Cyber Threats: Reviewing and updating your Port Facility Security Assessment

Part A: Cyber and security concepts

Agenda Item 4

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Lisbon / 26th November 2019
“The next generation of terrorists will grow up in a digital world, with ever more powerful and easy-to-use hacking tools at their disposal.”

Dr Dorothy E. Denning
Born: 1945
Cybersecurity pioneer
PhD in Computer Science
The next generation is now…

Real time Cybermap.
https://cybermap.kaspersky.com/
Source: AO Kaspersky Lab. Based on data from Kaspersky
Maritime cybersecurity timeline

- 1971: Establishment of EMSA
- 1998: SOLAS Convention 2002 amendments
- 2001: ISPS Code
- 2004: “Creeper” - The first Virus
- 2005: Regulation (EC) No 725/2004 on enhancing ship and port facility security
- 2011: IMO Guidelines on Maritime Cyber risk management
- 2011: IMO Resolution on Maritime Cyber Risk Management
- 2013: IMO Resolution on Maritime Cyber Risk Management
- 2013: EU Maritime Security Strategy (EUMSS)
- 2016: Port of Barcelona (Spain)
- 2017: Port of San Diego (USA)
- 2018: 2018 Revision of EUMSS action plan
- United Nations Resolution 53/70
- SOLAS Convention 2002 amendments ISPS Code
- 2013 Brooking report The critical infrastructure gap: U.S. Port Facilities and Cyber Vulnerabilities
- 2011 ENISA report Cybersecurity aspects in the Maritime
- IMO Guidelines on Maritime Cyber risk management
- Regulation (EC) No 725/2004 on enhancing ship and port facility security
- IMO Resolution on Maritime Cyber Risk Management
- EU Maritime Security Strategy (EUMSS)
- “NotPetya” Ransomware
- Port of Barcelona (Spain)
- Port of San Diego (USA)
- 2011: IMO Resolution on Maritime Cyber Risk Management

Source: PANES, R., Lisbon, 2019
Cybersecurity Terminology
Maritime Security Terminology
“If you think cryptography is the answer to your problem, then you don’t know what the problem is.”

Dr. Peter Neumann
Born: 1932
Cybersecurity pioneer