

Norwegian Maritime Cyber Resilience Centre



# NORMA CYBER

Building unified resilience against cyber threats for Norwegian Shipping  
and Maritime Sector

Hvorfor digital sikkerhet bør ha et fokus

Sjøsikkerhetskonferansen 22. September 2021



# A typical maritime cyber security presentation

## Cyber attacks on maritime OT systems increased 900% in last three years

by The Editorial Team — July 20, 2020 in Cyber Security



### Cyberattack or coincidence?



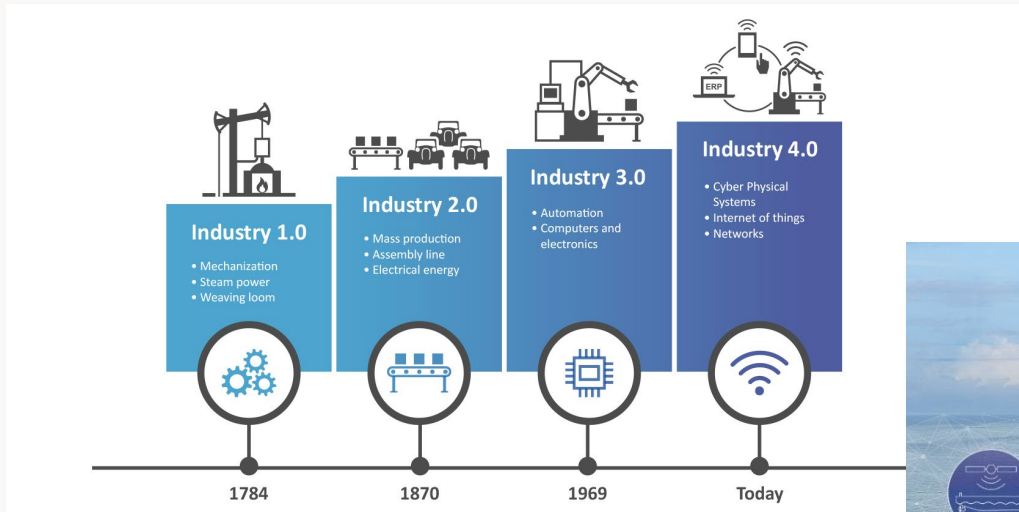
With one vessel hijacked and up to six others reporting a loss of steering control in the Gulf of Oman this week, many questions are being raised about the cybersecurity onboard ships.

Tom Bebbington, Singapore Country Manager, Cydome | Aug 06, 2021

## Report: Maritime Cyberattacks Up by 400 Percent



# Where are we headed?



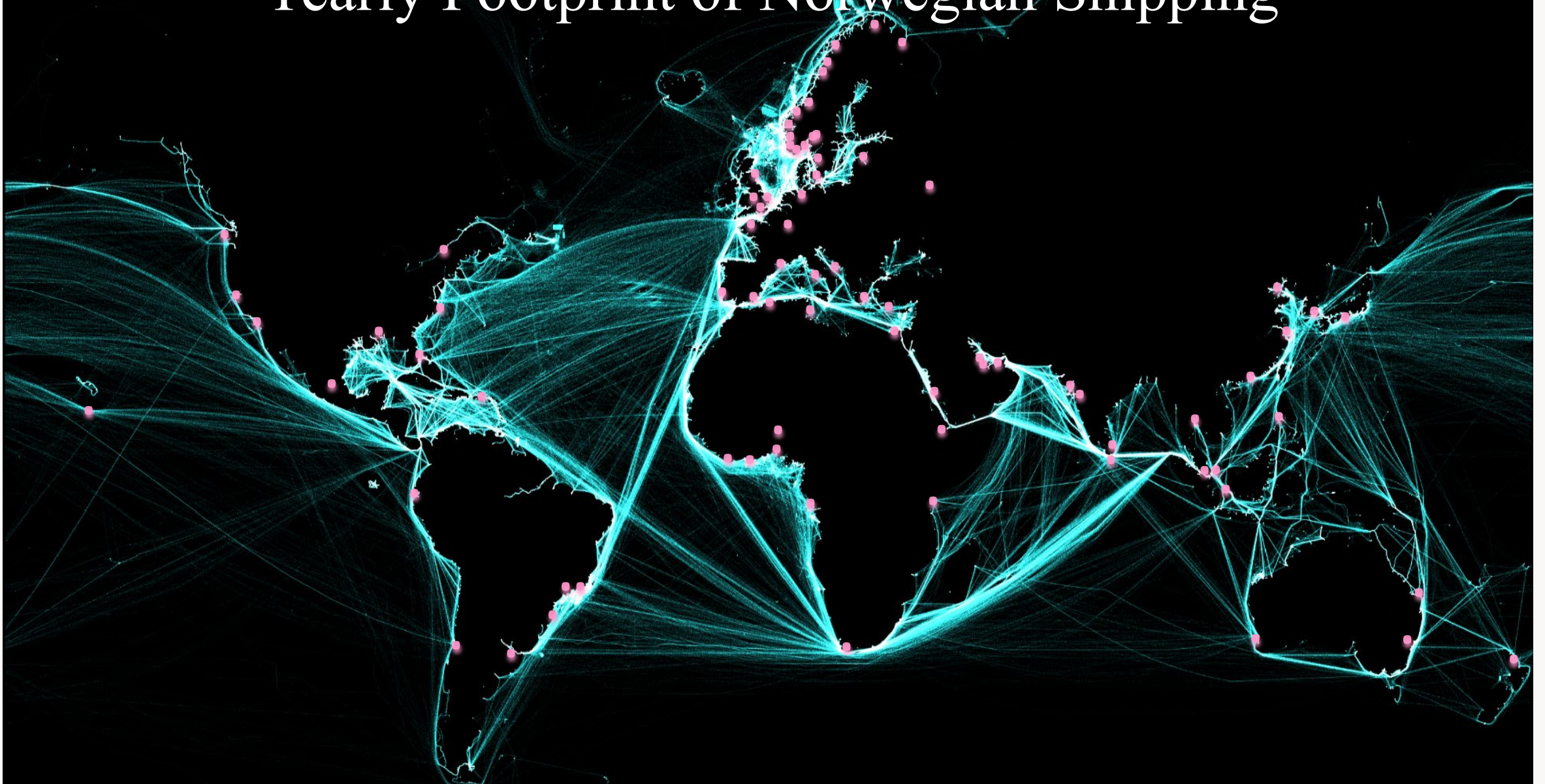
Picture: Forbes



Picture: DNV



# Yearly Footprint of Norwegian Shipping

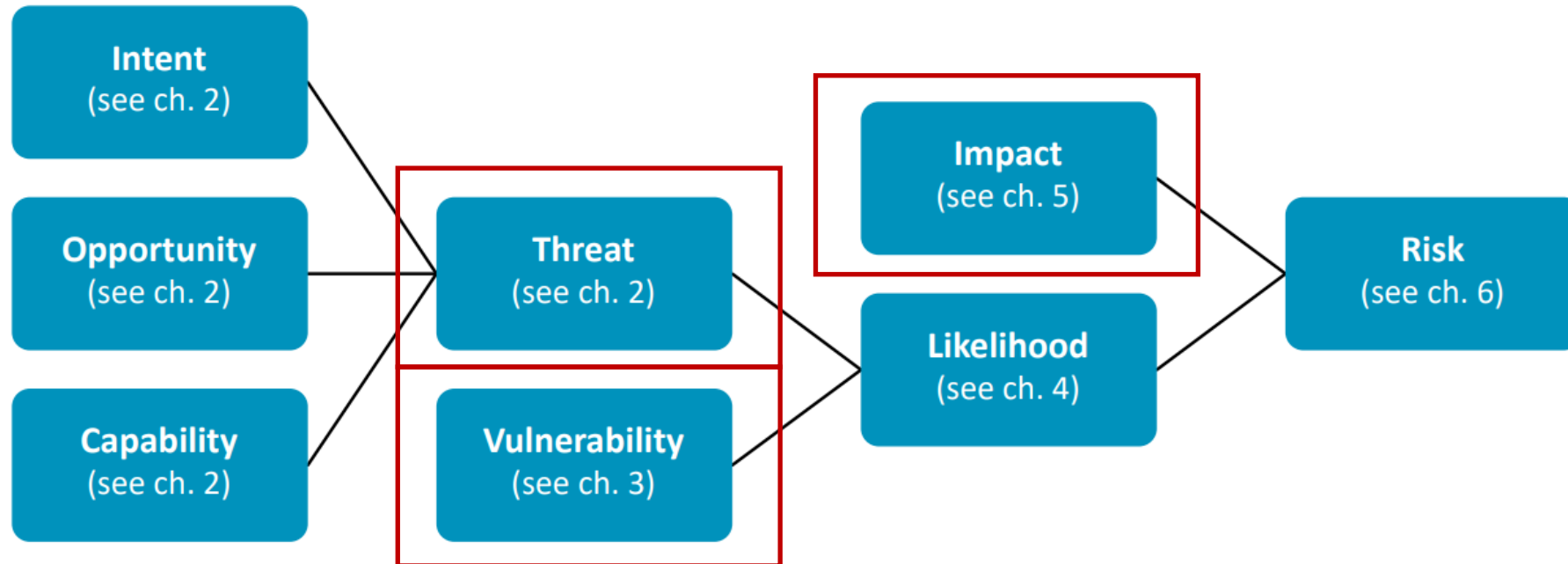




# A THOUGHT EXPERIMENT



# SECURITY RISK ASSESSMENT

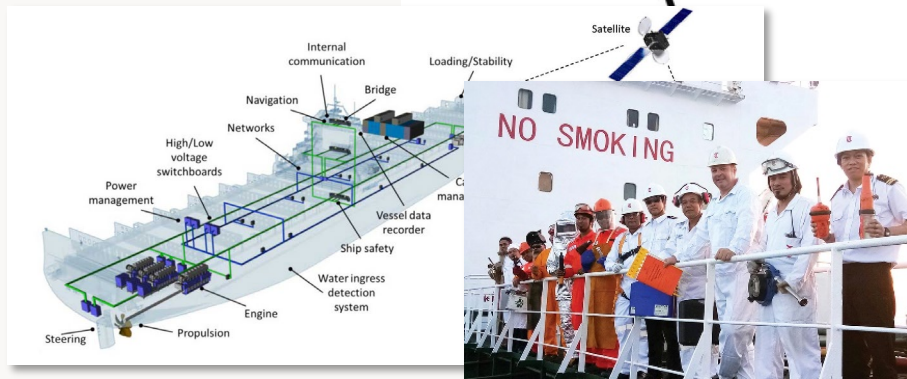
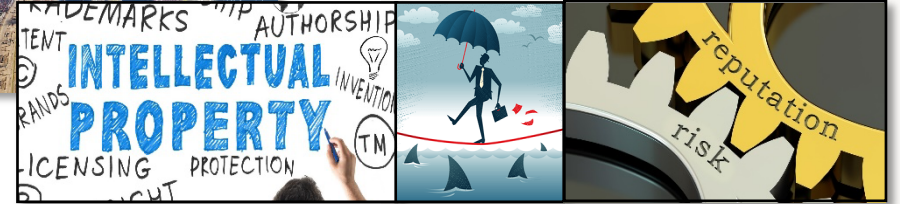


*Figure 2: The relationship between different factors influencing the risk. The lines represent multiplication, ie “Likelihood” is multiplied with “Impact” to produce “Risk”.*

From BIMCO The Guidelines on Cyber Security Onboard Ships, 4<sup>th</sup> edition, published in December 2020

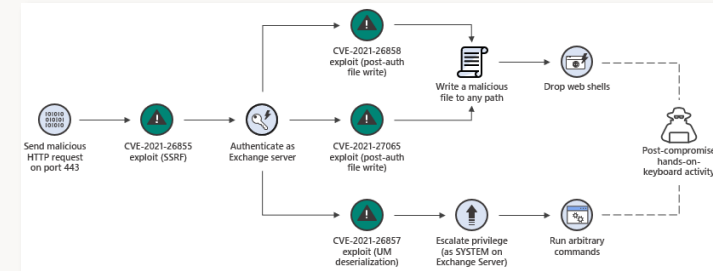


# SECURITY RISK ASSESSMENT



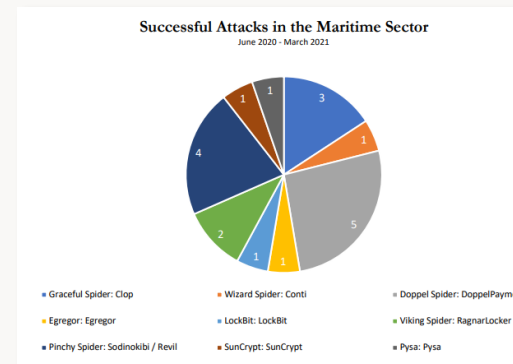
# What have we seen so far?

- Microsoft Exchange Vulnerability related compromises



- Business Email Compromise – Financial Fraud

- Ransomware



**WHAT IS BUSINESS EMAIL COMPROMISE?**

**ILLEGAL ACCESS**

Criminals gain entry to a victim's devices or systems – through hacking, phishing websites, malware – then deceive the victim into transferring money into their bank account.

**SOCIAL ENGINEERING**

Criminals can target their victims based on information they share on social media platforms.

**URGENT REQUEST**

The criminal impersonates a supplier requesting an urgent payment or change to banking details, or a senior employee in the company with authority to authorize payments.

#BECareful

INTERPOL

- What about attacks towards maritime OT systems then?



# Norwegian Maritime Cyber Resilience Centre

## Our Vision:

Unified resilience  
against cyber threats for  
Norwegian Shipping and  
Maritime Sector



**NORMA  
CYBER**

## Our Values:

Trusted

Solid

Innovative

## Our Set-Up:

Mutually owned by  
Norwegian Shipowners and  
Operators



# History

November 2019

Joint initiative by DNK and Norwegian Shipowner Association  
Pre-project started

March 2020

Project group established  
3 personnel  
Fact Finding – input from members and others

October 2020

Board approval from DNK and Norwegian Shipowners Association.  
NORMA Cyber will be established as a Joint Venture

January 2021

NORMA Cyber starts operations

June 2021

Security Operations Centre (SOC) service operational

# Current Status



55 Member organisations



Represented with 1331 Vessels



• Intelligence & information sharing



• Response



• Security Operations



8 Employees



Offices and Operations Room in Oslo, Norway



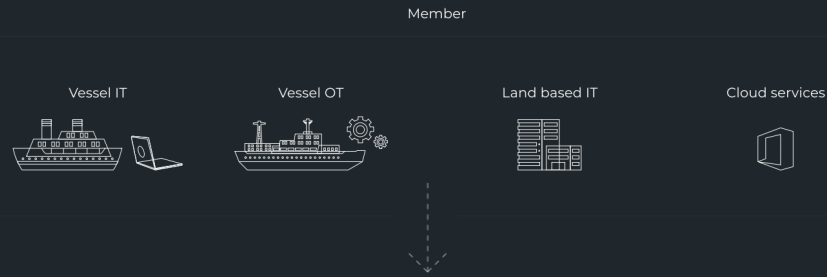
# Our Services

## Intelligence



- Reliable and timely information and intelligence for decision support

## Security Operations



NORMA Cyber 24/7 SOC  
**Combined SOC view**  
Alert triage, analysis, threat hunting



Member alerts and reports

Member dashboard and insight

## Response



- 24/7 Cyber Response Service



# Our Team



Arne Asplem

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Head of Intelligence



Lars Benjamin Vold

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Managing Director



Øyvind Berget

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Chief Technical Officer



Øystein Brekke-Sanderud

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Intelligence Analyst



Marthe Brendefur

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Intelligence Analyst



Jabber Abbas

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Senior Analyst –  
Vessel Technology



Nils Johan Gabrielsen

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Senior Security  
Advisor



Eivind Kristiansen

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Cyber Security  
Analyst



# Contact information

NORMA Cyber OPS:  
[ops@normacyber.no](mailto:ops@normacyber.no)

**24/7 Incident and Crisis number: +47 90 98 97 37**

Administrative queries:  
[contact@normacyber.no](mailto:contact@normacyber.no)

Questions?



**NORMA  
CYBER**