

# FIRES ON CONTAINER VESSELS

*Are we sailing blissfully  
to catastrophe?*

Singapore International Safety@Sea  
Week 2021

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**Andrew Moore & Associates Ltd**  
*Fire, Marine, Engineering & Science Consultancy Services  
for Sea & Land Incidents Worldwide*

# WELCOME!



01

## BACKGROUND

X-Press Pearl  
KMTC HongKong  
Ocean Trader

02

## SHIPPING FIRE TRENDS

Misdeclaration  
Packiing and packaging  
Batteries...

03

## SCALING UP

Terminals  
Fire and explosion

04

## SELF-SUFFICIENT FIRE CASUALTY?

New Class notations  
Firefighting technology...

05

## SOLUTIONS

Fire prevention  
Fire alert and suppression  
Fire containment...



## X-PRESS PEARL

- 186 metre
- 2,700 TEU



## KMTC HONGKONG

- 168 metre
- 1,500 TEU





## OCEAN TRADER

- 90 metre
- 210 TEU

# SHIPPING FIRE TRENDS

(1)

MISDECLARATION  
AND BATTERIES

(2)

PACKING AND  
PACKAGING

(3)

MANAGEMENT  
Maintenance  
Crew Training

(4)

CHARCOAL

(5)

SUITABILITY OF  
CODES

Standards  
Vessel size





## X-PRESS PEARL

- 186 metre
- 2,700 TEU

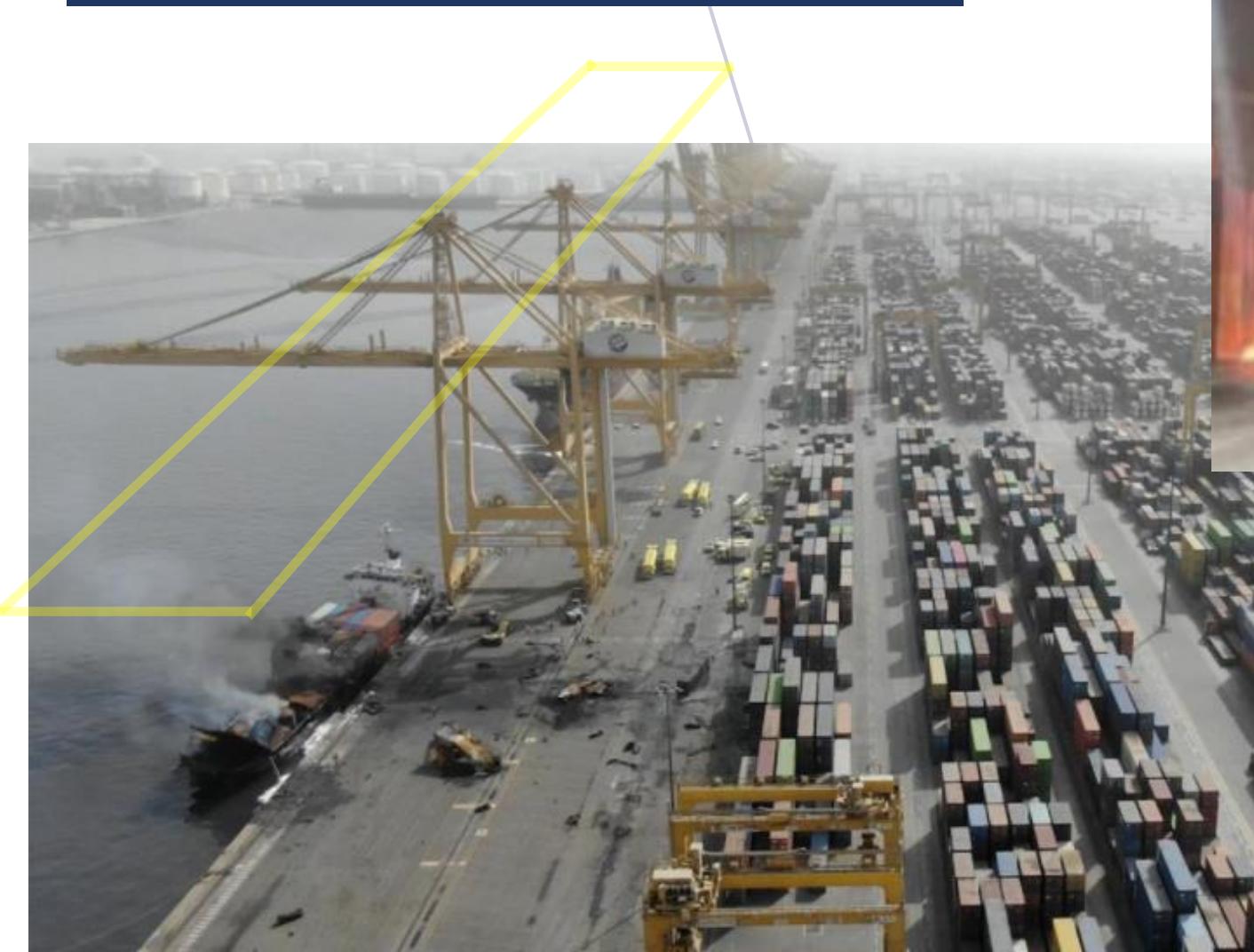


# KMTC HONGKONG

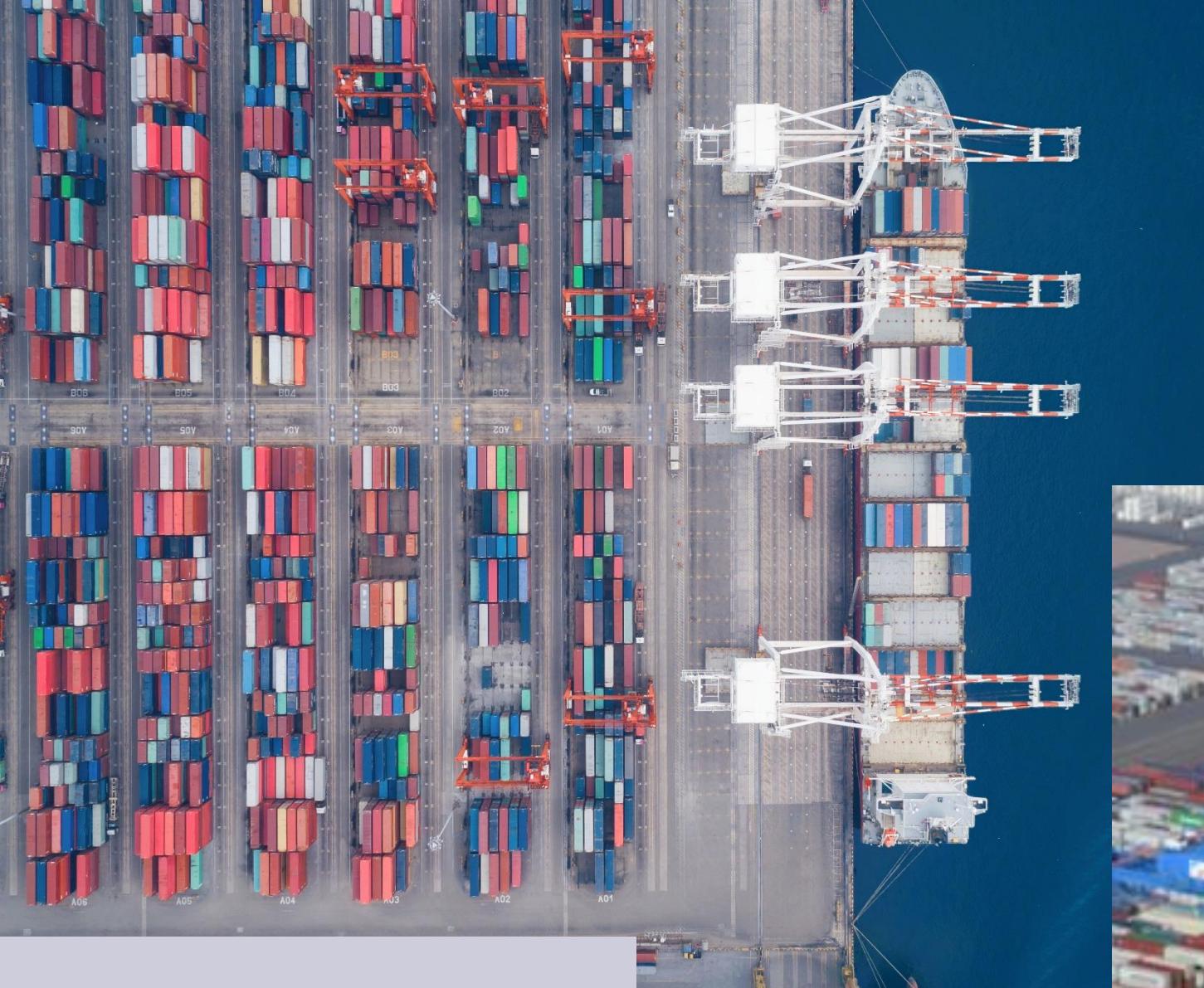


# OCEAN TRADER

- 90 metre
- 210 TEU



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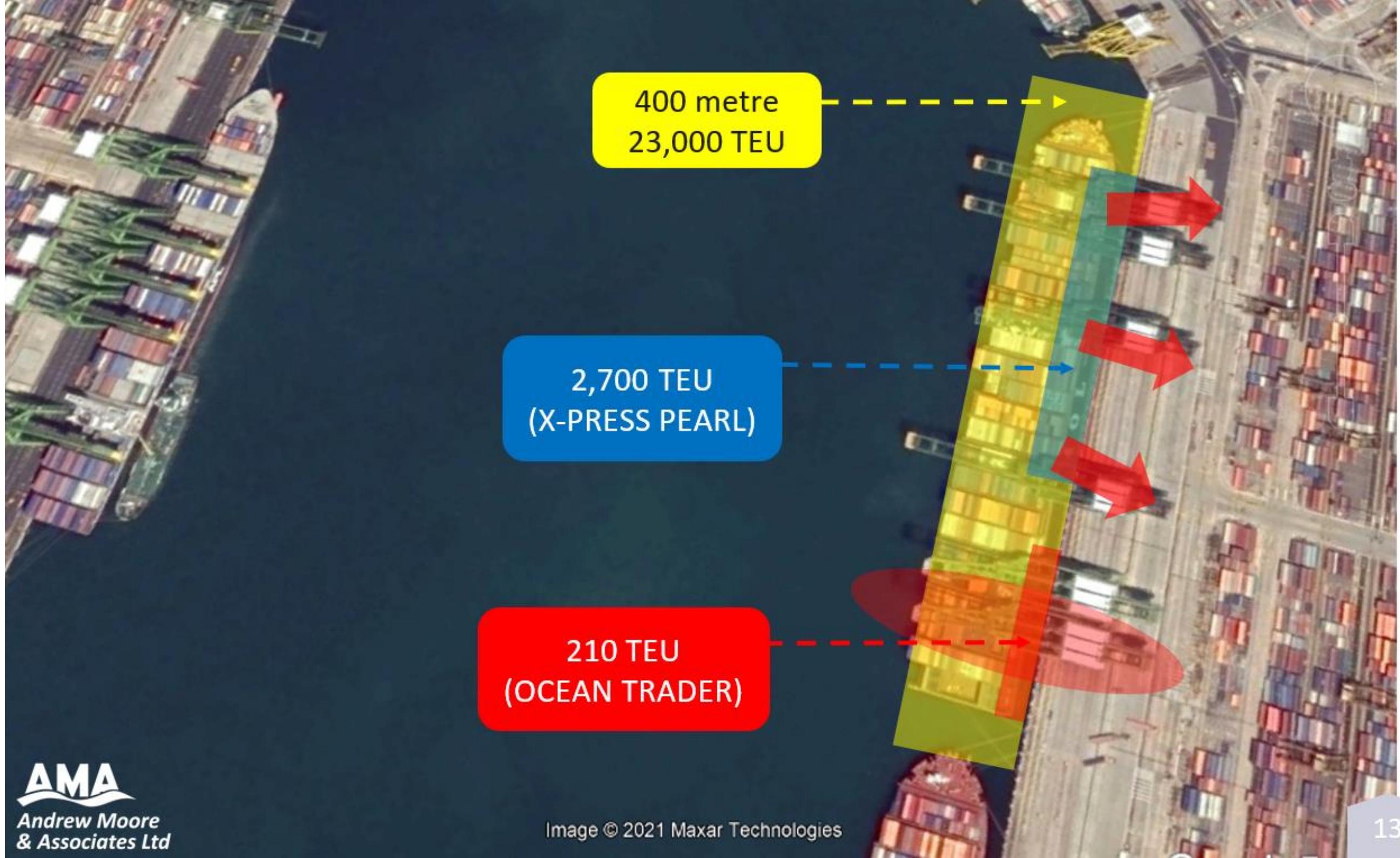


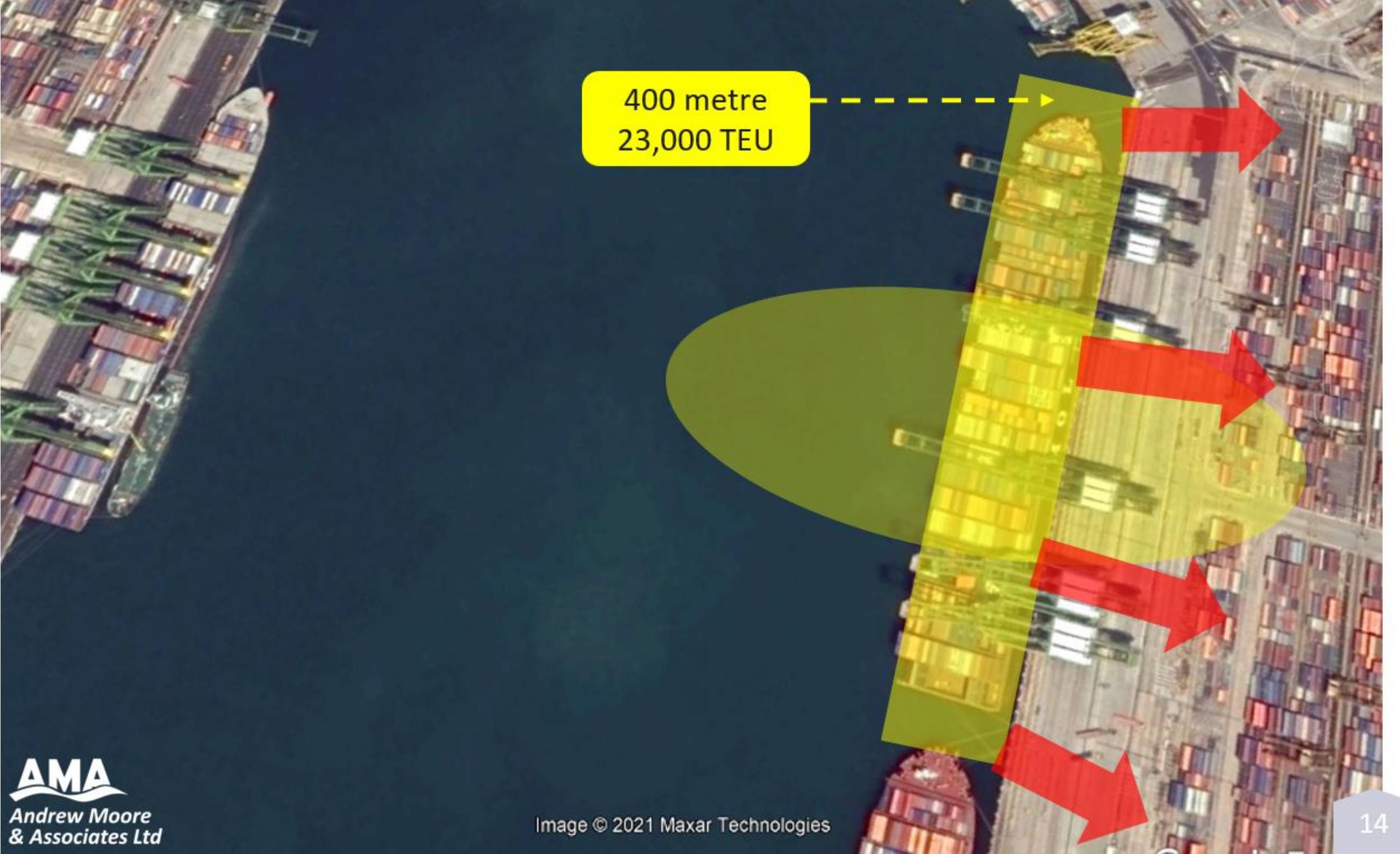
# SCALING UP

*400 metre | 23,000 TEU at Terminal*

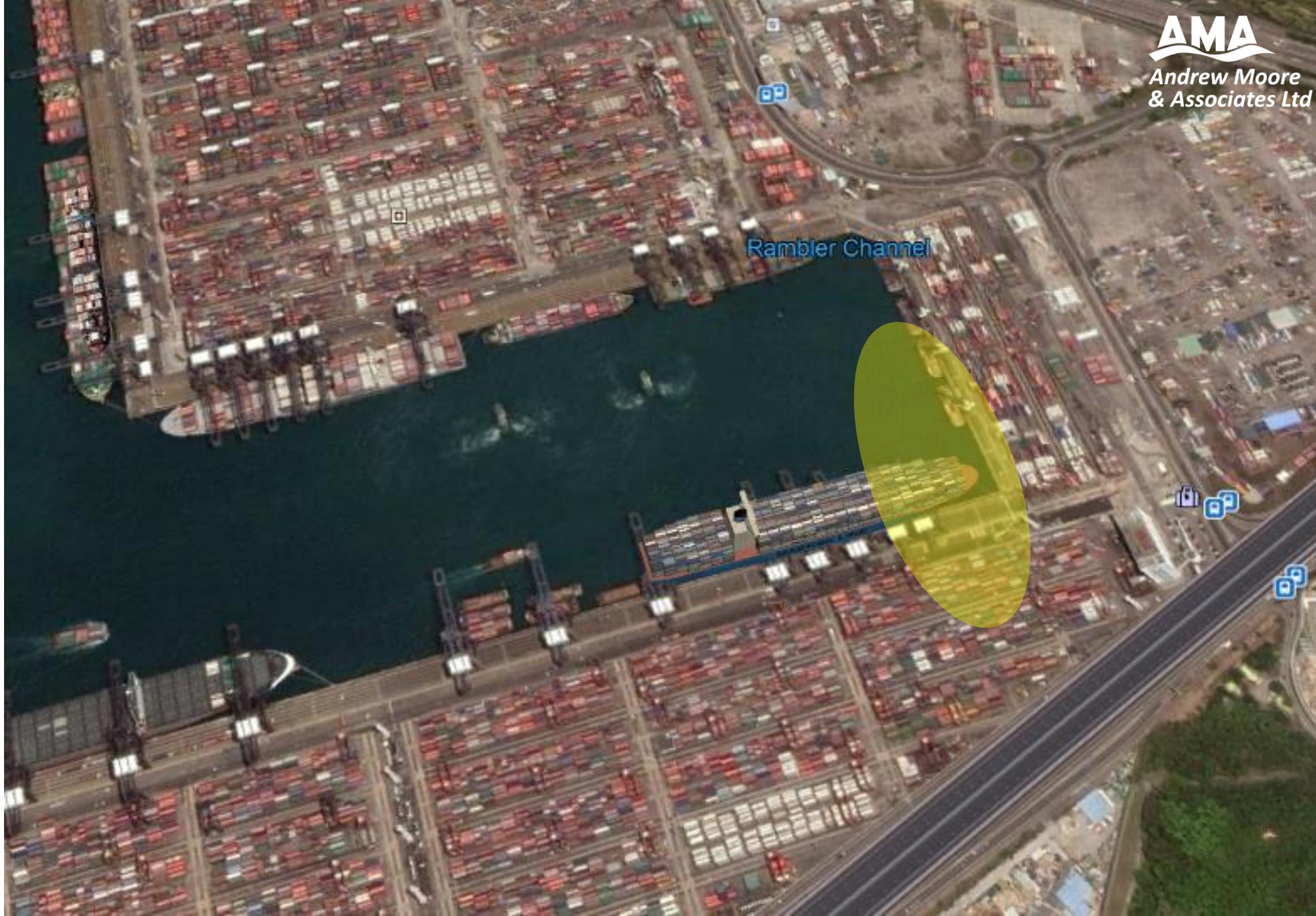




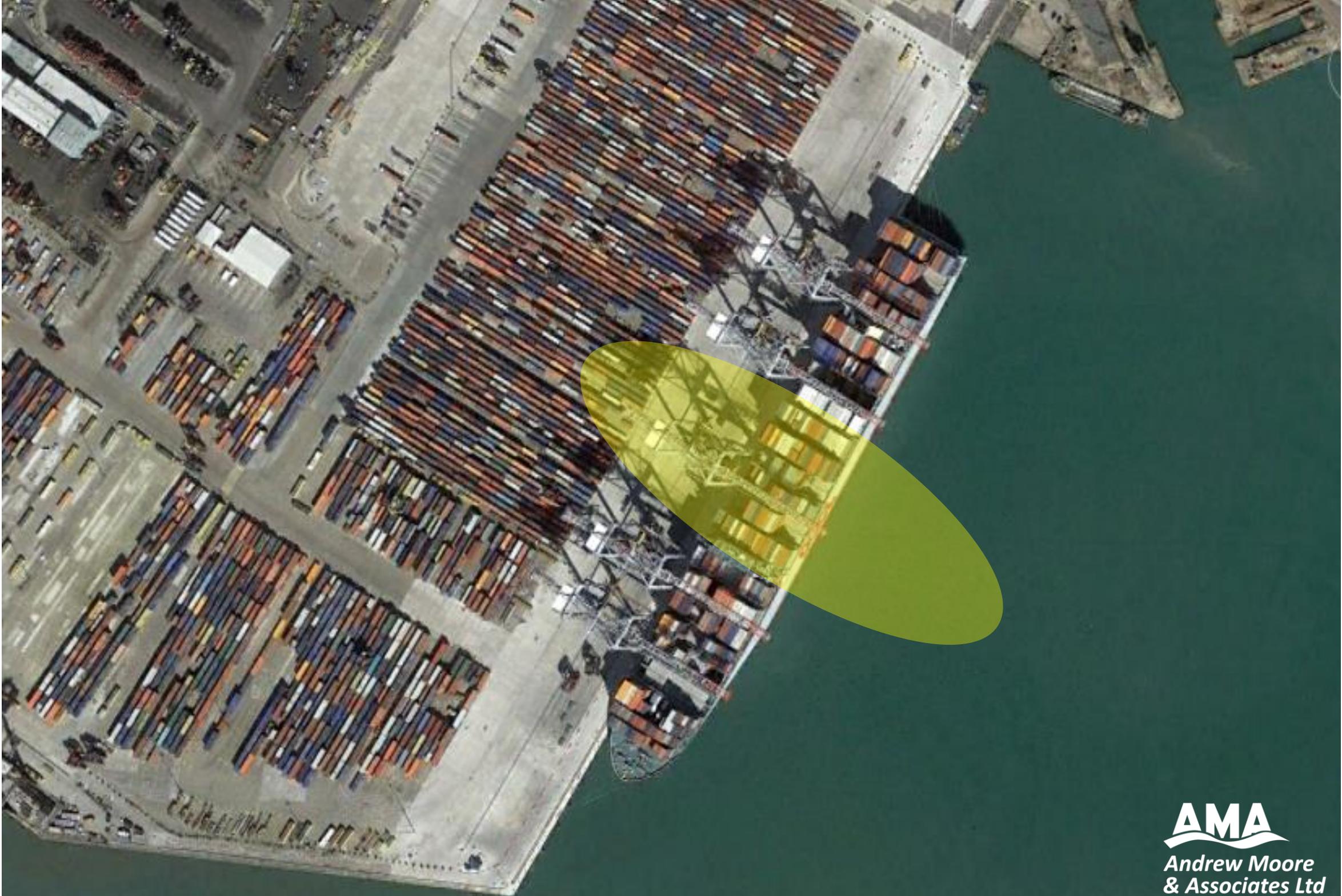




370 metre vessel

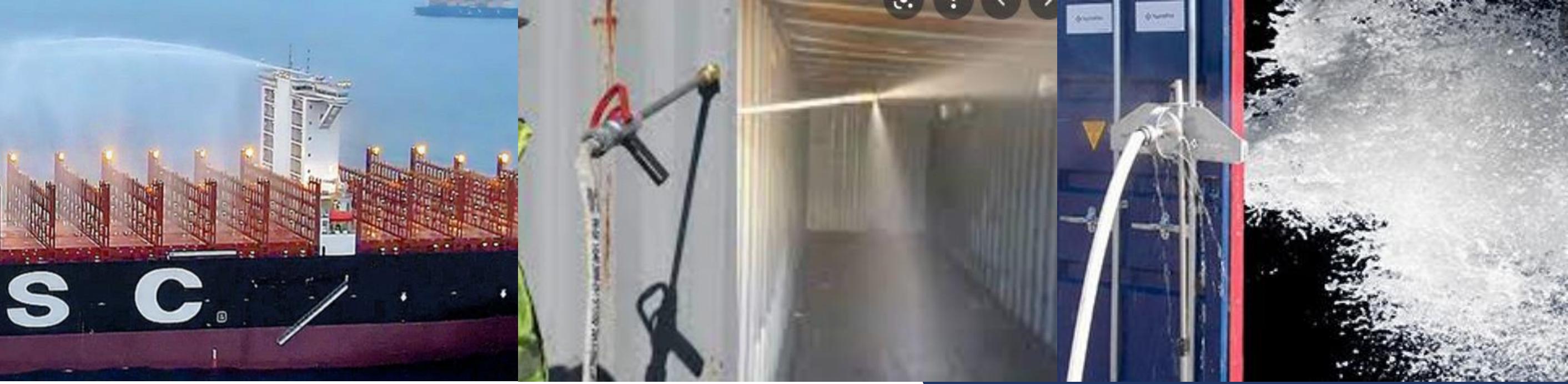


# 370 metre Vessel





# SELF-SUFFICIENT FIRE CASUALTY?



## SELF-SUFFICIENT FIRE CASUALTY?

- New class notations
- Advanced firefighting technology
- Temperature scanning systems
- Water canon
- Ship-specific systems

# SOLUTIONS

## 1) Fire Prevention

Must assume misdeclaration  
or future trend

## 2) Fire alert and suppression

Automatic detection, CO<sub>2</sub>, water  
mist, foam, monitors, dry  
powder....

## 3) Fire containment

Compartmentation  
Fire resistance  
Isolation



# SOLUTIONS AT SOURCE

## – The Container

### 1) Fire Prevention

- Cargo intelligence –  
Policing/monitoring at stuffing.
- Video and stills

### 2) Fire detection

- Remote 24hr monitoring of heat  
and gas

### 3) Fire suppression

- CO2, powder, mist, etc.

### 4) Fire containment

- Fire resistance, isolation





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to catastrophe?





*Fix the container!*



# OUR LOCATIONS



**AMA**  
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# THANK YOU

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