

# 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



DEN NORSKE KRIGSFORSIKRING FOR SKIB  
GJENSIDIG FORENING  
The Norwegian Shipowners' Mutual  
War Risks Insurance Association



Norges  
Rederiforbund  
Norwegian  
Shipowners'  
Association

# 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

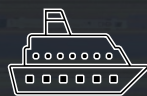
June 2021

Security Operations Centre (SOC) service operational

# Current Status



81 Member organisations



Represented with 1956 Vessels



## Services:

- Intelligence & information sharing
- Response
- Security Operations



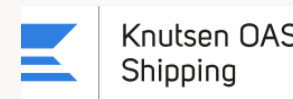
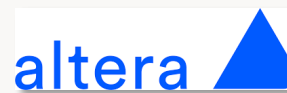
9 Employees



Offices and Operations Room in Oslo, Norway



# NORMA Cyber members as of 20 September 2022: 82 members – 2 024 vessels



**SOC Service:**  
4 members  
80 vessels  
3 000 land-based staff



# Membership Services

## Intelligence & Information Sharing



### Decision Support to members

- Effective information sharing to/from members
- Monthly Threat Assessments
- Intelligence reports
- Tippers
- OT Vulnerability notifications
- Mitigation advice
- MISP portal – indicators of compromise sharing

## Monitoring & Detection



### External Monitoring

- Deep/dark web monitoring
- Vulnerability scanning of internet facing systems
- Warnings/Alerts to individual members

### Managed Security Operations Centre

- Vessel IT/OT
- Land-based/Cloud infrastructure
- 24/7/365 - Early alerts to members before incident escalates

\*Additional Service – extra cost

## Response



### Incident and crisis support to members

- Mitigation advice
- Crisis response advice
- Coordination between members, authorities and other stakeholders
- Provide and manage recourses
- Participate in exercises and provide scenarios

Analysts available for members, Member log-in portal, Webinars / Seminars, User Council

# Annual Threat Assessment 2022

## Nation state actors

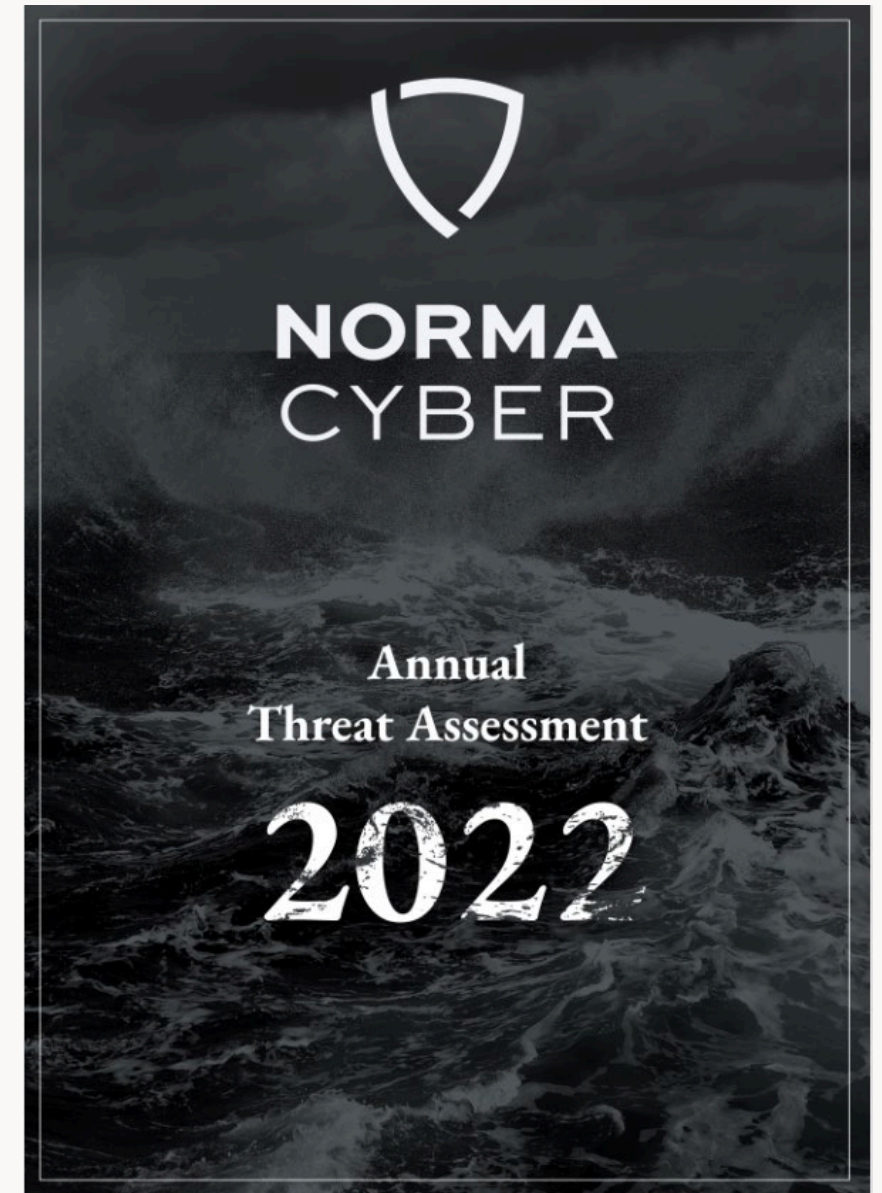
- The espionage threat from Russia- and China-linked threat actors
- Regional conflicts and the impact on merchant shipping
- GNSS interference
- Manipulation of AIS data in vessel tracking services

## Cybercrime

- Fraud
- Ransomware

## Hactivists

## Operational technology



# Take-aways

- Stage 3:
  - Out of 88 e-mails, 49 are caught by the **spam filter**
  - Still, 6 **people** click the link while the malware site is active
  - Out of the 6 clicks, 2 downloads are blocked by the **firewall**
  - Out of the 4 remaining downloads, 3 **people** open the excel document and enable macros
  - In the remaining 3 cases, the malware either fails to execute properly or is blocked by the **firewall** due to activity towards known malicious IP's

In this case, the **antivirus** failed to identify the malware. Only 5-11 out of 60 antivirus programs would block the Excel-documents at the time. **They should have now been updated**

# Ransomware in 2021

Known successful attacks towards the maritime sector





# Stop talking about Cyber!





# 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?

