

Sikkerhetstyring

Bullshit, byråkrati og det beste vi har

SAN, Gøteborg, 24. oktober 2024

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One size fits all? Safety management regulation of ship accidents and personal injuries

Kristine Vedal Størkersen, Stian Antonsen & Trond Kongsvik

Safety Science

journal homepage: www.elsevier.com/locate/ssci

safety science meets the practitioners: Does safety science contribute to marginalization of practical knowledge?

G. Almklov^{a,*}, Ragnar Rosness^b, Kristine Størkersen^a

Doctoral theses at NTNU, 2018:184

Kristine Vedal Størkersen

Bureaucracy overload calling for audit implosion

A sociological study of how the International Safety Management Code affects coastal transport



ELSEVIER

Safety Science

journal homepage: www.elsevier.com/locate/ssci

Survival versus safety at sea. Regulators' portrayal of paralysis in safety regulation development

Kristine Vedal Størkersen^{*}

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CrossMark



ELSEVIER

Safety Science

journal homepage: www.elsevier.com/locate/safety

How deregulation can become overregulation: An empirical study into the growth of internal bureaucracy when governments take a step back

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ELSEVIER

Marine Policy

journal homepage: www.elsevier.com/locate/marpol

Permitted to be powerful? A comparison of the possibilities to regulate safety in the Norwegian petroleum and maritime industries

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safety

Article

Procedure N Done to Red Informal As

ARTICLE INFO

ABSTRACT

examines the link between formal authority and executive power h
includes an analysis of regulations and
regarding



SINTEF



SINTEF Ocean shall be a world-leading research environment within maritime technology and biomarine research





Avdeling for energi og transport

Klimautfordringene krever lav- og nullutslippsløsninger og en omfattende omstilling til fornybar energiproduksjon. Maritim transport og offshore energiproduksjon står foran omfattende endringer som vil kreve innovative, bærekraftige, pålitelige og...



Avdeling for fiskeri og ny biomarin industri

Avdelingen jobber med å fremskaffe fremtidens mat og fôr fra både fangst, høsting og dyrking av marine arter til ferdig produkt og vi utvikler teknologiske løsninger på biologiens premisser.



Havbruksavdelingen

Havbruksavdelingen jobber tett med næringen for å forstå dens forutsetninger og behov, og for å sette dagsorden for en bærekraftig utvikling.



Avdeling for klima og miljø

Gode klima- og miljøløsninger kombinert med



Avdeling for skip og havkonstruksjoner



Stab

Staben bistår fagavdelingene med



The next 50 minutes

- Safety management regulation
- How regulation plays out in organizations
 - Pros and cons
 - Example 1: Three levels
 - Example 2: Fishers and seafarers
- Trends important for safety management
 - Auditism
 - Digitalization
 - Interorganizational operations
- A way forward for safety management

Oral language

- ☐ Nordnorsk
- ☐ Barne-TV-svenska/svorsk
- ☐ English



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Native resilience

Sjømannskap





Photo: Terje Fredh / Sjöhistoriska
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The idea

Safety can be managed through

- Responsible companies
- Work descriptions
- Risk considerations
- Systematic thinking
- Evaluation and attention



before/after ISO 45001

The publication date is late 2016/early 2017



Safety management regulation with good intentions

- Procedures for planning, performance, emergencies, reporting, training, communication, etc.
- Documentation – for auditing

ISM Code

INTERNATIONAL SAFETY MANAGEMENT CODE
with guidelines for its implementation

2018 EDITION



- Make companies invest in safety equipment
- Systematize the maintenance
- Risk routines
- Plan operations
- Safety meetings etc.



- Many details about many tasks
- Procedures do not fit the operation
- Conflict with each other
- Demand more resources (personnel/time) than available

«Mission impossible»
«Window dressing»
«Bullshit»



Nice to meet you

1. Do you work at sea?
2. Do you work with safety management on shore?

Example 1: Actors on three levels

Studying safety management in Norway:

1. Maritime authorities
2. Shipping companies (onshore offices)
3. Passenger and cargo vessels

Here, I first saw the safety management traps

International regulation: The ISM code



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graph TD; A[International regulation: The ISM code] --> B[Maritime authorities];
```

Maritime authorities



Maritime authorities paralyzed:
Up to the companies to manage safety

International regulation: The ISM code

```
graph TD; A[International regulation: The ISM code] --> B[Maritime authorities]; B --> C[Company management];
```

The diagram consists of three colored shapes arranged vertically. The top shape is a teal rectangle with a small downward-pointing triangle at its bottom center. The middle shape is a blue rectangle with a small upward-pointing triangle at its top center and a small rightward-pointing triangle at its right center. The bottom shape is a green rectangle with a small downward-pointing triangle at its bottom center. The text 'International regulation: The ISM code' is inside the teal shape, 'Maritime authorities' is inside the blue shape, and 'Company management' is inside the green shape.

Maritime authorities

Company management



Must invest in safety:
Policies, safety management systems,
measures, internal controls

International regulation: The ISM code

Maritime authorities

Consultancies, class

Shipping company

Vessel personnel

Officers
(translate from rules to
practice)

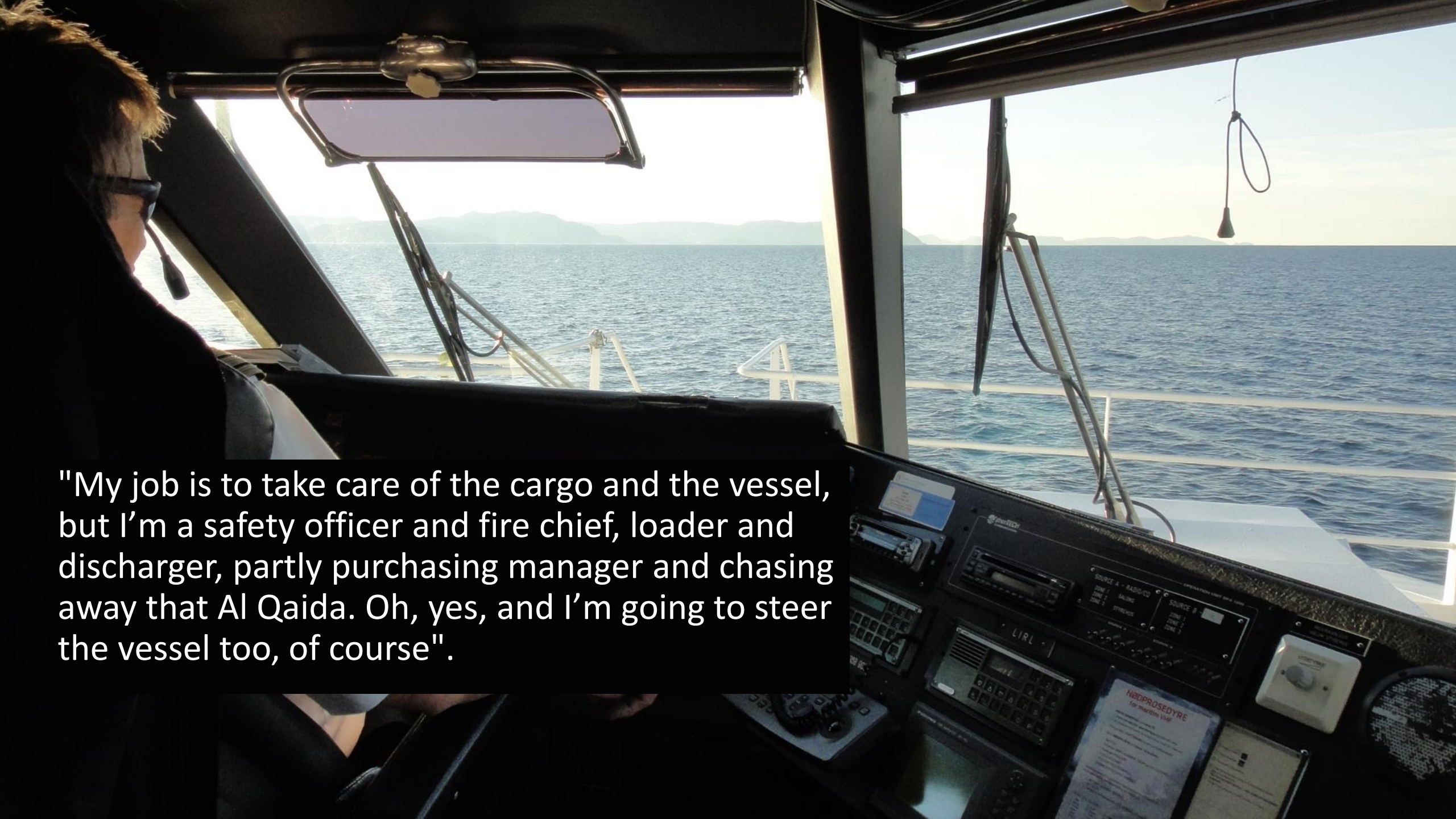
ABs/ratings
(get the practical
information)

Extrawork and hassle

Can «ignore» safety management systems

A person wearing a headset and sunglasses is seen from the side, looking out from the cockpit of a boat. The cockpit has a dashboard with various controls, a compass, and a small screen. The boat is on a body of water with mountains in the background under a clear sky. A text box is overlaid on the bottom left of the image.

Practical and administrative tasks:
Facilitates for the crew

A person wearing a headset and sunglasses is seen from the side, looking out of a ship's cockpit. The cockpit has a large window with a rearview mirror and a view of the ocean and distant mountains. The dashboard is visible in the foreground with various controls and a document titled "HARDPROSEDYRE For Marlin V10".

"My job is to take care of the cargo and the vessel, but I'm a safety officer and fire chief, loader and discharger, partly purchasing manager and chasing away that Al Qaida. Oh, yes, and I'm going to steer the vessel too, of course".



Work safely in practice,
no documentation tasks?



Nice to meet you

1. Do you work with passenger vessels?
2. Do you work with cargo and transport? Short sea – international?
3. Do you work on service vessels? Supporting other industries?
4. Are you fishers?
5. What do you like about your safety management system?

Example 2

Fishers versus
seafarers





Contents lists available at ScienceDirect

Safety Science

journal homepage: www.elsevier.com/locate/safety



Traps and tricks of safety management at sea

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ARTICLE INFO

Keywords:

Seafarers

Fishers

Transport

Fishing

Safety

Safety management

ABSTRACT

Safety management regulation was introduced almost twenty years earlier for Norwegian seafarers than coastal fishers, although both groups work in industries with high accident frequencies. In this study, seafarers and fishers' perspectives on safety management requirements is studied, through empirical data from interviews and observation conducted over several years, with the aim of informing the future development of safety management, especially in fishing. Results show that the fishers have practical skills and an operational orientation, while the seafarers experience ill-fitting procedures, extensive documentation, and shore management that the coastal fishers lack. The suggestions for future safety management are related to development of procedures, a safe working environment, safeguards and safety management skills.

Safety management requirements	Fishers without safety management	Seafarers after two decades of safety management
Procedures for safe practices		
Create a safe working environment		
Skills to work safely		

Safety management requirements	Fishers without safety management	Seafarers after two decades of safety management
Procedures for safe practices	Not commonly used	• Practical procedures used and liked • Impractical procedures disliked
Create a safe working environment		
Skills to work safely		

Perspectives on procedures

"Is there really no limit for the bureaucracy's right to, in detail, regulate our private lives and our assessments of our own safety?"

Fishers

Perspectives on procedures – seafarers

"You talk about a **collision between an old and a new culture**. (...) Suddenly I had to comply with something on paper. There was great resistance. Some actually quit sailing because of the ISM Code"

"You know what's in the procedures and the [system], but anyway **you do things in your own way** in the daily business".

"If you have **so much reporting** and governmental surveillance, and there's no rational reason, that's a safety risk".

Safety management requirements	Fishers without safety management	Seafarers after two decades of safety management
Procedures for safe practices		
Create a safe working environment	Operational orientation. The crew takes care of themselves	System orientation. The crew takes care, but also expect the shore management to facilitate
Safety management skills		

Who's important for the working environment?

"There are two rules onboard. Rule number one: the skipper is always right. Rule number two: if the skipper is not right, follow rule number one".

Fisher

Who's important for the working environment? - seafarers

"Our schedule is a stress factor. They plan for it to be a stress factor. Everything's on the spot; you have no margins".

"When you're permanent on a vessel with a steady crew, you learn to know that crew very well. And then you might perform well in critical situations – when you're confident in the persons you work with".

"I feel that safety is much better taken care of now than before. It was more at random before, even though it was okay back then, too".

Safety management requirements	Fishers without safety management	Seafarers after two decades of safety management
Procedures for safe practices		
Create a safe working environment		
Safety management skills	Experience-based skills are valued	Experience-based and safety management skills are valued

Skills

"It's important that one never turns ones back to the ocean. One must watch the ocean and show respect for it".

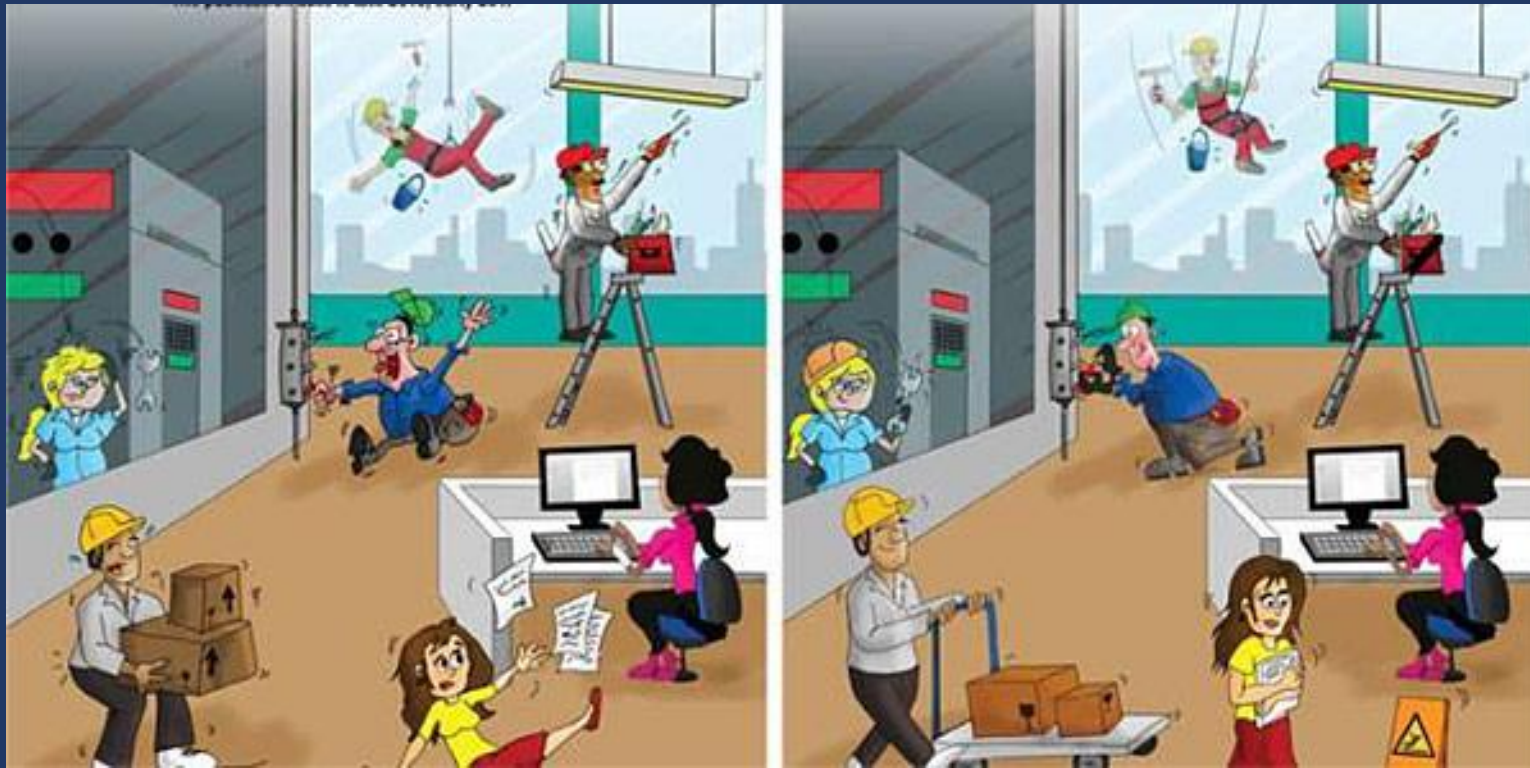
Fisher

Skills – seafarers

"Before, you had to be able to find your way. One criterion was that you were **familiar** with [your region]. Now you must know about **papers** and computers and all this".

"[The safety management system] says how to plot the course for each of the company's routes. But they don't consider current or weather. And experienced navigators want to—and will—**choose the course appropriate according to wind and current.** But that's actually not allowed".

Where did safety management fail?



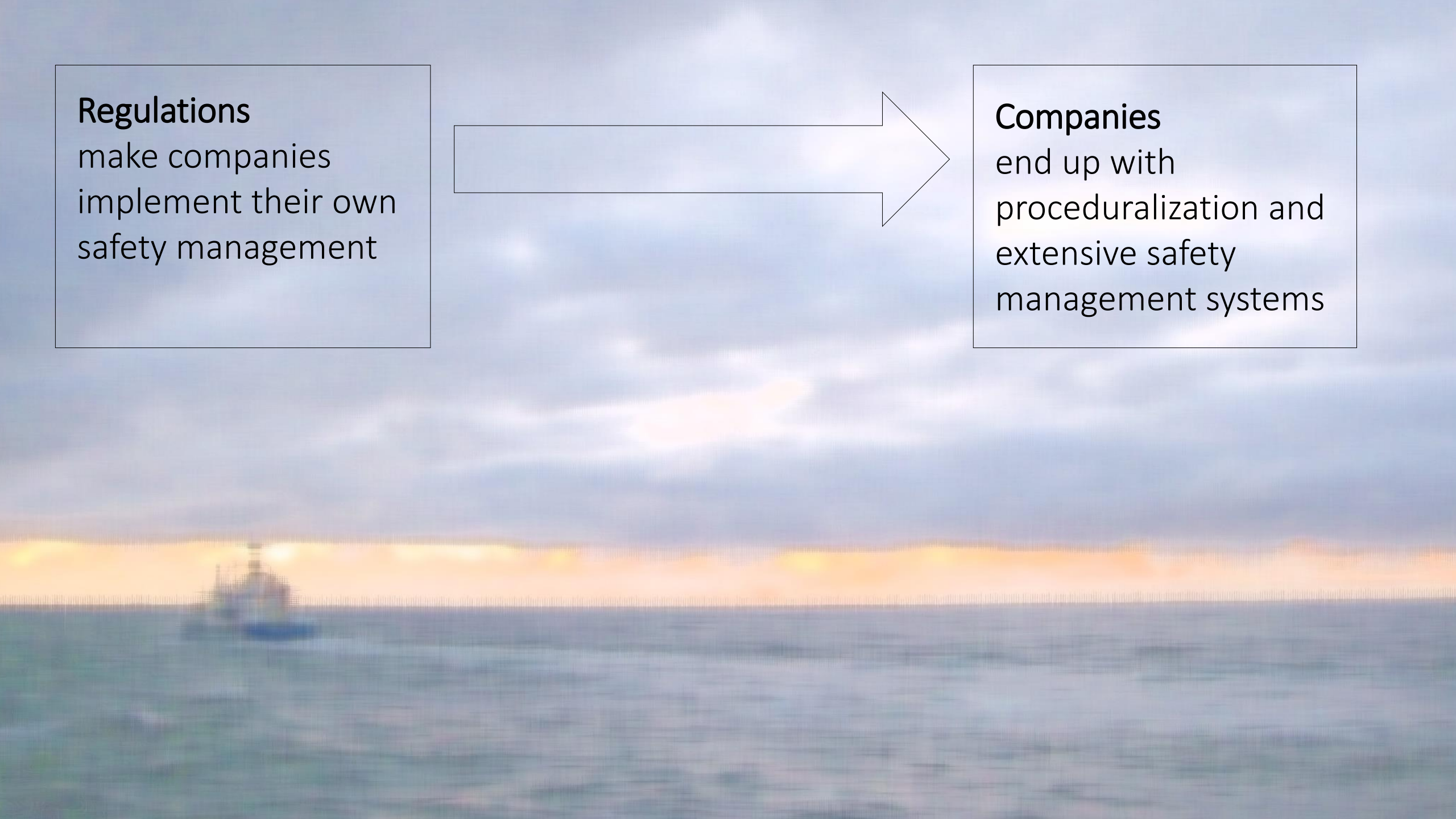
Regulations

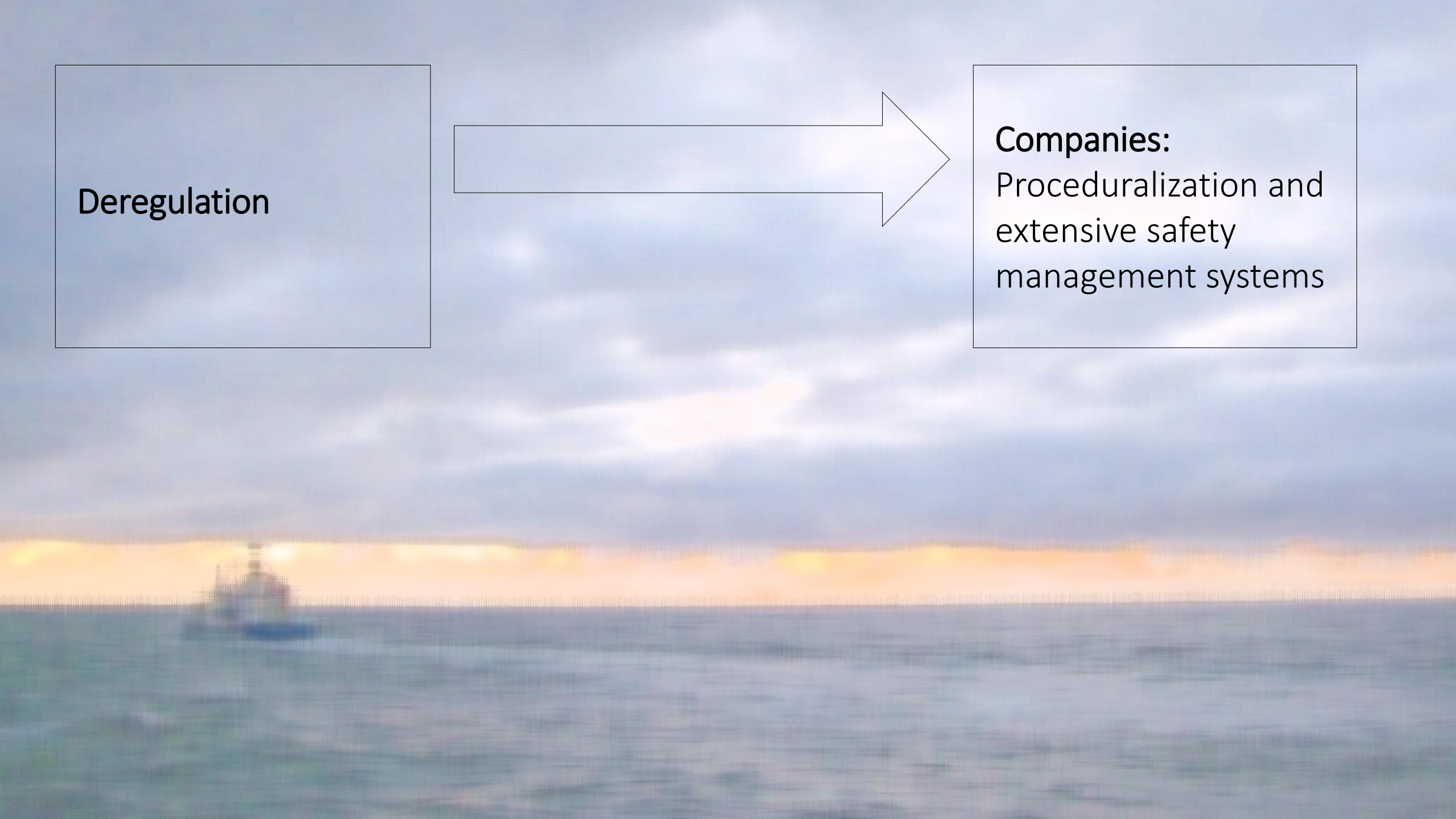
make companies
implement their own
safety management



Companies

end up with
proceduralization and
extensive safety
management systems





Deregulation



Companies:
Proceduralization and
extensive safety
management systems

Deregulation

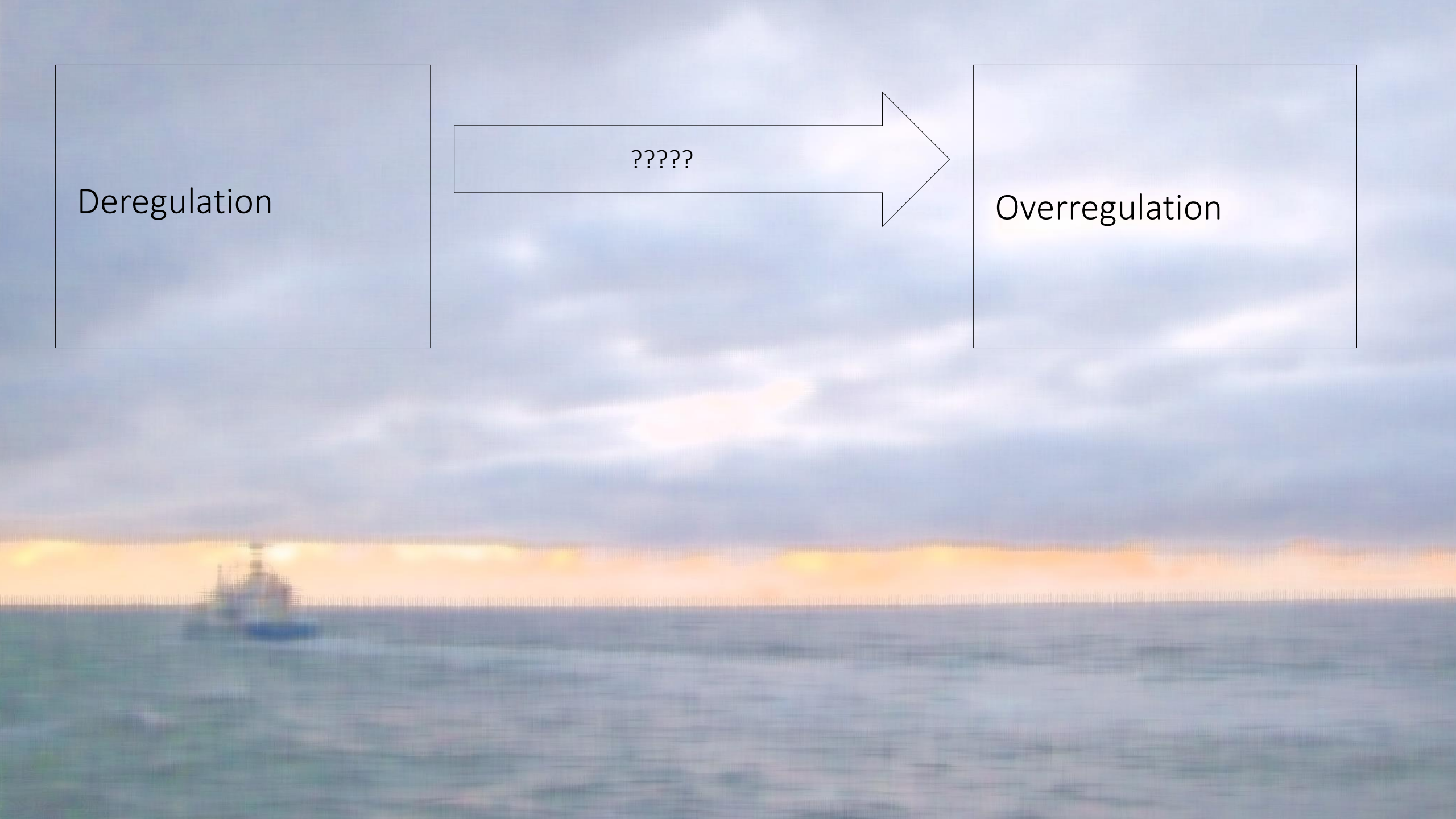


Overregulation

Deregulation

?????

Overregulation



Deregulation

The diagram is set against a background of a cloudy sky at sunset or sunrise, with a ship visible on the horizon. It features three main elements: a box on the left labeled 'Deregulation', a box on the right labeled 'Overregulation', and a long box at the bottom labeled 'Making work auditable'. A large white arrow points from the 'Deregulation' box to the 'Overregulation' box. Below this arrow, a white arrow points upwards from the 'Making work auditable' box towards the space between the two main boxes.

Overregulation

Making work auditable

Deregulation

The diagram features a background image of a sunset over the ocean with a small boat. Two light blue rectangular boxes are positioned at the top, one on the left and one on the right. A large white arrow points from the left box to the right box. Below this arrow, a white arrow points upwards towards the space between the two boxes. At the bottom, there are two horizontal bars: a light blue one above an orange one. The light blue bar contains the text 'Making work auditable', and the orange bar contains the text 'Managerial insecurity and liability'.

Overregulation

Making work auditable

Managerial insecurity and liability

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graph LR; A[Deregulation] --> B[Overregulation]; C[Making work auditable] --> B; D[Managerial insecurity and liability] --> B; E[Audit practices] --> B;
```

Deregulation

Overregulation

Making work auditable

Managerial insecurity and liability

Audit practices

1. Have you seen these mechanisms
 1. in your organization?
 2. in institutions around you – like schools, or healthcare?
2. Is your safety management system – at your vessel/company – mostly **helpful**?
3. Is your safety management system mostly a **problem**?
4. Have you tried to **simplify** your system?

Trends making safety management even harder

- Auditism
- Digitalization and remote operations
- Complex, interorganizational operations

Auditism

- The idea of audits shape how work is structured, performed, or talked about
- Effective audits require quantifiable tasks

Symptoms

- Practices are transformed into standardised auditable tasks.
- Being *auditable* instead of doing core work



Digitalization and remote operations



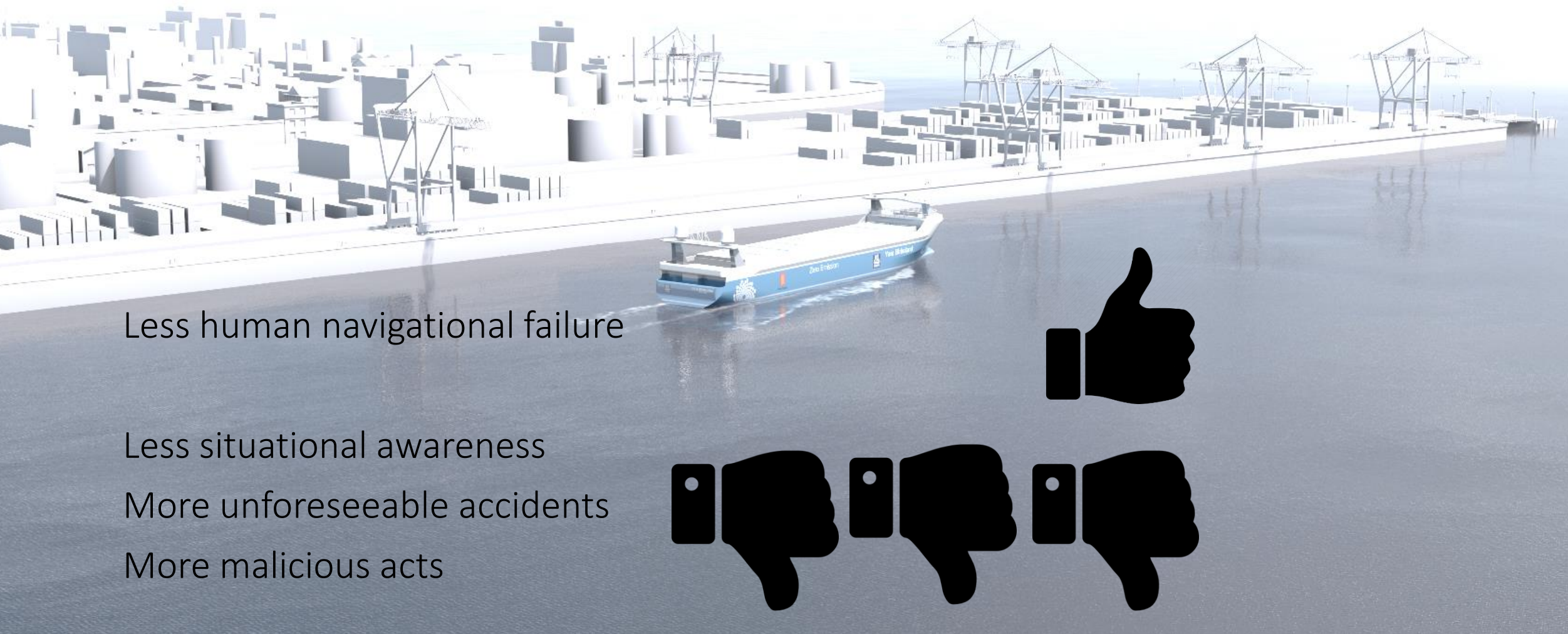


Virtual Ship Intelligence Lab. Photo: Tony Hall/Rolls-Royce





Accidents in remote operations



Less human navigational failure



Less situational awareness

More unforeseeable accidents

More malicious acts



Safety management in the digital era

People still are important!

Safety management is even more important

Good safety management still demands:

- Understanding of roles and flexibility
- Safe practice in focus, not auditability



Inter- organizational operations

High risk operations demand many competences

- Seafarers on different vessels
- Marine traffic surveillance and control room personnel
- Terminal workers
- Managers etc



*“These are at really weather-exposed places, making it more dangerous. It’s heavier work such as **anchor handling of a large fish farm**, for example, and generally heavy tasks where there’s a lot of tension and often mooring, that’s the big, bad wolf. A lot to keep an eye on.”*

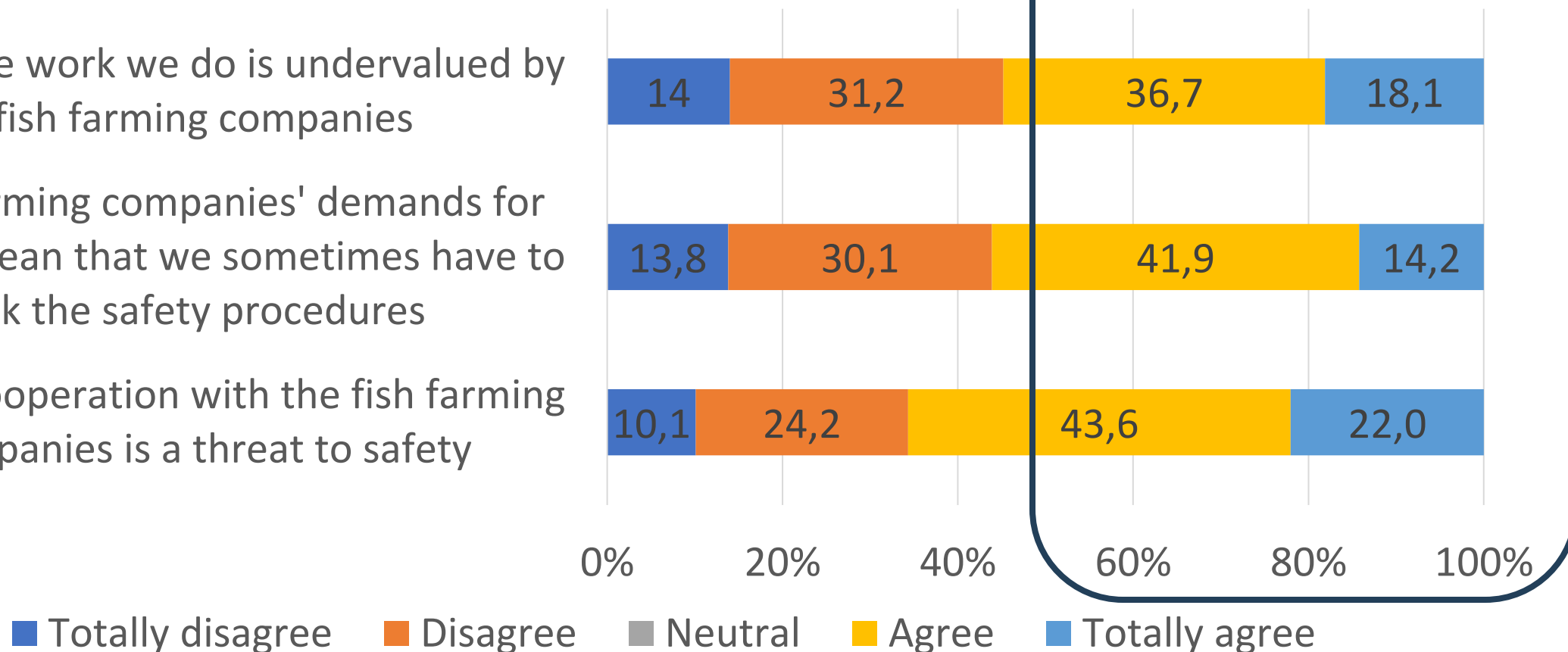
Seafarer, about interorganizational operations in fishfarming



I feel that the work we do is undervalued by the fish farming companies

The fish farming companies' demands for efficiency mean that we sometimes have to break the safety procedures

Lack of cooperation with the fish farming companies is a threat to safety



Challenges

- Inequality and power issues between seafarers and the hiring company. Lack of credit and a being undervalued.
- Production pressure and limited knowledge from hiring company
- Poor cooperation, unclear roles and responsibilities. The seafarers must know different routines, methods and safety procedures.





Safety management in interorganizational operations

Move in the same direction

- Harmonized procedures
- Shared understanding of tasks and roles

- Do you have operations with personnel from other organizations?
- Are seafarers with interorganizational operations present at a conference like this?
- Would a study of interorganizational operations be useful for Swedish seafarers?

Searching for implementation of intention

Safety management is the best idea so far?

- Tasks we don't want
- But also more safety measures

Can we *re-think* how to perform safety
management

and how to audit it?



Positive safety management

1. Useful procedures

- Do it yourselves, not shelfware
- Talk about which procedures are used

2. Sufficient resources on board:

- How can the shore office support the seafarers?



New thinking

- 4. Transfer documentation to shore office
- 5. Documentation does not have to be writing (film, pc-log, engine reports?)
- 6. Change audit traditions
- 7. Rather make a system based on trust? (Is the auditing of value?)



Takk for meg

- Safety management is still a good idea
- Our safety management traditions need change
- We can do it!