

Perimeter security is becoming less and less effective as the main cyber security solution, and the traditional antivirus approach is failing as the main protection.

What is then the definition of **cyber security** and **cyber attack**? And **cyber incident**?



Are hackers really after vessels or anyone in the maritime sector?
If we can't prove that they are, what are then the drivers to work on it?

Is a ransomware incident a cyber attack or just a cyber (or even just an ICT) incident?

What about DDOS events? Should you still care if you are just collateral damage?



To make the problem even more complex, the exposure is extended to non-PCs
(**mobile devices and IoT**).

Do you know of any initiatives that take **ALL** possible devices into consideration? How
much proper infrastructure would help?



Big Data - Unexplored but Exploitable

Newer vessels have several sensors and digitally aware machines, from the main engine to the air conditioning; from the auto-pilot to the VDR and ECDIS. They are all constantly generating and processing data, in a way that could very well be classified as “Big Data”, even if it’s not processed or downloaded to a computer or sent to the office onshore.

So, **where is all that data?**

How it is **protected?** Do you have any control over **who has access to it?** Logs? Backup?

If it’s sent onshore or to “the cloud”, do you have or recommend other cyber security controls?



Ransomware: a billion dollar industry in 2016 alone.
The data angle.

What kind of **competence** should the maritime shipping companies have in order to ensure a minimum level of cyber security in their ICT solutions (even involving machine to machine communication or IoT)?



Do you believe that traditional maritime vendors are capable of including **“security by design”** in their ICT services?

How much of secure infrastructure are shipowners and operators capable of delivering by themselves?

Do shipowners and operators set requirements to their suppliers?
Do you know of any good examples?





The Maritime Communications Experts™

SINCE
1994

If we, as an industry, are to make proper use of advanced ICT solutions, what should we do to start building a **resilient platform**?



If we, as an industry, understand that vulnerabilities exist and actions must be taken to be able to **deliver secure IoT platforms**, what has to happen for action to begin before we have actual incidents? Is perhaps the fear-mongering approach used by some vendors causing more damage than helping immediate action to start?

