The Great Disconnect
in maritime cyber risk

Digital Ship Copenhagen
10 May 2022

Visibility | Security | Compliance

Introducing CyberOwl

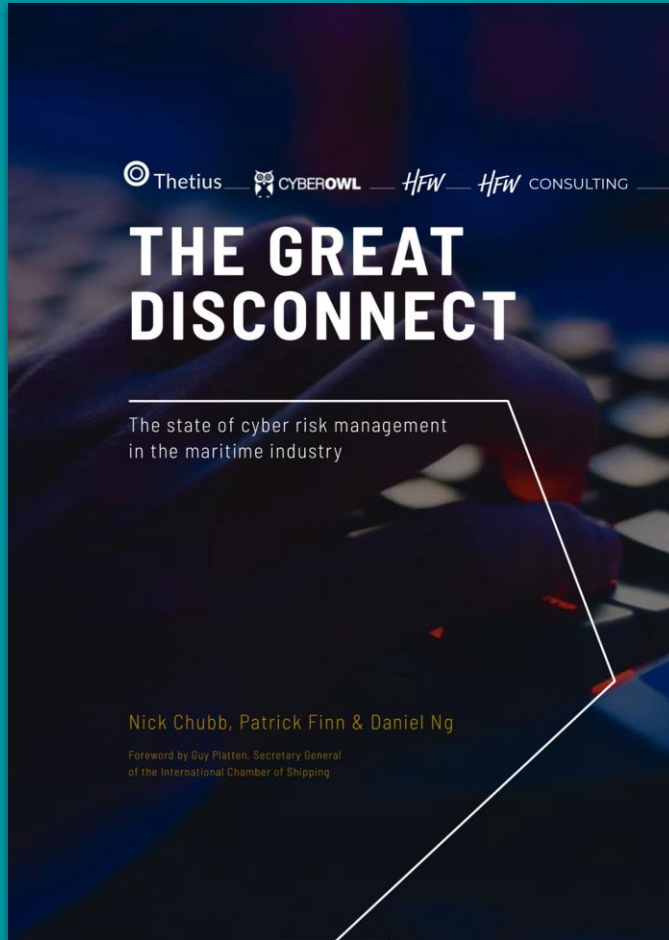## Deep expertise in maritime sector

Award-winning technology

National Cyber Security Centre
a part of GCHQ
Cyber Accelerator Alumni

GCHQ Cyber Accelerator Alumni

Maritime UK Awards
10.03.22 Glasgow

2021 Cyber Security Award
SMART4SEA
Shortlisted

Seatrade Awards
Finalist

In association with Lloyd's List

LLOYD'S
Science of Risk Prize

finalist Cyber Security Awards

Trusted by customers globally

EASTERN PACIFIC SHIPPING

PIL

PCL

misc

SWIRE SHIPPING

NAVARONE S.A.

aet

TUFTON

ZEABORN SHIP MANAGEMENT

Andriaki

ELETSON

THE GREAT DISCONNECT

The state of cyber risk management in the maritime industry

Nick Chubb, Patrick Finn & Daniel Ng

Foreword by Guy Platten, Secretary General of the International Chamber of Shipping

combining insights from:

200 *shipping experts*
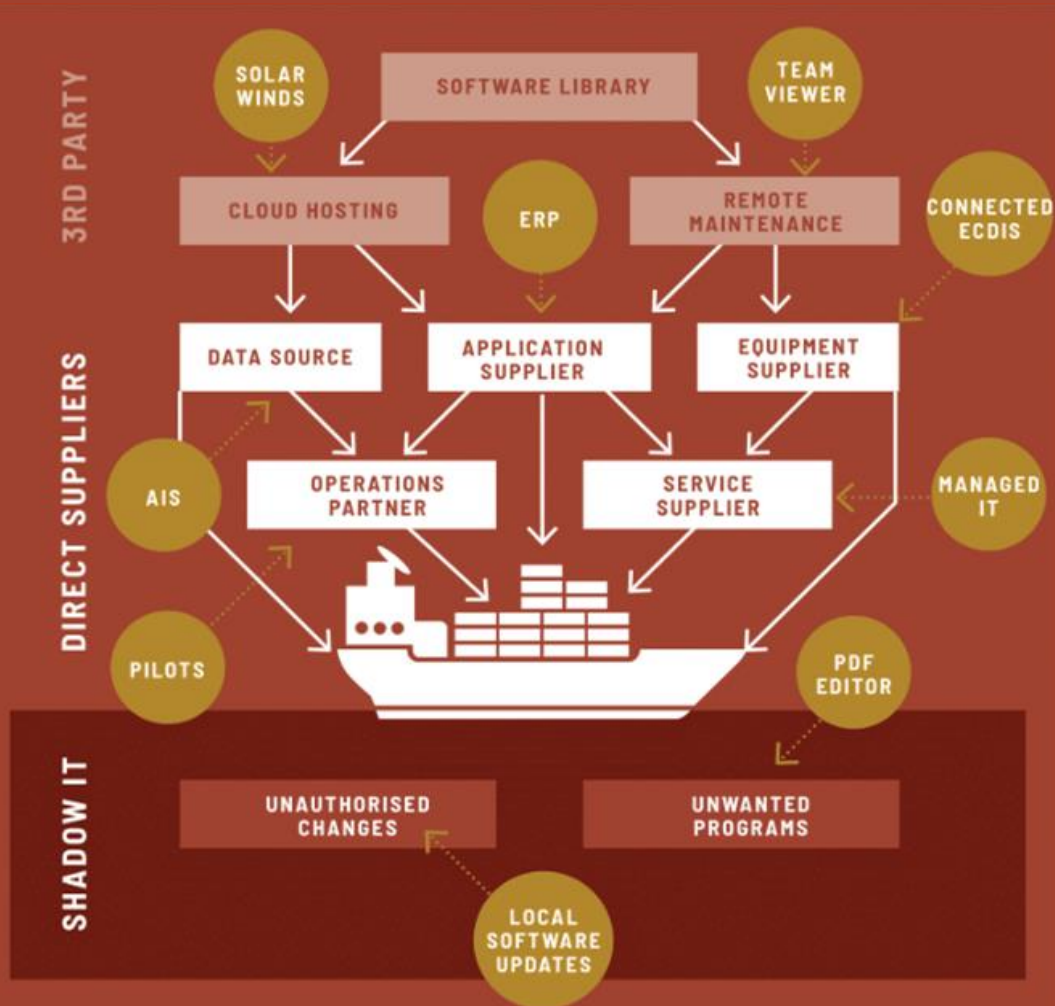
80 *fleets*

Data from vessels CyberOwl monitors

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The supply chain disconnect

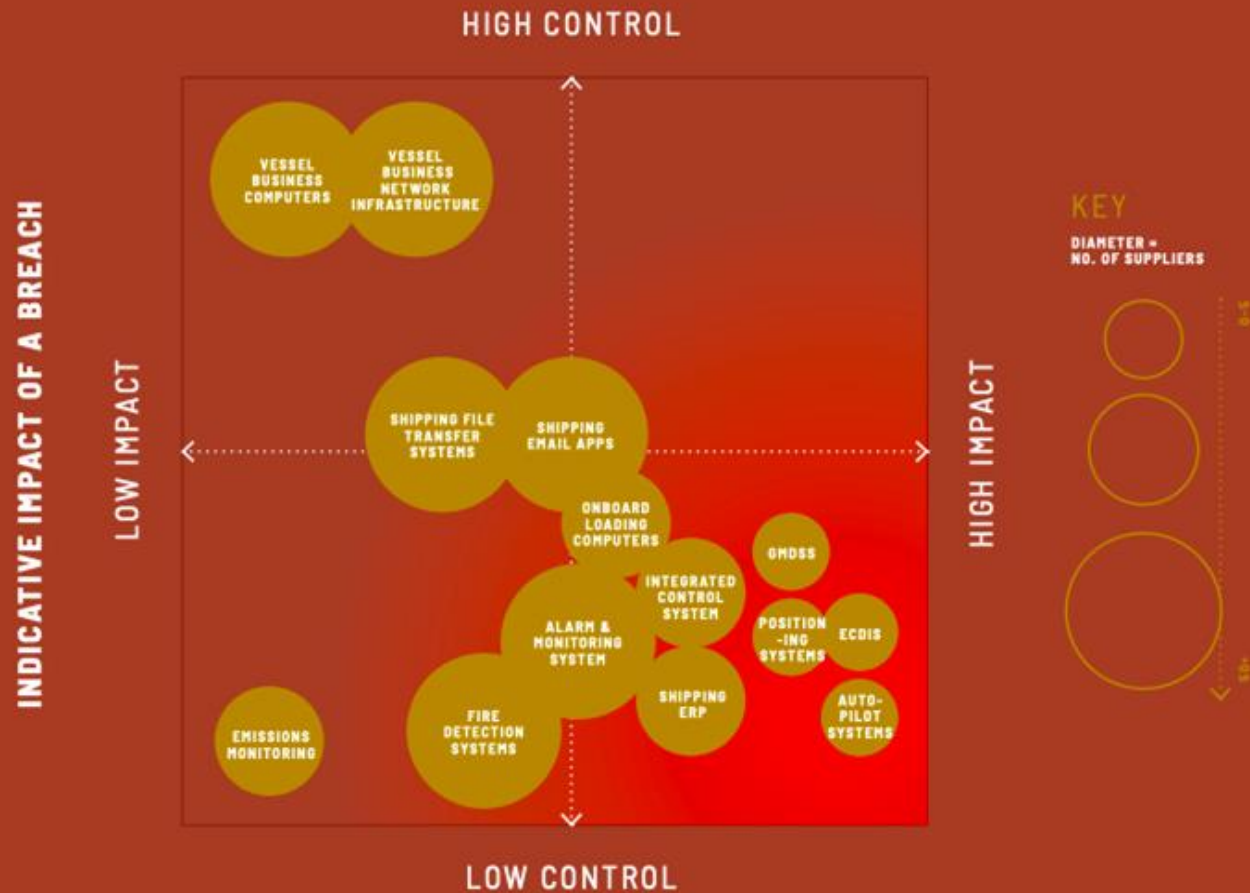**50%+** *ships have 40-180 connected devices*

60% *onboard computers have unapproved software*

30% *fleets give full local admin rights to crew*

SHIPOWNER'S CONTROL OVER SECURITY

(dependent on specific operations of vessel)

HIGH CONTROL

INDICATIVE IMPACT OF A BREACH

LOW IMPACT — HIGH IMPACT

LOW CONTROL

- VESSEL BUSINESS COMPUTERS
- VESSEL BUSINESS NETWORK INFRASTRUCTURE
- SHIPPING FILE TRANSFER SYSTEMS
- SHIPPING EMAIL APPS
- ONBOARD LOADING COMPUTERS
- GMDSS
- INTEGRATED CONTROL SYSTEM
- ALARM & MONITORING SYSTEM
- POSITION-ING SYSTEMS
- ECDIS
- SHIPPING ERP
- FIRE DETECTION SYSTEMS
- AUTO-PILOT SYSTEMS
- EMISSIONS MONITORING

KEY

DIAMETER = NO. OF SUPPLIERS

only

65%

vessel systems suppliers asked to prove cyber risk management

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The risk disconnect

3% *of cyber attacks resulted in the respondents' organisation* paying a ransom.

$3.1 MILLION

...Is the average ransom paid

only

34%

believe their shipping organisation has appropriate insurance in place to cover cyber attacks

54%

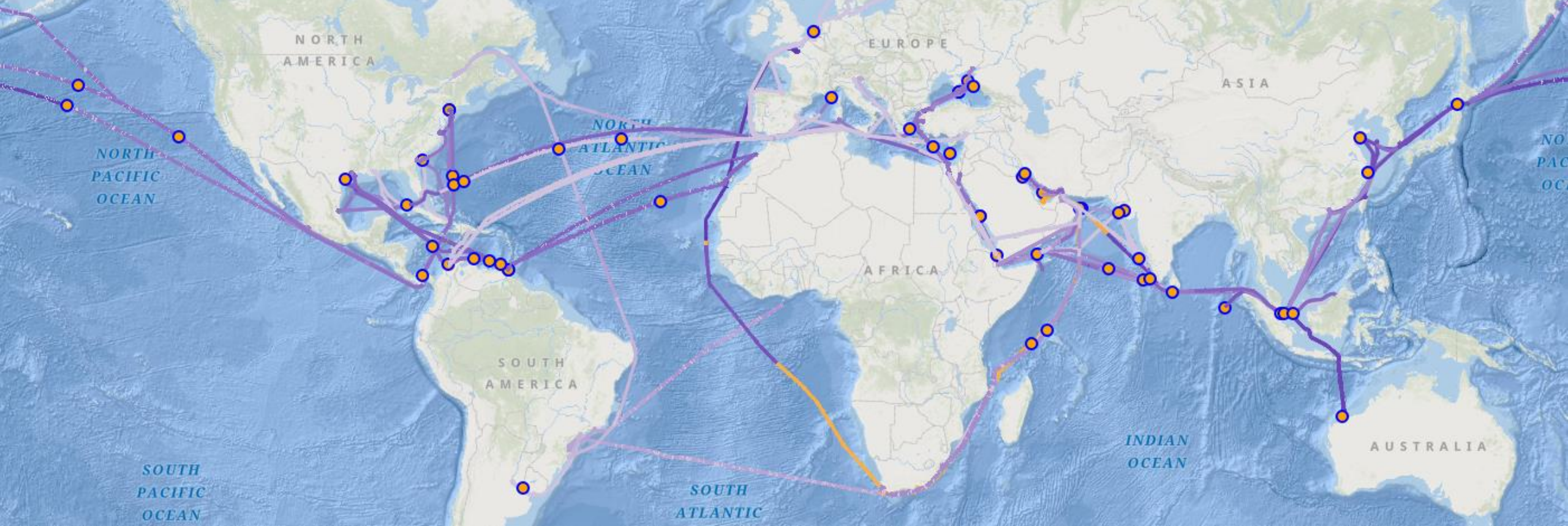of shipping companies spend less than $100K per year on cyber security management.

VS

$182,000

An average, cyber attacks cost ship operators $182,000 per year.

For **1 in 12** ship operators (8%), the average cost of cyber attacks is:

$1.8MILLION PER YEAR

80%+
cyber incidents raised shortly after vessel leaves port

Recommendations to industry

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1. Set up a dedicated cyber security directorate within fleet operations that covers both IT and OT security

2. Implement a comprehensive cyber incident training and drill programme

3. Develop minimum security standards for suppliers and partners

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4. Conduct an urgent review of insurance policies and seek legal guidance on ransom payments

CYBERSECURE
AT SEA 2022

MAKING SMARTER
PROGRESS

Register here

- **Working smarter with the ecosystem**

- **Setting up a smarter cyber security "directorate" for vessel operations**

- **Maritime cyber exercise**

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