
Defense College

Awareness of cyber threats and risks to ship owners

In a recent study ("Cyber Security, The Unknown Threat At Sea 2016") conducted by the University of Coventry, in the United Kingdom for 18 months with more than 250 ship owners, it was highlighted that 67% of Company Security Officers (CSOs) in the shipping industries do not consider cyber security a serious threat to daily shipping operations.

The 89% of CSO's did not believe Cyber Security was their direct responsibility and only related to the IT department and the 91% of Ship Security Officers (SSOs) assure that they did not have the knowledge, training or competencies to manage the cyber threats to the vessel.

Considering who work on daily basis on a ship, crew members, all the ship owners involved in the study confirm that were given no training at all nor it was planned for them but only IT security policies to respect for the 53%. It means that the crew has no awareness regarding cyber threats and do not consider itself to create security breaches as a direct result of human error.

The International Maritime Bureau (IMB) also recently reported that cyber crime at sea was on the rise and ship owners should be aware of the consequences of not implementing risk mitigation measures and, for this reason, it has been released IMO circular MSC.1/Circ.1526 on the 1st of June 2016 entitled "INTERIM GUIDELINES ON MARITIME CYBER RISK MANAGEMENT".

It clearly states "Threats are presented by malicious actions (e.g. hacking or introduction of malware) or the unintended consequences of benign actions (e.g. software maintenance or user permissions). In general, these actions expose vulnerabilities (e.g. outdated software or ineffective firewalls) or exploit a vulnerability in operational or information technology. Effective cyber risk management should consider both kinds of threat." It recommends, in fact, cyber awareness at all levels.

The cyber domain at sea it is still not considered appropriately dangerous for the shipping industry and it means that we can predict several cases of cyber offence activities against shipowners all over the world.

Andrea Kellum - *worked for Triskel Risk Management and Orion Nautical Risk Solutions. He is now trainer at G7 International Accademy and has been appointed Emerging Challenges Analyst by the NDCF*