

Presentation by  
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ICHCA International

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**Global Shippers Forum & ICHCA  
International Conference & Exhibition  
Melbourne, Australia 8 to 11 May 2018**

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**MELBOURNE**  
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Victoria  
Australia



**CITY OF  
MELBOURNE**

# Ports & Terminals Gearing up to Face New Challenges.....

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# ICHCA INTERNATIONAL

**The voice of global cargo handling**

PREMIUM MEMBERS:



# How it used to be done.....



**BI**

What did that mean?



Smarter ways of doing things.....





**AI**

What does it mean?

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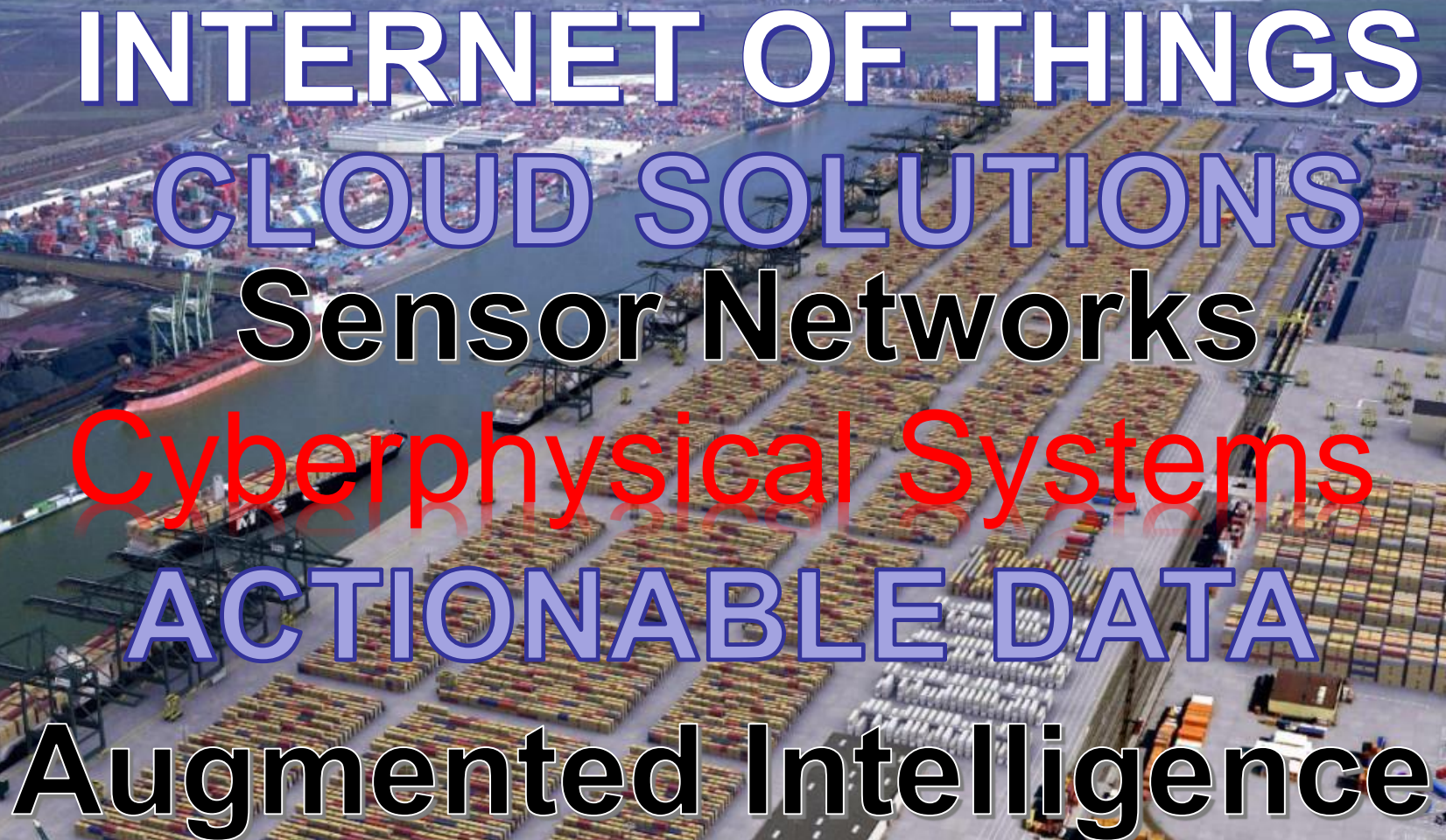
How long did it take.....

**35**

**Days**




But first some Buzzwords !



**INTERNET OF THINGS**  
**CLOUD SOLUTIONS**  
**Sensor Networks**  
**Cyberphysical Systems**  
**ACTIONABLE DATA**  
**Augmented Intelligence**



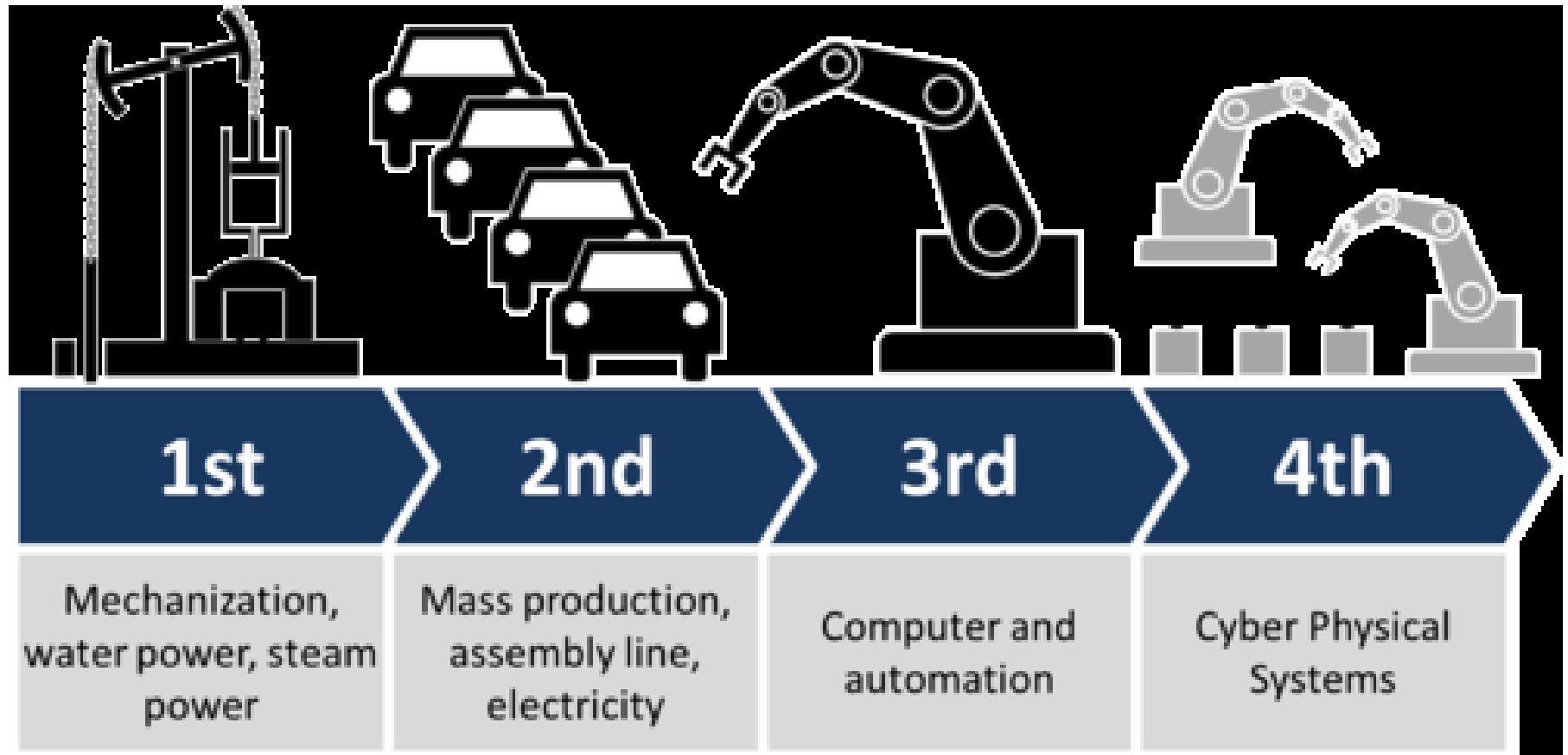
What next? Lets look at some Buzzwords !



**Industry 4.0**  
**digitalization**  
**BIG DATA**  
**Hyperloop**  
**BLOCKCHAIN**

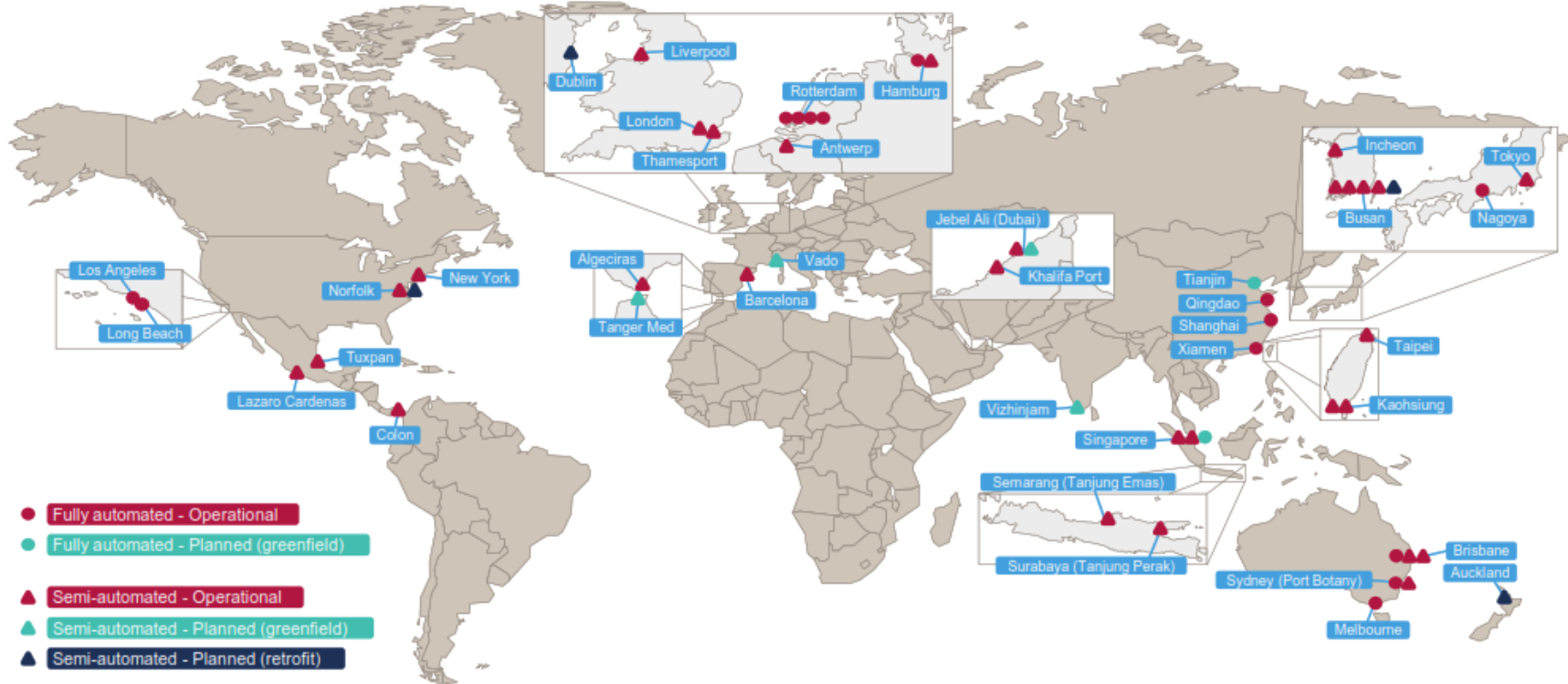


# Industry 4.0 !



# How many terminals are automated?

Figure 1: Existing and planned automated container terminals



# What is driving change?



Challenge of mega-vessels  
Productivity and price  
Automation  
Availability of CAPEX  
Demographics  
Re-structuring of the industry  
New Technologies  
Environmental Sustainability  
Global Branding and CSR  
De-Regulation/Inspection decline



# What are the challenges we face?



## Vessel Size

How big can they get?

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# Vessel size?

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## How big can they get?



# What is driving change?

24,000 teus!



www.shutterstock.com · 39632596

MSC's "Megamax 24" will have

12 tiers in hold

12 on deck

24 container bays in length

24 containers width

23,356 teu

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# Productivity?

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# The 5 “S”s

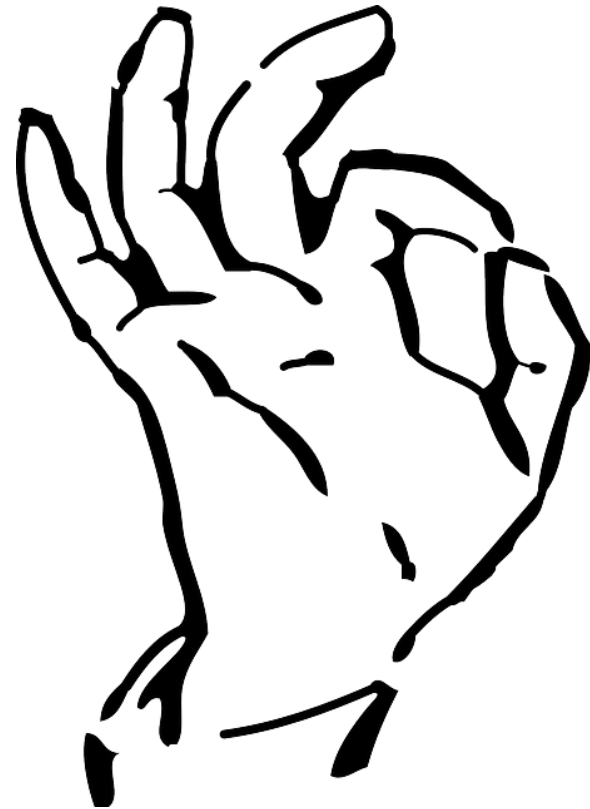
Safe

Skilled

Secure

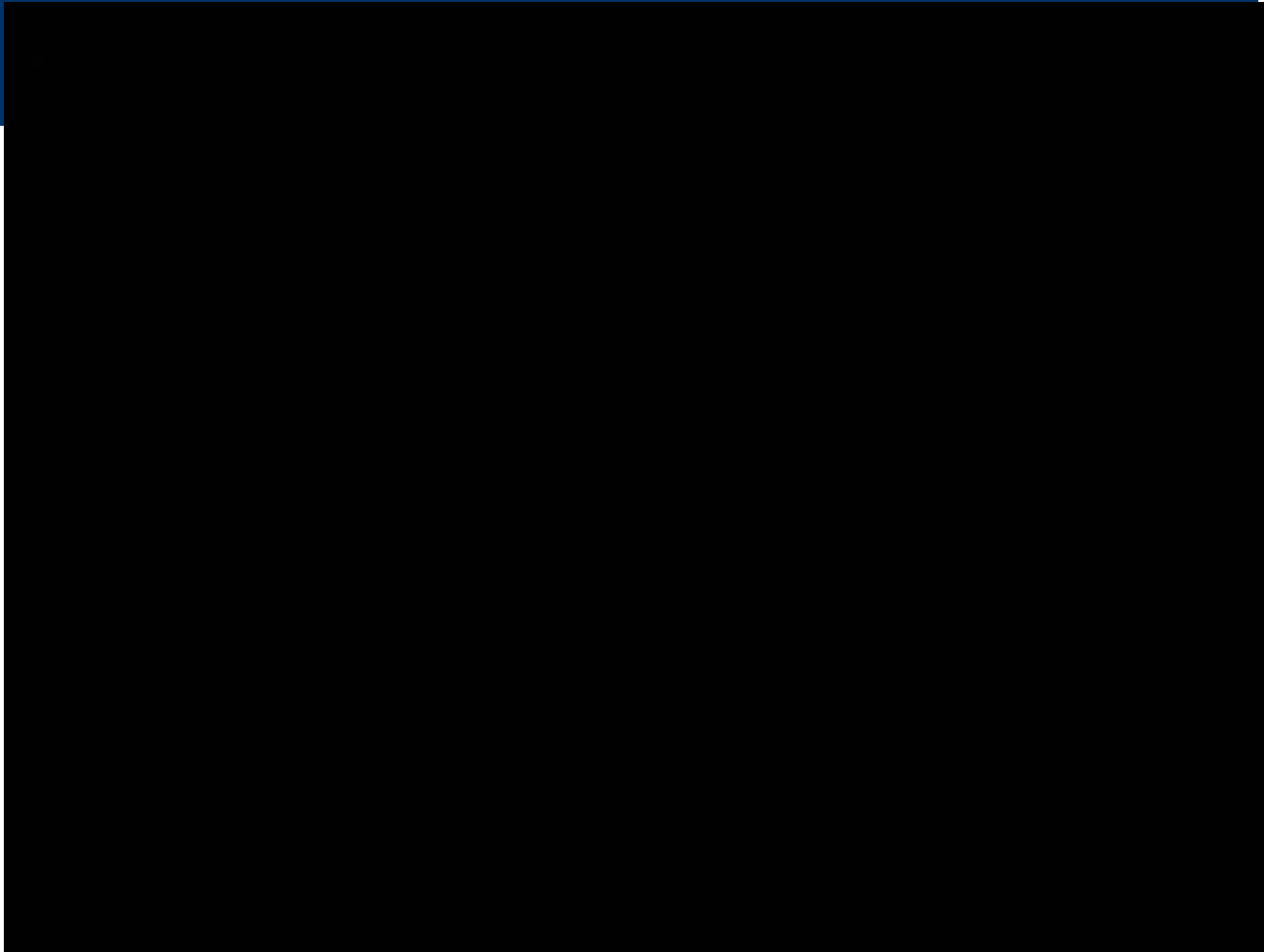
Smart

Sustainable



Was it safe?

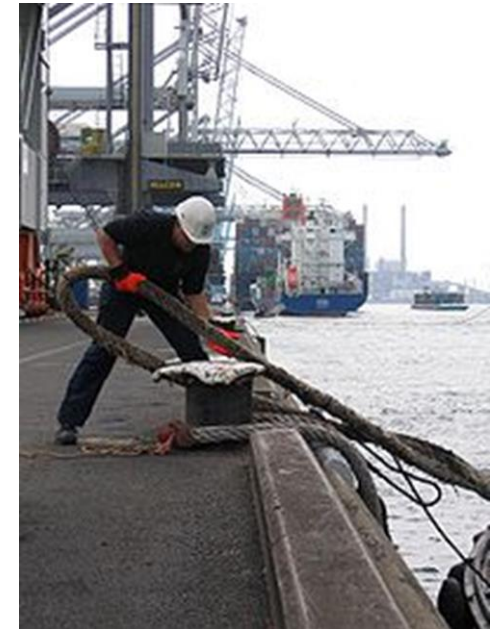
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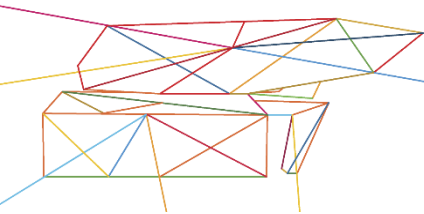
But we still have issues.....

## SAFE ?



Many of them.....

SAFE?

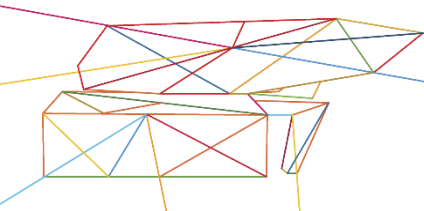




Non- dangerous goods can become dangerous !

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SAFE?



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established expertise

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So we need good systems and good information...

## SAFE?

### Minimum Safety Recommendation for Yard Equipment Safety features @ Straddle Carrier



© REX-HAP: Qulirky China News

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It is still not safe.....



So where do we develop that Internationally?

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SAFE?



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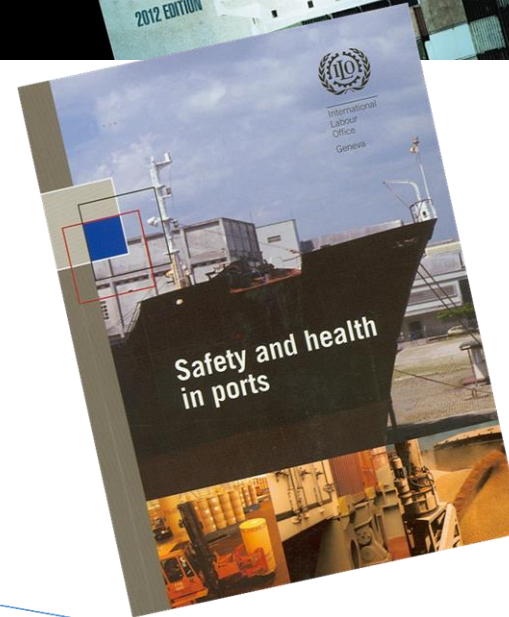
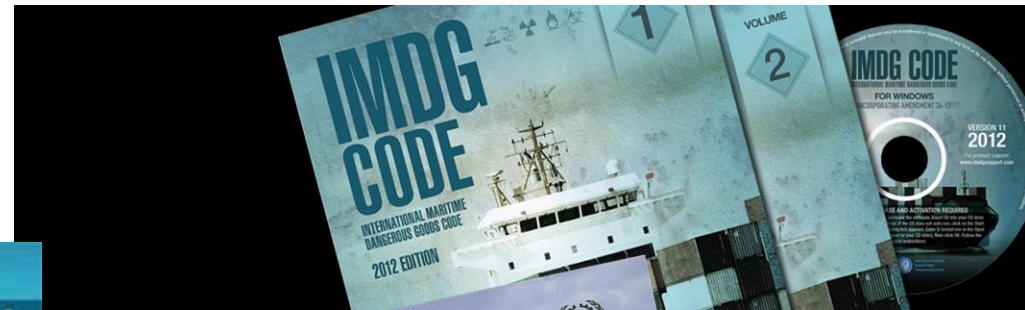
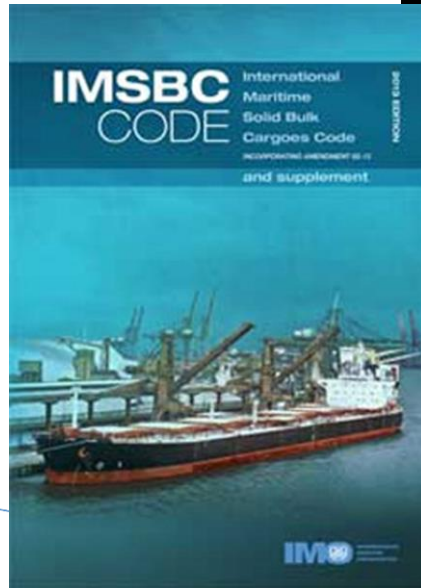
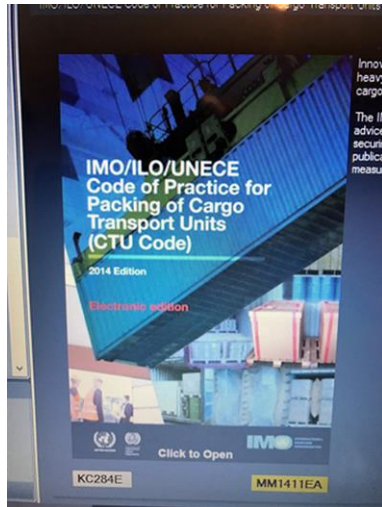
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And what is produced.....?

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SAFE?



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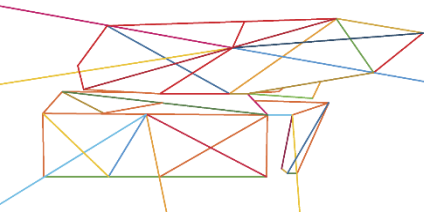
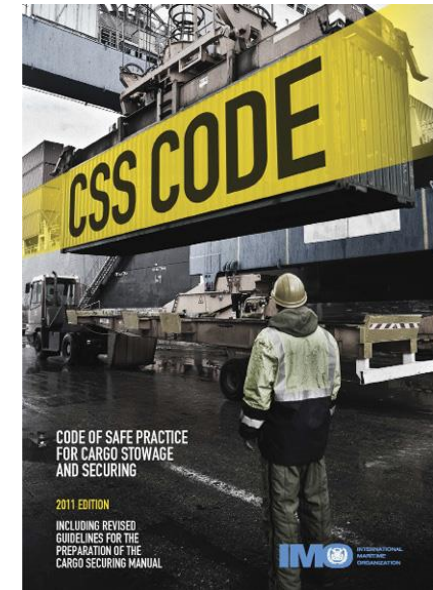
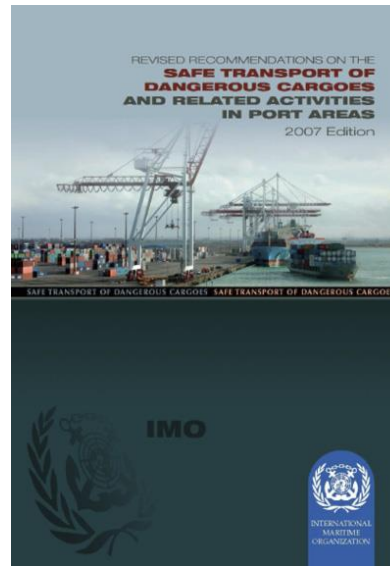
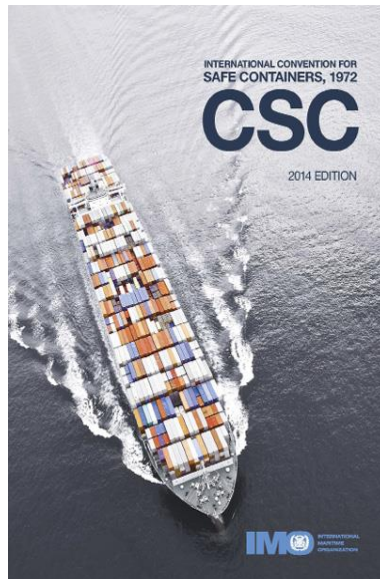
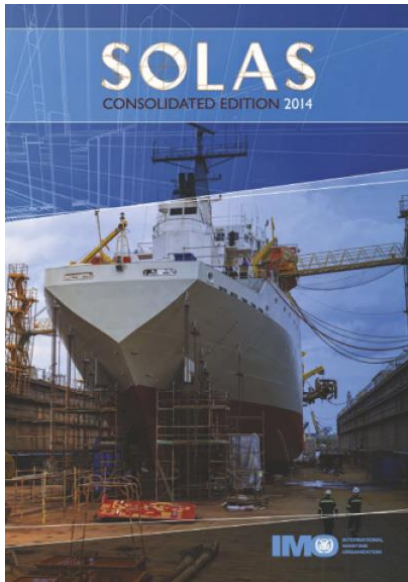
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A plethora of legislation.....

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## SAFE and LEGAL?

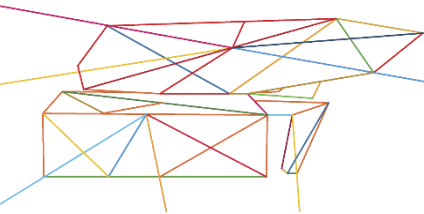
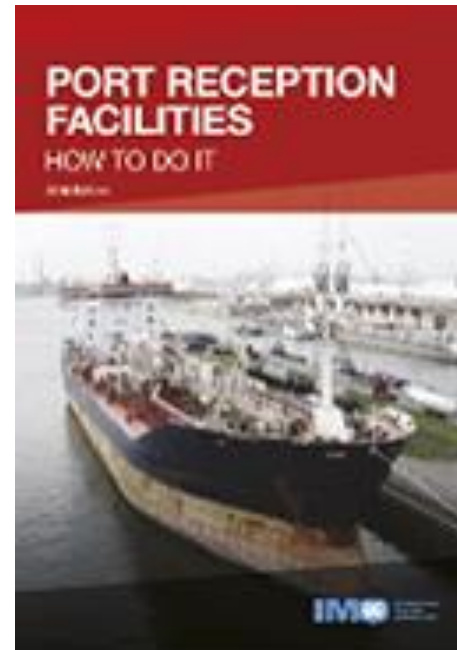
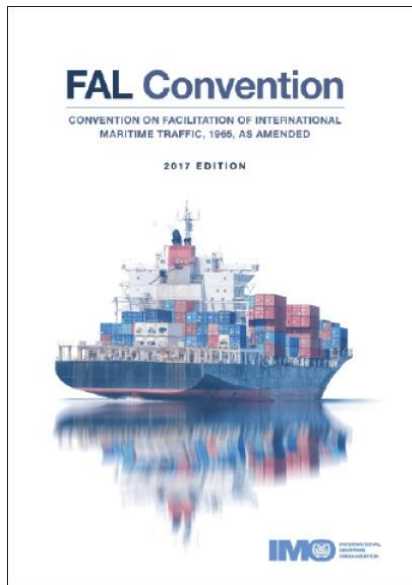


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And still more.....

## LEGAL !



# Cyber Risks?



So how do we communicate all of this?

LEGAL !

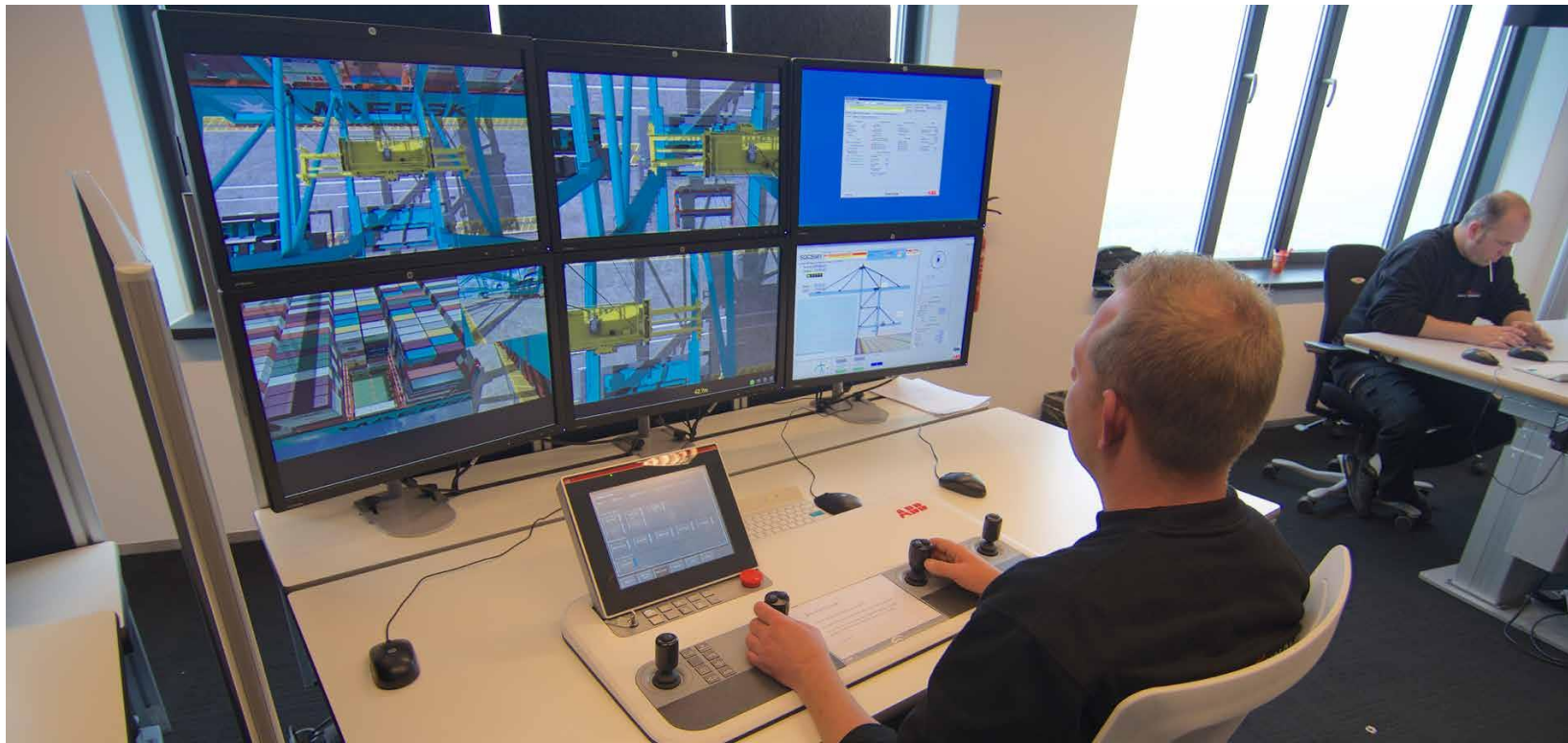


Maritime Single  
Window

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# Better ways of doing things !



# Upgrading older equipment



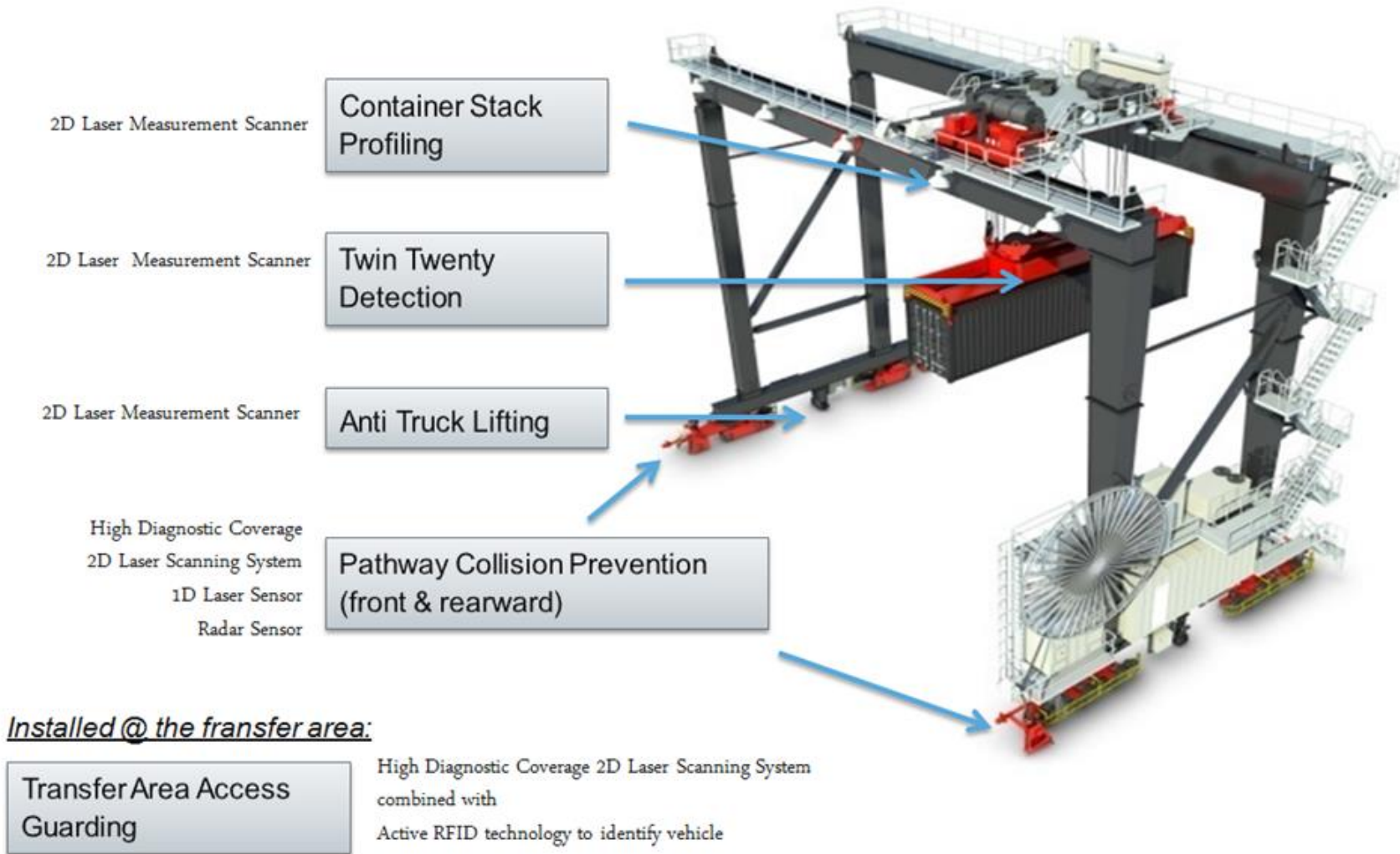
But what about upgrading our people?!

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Technology is advancing....





# Upgrading older equipment

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# And the future is nearly here.....

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# And the future is nearly here.....

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So which way do we turn for guidance? .....



# Information Instruction Training

So which way do we turn for guidance? .....

MESHP/2016/7/Rev. 1

INTERNATIONAL LABOUR ORGANIZATION  
Sectoral Policies Department

**Code of practice on safety and health  
in ports (Revised 2016)**

Meeting of Experts to Adopt a Revised Code of Practice  
on Safety and Health in Ports

Geneva, 2016

INTERNATIONAL LABOUR ORGANIZATION



Sectoral Activities Department

TMEPS/2011/10

**Guidelines on training in the port sector**

# Is training enough?



**Even training can let you down!**





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What does it mean?

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# The future is not far away!

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# Thank you

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