

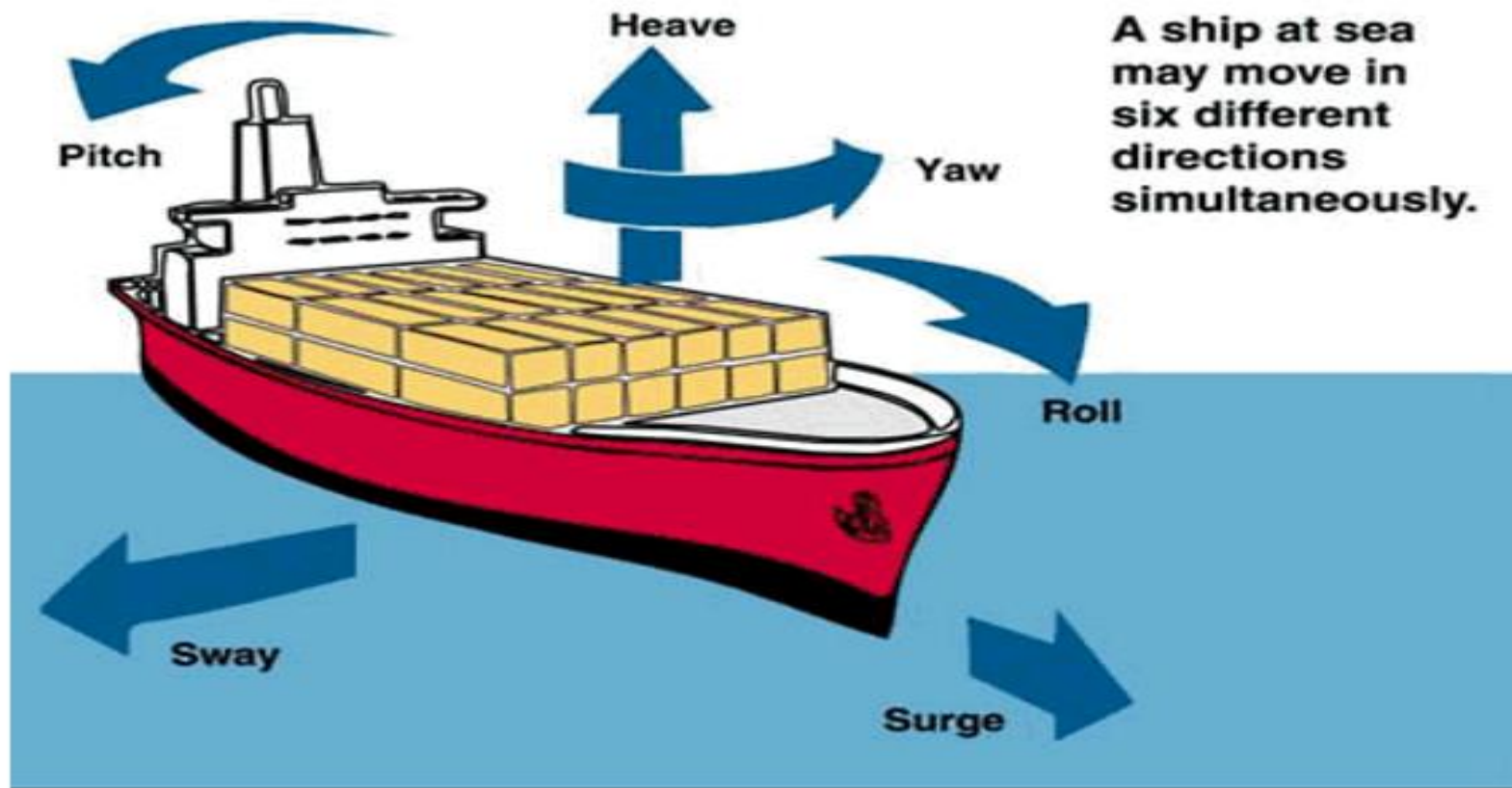


Stakeholder workshop on lost containers

EU maritime safety
considerations

Brussels 4 July 2019

A complex issue:



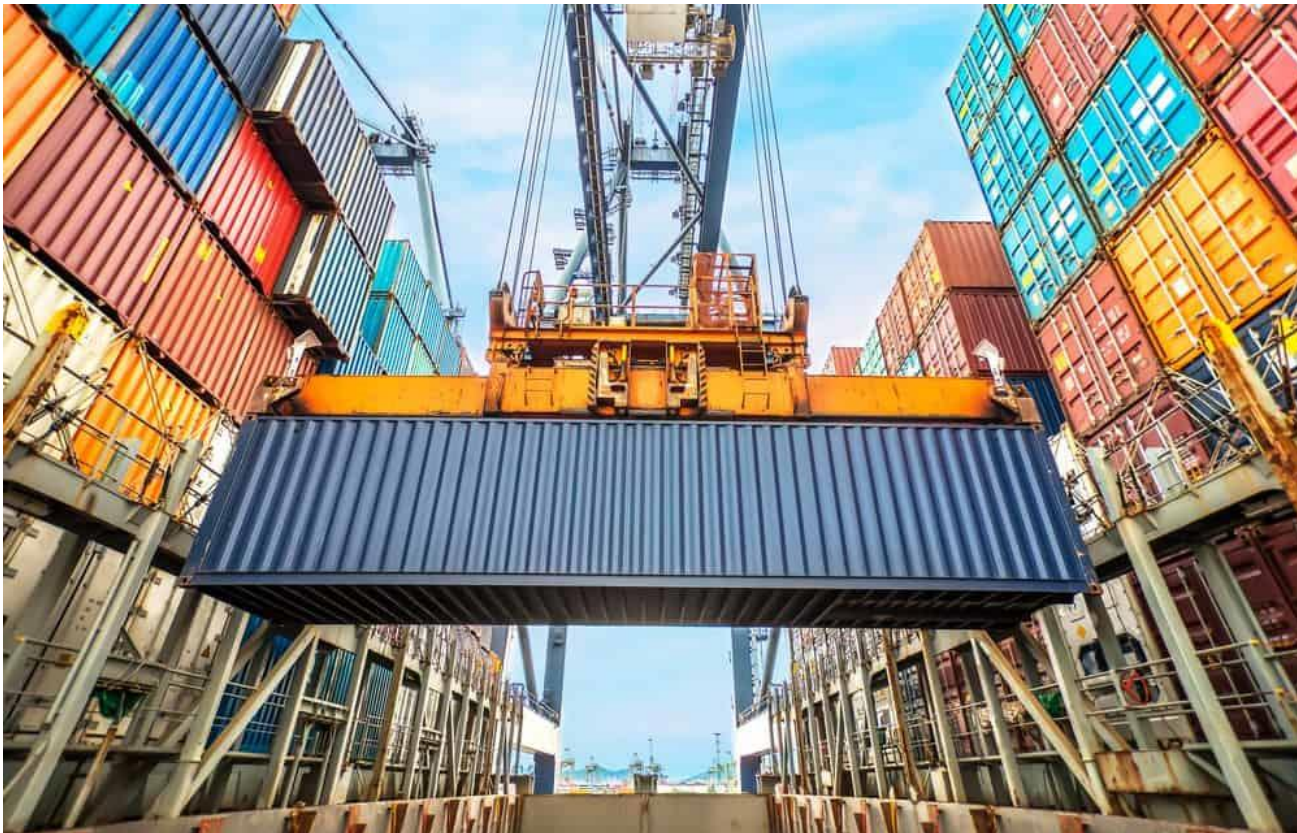
Considerations

- **Loading and securing of cargo**
- **Verification of container mass**
- **Misdeclaration of cargo**
- **Ship design – maximum acceleration criteria**
- **Strength of containers**
- **Twistlocks and lashing equipment**
- **Accident investigation**
- **Insurance and liability**

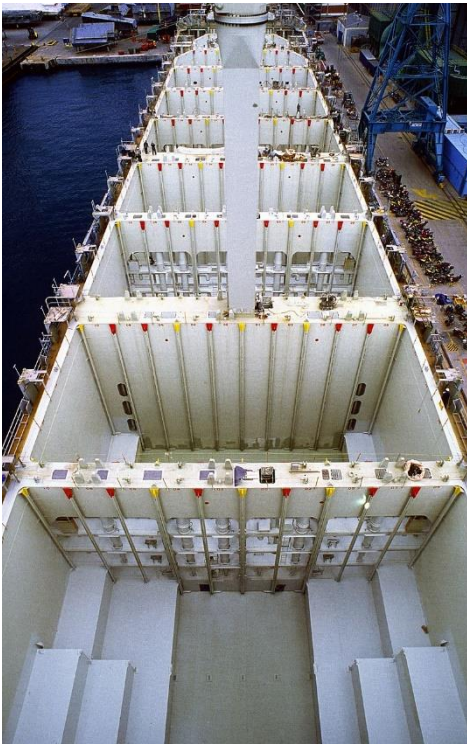


Commission
européenne

Cargo loading



A three dimensional puzzle



Vessel specifications/stability

Bay – row – tier

Vessel route – ports of call

Cargo already on board

Container type/size/weight

Dangerous/hazardous goods

IMO rules



SOLAS Chapter VI (Carriage of cargoes and fuel oils) Reg. 5. refers to the Code of safe practice for Cargo Stowage and Securing (Res.A714(17)).

SOLAS Chapter VII, Reg. 5 prescribes that "a ship carrying cargo transport units etc., shall have on board a ship specific cargo securing manual approved by the administration", IMO with ILO and the UN Economic Commission for Europe (UNECE) Code of Practice for packing of cargo transport unit, 'CTU Code', November 2014) for the packing of cargo transport units.

CTU Code outlines the specific procedures and techniques such as equal distribution of weight, proper positioning, blocking and bracing according to the type of cargo.

Verification of container mass

A 2014 SOLAS amendment requires mandatory container weight verification, making the shipper responsible for obtaining the gross mass of a container and providing the verified gross mass (VGM) to the ship's master in reasonable time prior to loading.

VGM consists of container, cargo and dunnage.

Container means standard containers, tanks, flat racks and bulk containers.

The carrier is responsible for relaying the VGM to the terminal.

Carriers **WILL NOT LOAD** containers without VGM.

Misdeclaration of cargo

Compromises safety on board, and undermines attempts to appropriately stack and secure containers to prevent their loss.

The number of fires on board boxships has been increasing rapidly in the last decade, reflecting the increasing number of containers transported. Cargo fires represent potentially catastrophic risks.

Most container fires are associated with cargo misdeclaration, making correct declaration the first line of defence against the risk of fire.

Ship design – maximum acceleration criteria

When a ship is rolling, objects in higher locations on board the ship travel longer distances.

As the objects which are higher have to cover longer distance during the same time, the linear velocity must be larger.

This can have a serious negative impact on containers low down in a stack and by consequence on the integrity of the stack itself.

This issue is being addressed in the IMO second generation Intact Stability code by the maximum acceleration failure criteria.

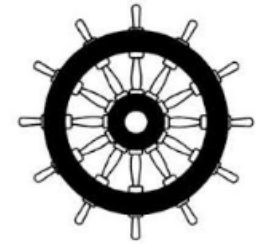
Strength of containers



ISO standard ISO 1496-1, establishes the required stacking strength (maximum superimposed mass) for standard containers at 192,000 kg. Increased in 2005 to 213,360 kg. This weight was maintained in the latest revision of the ISO standard (1496-1 (2013)).

The Convention for Safe Containers (CSC) stipulates a stacking strength below which a container shall be considered as having limited stacking capability. However, this figure has not been updated from the original figure of 192,000 kg.

While most containers are built to a stacking strength of 216,000 kg there are still containers being produced/in service to the lower standard and a need to update the CSC standard



Containers and the Marine Equipment Directive



Directive 2014/90/EU on marine equipment

Harmonises the safety rules relating to marine equipment on board of EU flagged ships through the uniform application of the international instruments.

Only equipment certified after successful third party testing can be placed on any EU flagged ship.

Size of EU fleet: approx. 11000 ships/over 200m GT.

Contains the rules for certification through Notified Bodies and market surveillance by Member States.

Lashing equipment

In order to ensure that only lashing equipment of a sufficient quality is placed on board, an IMO requirement for such equipment to be tested in accordance with an appropriate testing standard such as ISO 3874:2017, where appropriate could be considered.

The equipment would have to be approved by a flag state Administration.

If IMO required flag state approval, lashing equipment could be brought into the scope of the MED and would be marked with a wheel mark after successful conformity assessment.

Accident investigation

Directive 2009/18/EC

Scope: accidents which

- (a) involve ships flying the flag of one of the Member States;
- (b) occur within Member States' territorial sea; or
- (c) involve other substantial interests of the Member States.

Obligations on Member States to:

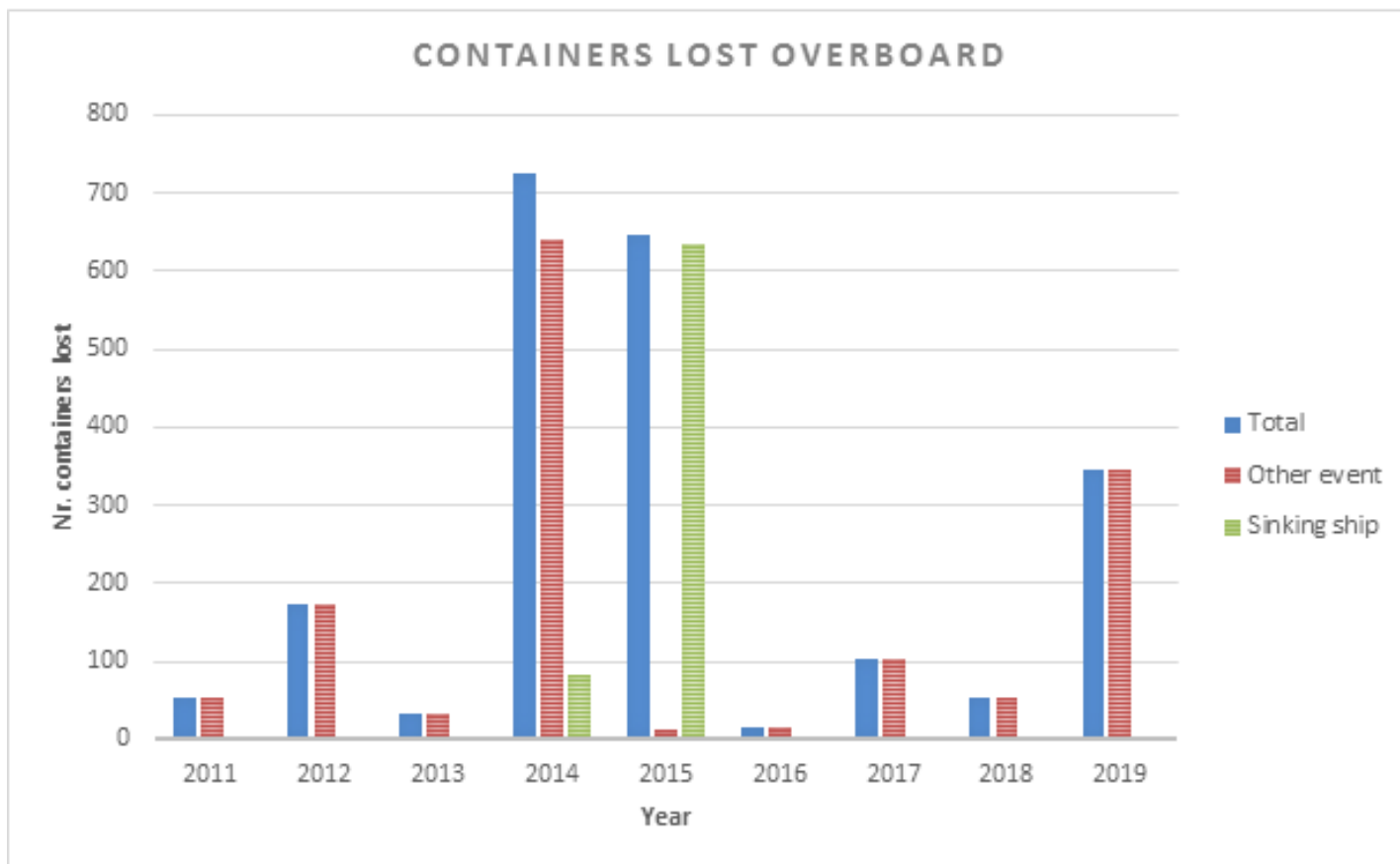
Establish independent, professional investigative bodies
Carry out an investigation of all **very serious marine casualties** and a **preliminary assessment** of all **serious casualties**.

Publish a report (or interim report) within one year.

Investigate using a **Common methodology**

Populate the **European Marine Casualty Information Platform (EMCIP) database** with information **on marine casualties and incidents** falling within the scope of the Directive.

EMCIP data on lost containers



Lost containers June 2011- March 2019

- *Current EMCIP taxonomy is not designed for specific reporting of lost containers (overboard or "exceptional event"). The loss of container is recorded under "loss of containment". It is therefore planned to update the EMCIP taxonomy.*
- *Focus was given to loss of container overboard or loss of container due to the sinking of the ship.*
- *50 occurrences are included in graph. Includes MSC Zoe but does not include MV Grande America (365 containers).*
- *6 reported occurrences didn't indicate the number of containers lost, however for 4 of them it was possible to find values in the commercial sources. For the remaining 2, a notional value of 2 containers lost was attributed.*
- *EMCIP data to March 2019 includes a total of 2,514 containers were lost overboard, giving an average of 324 containers per year.*

Insurance

Directive 2009/20/EC

- **Compulsory insurance** for all ships entering a maritime area under the jurisdiction of a Member State.
- **Cover:** ceilings set out in the Convention of IMO on the Limitation of Liability for Maritime Claims (1996 version)
- When no certificate the ship may be **detained or expelled**

Nairobi International Wreck Convention

Entered into force in April 2015.

Provides a legal basis for coastal states to remove or have removed from their coastlines wrecks, which pose a hazard to the safety of navigation or to the marine and coastal environments.

Provides a broad definition of what constitutes a 'wreck', which can be interpreted as including lost containers.

Makes the ship-owners financially liable and require them to take out insurance or provide other financial security to cover the costs of wreck removal.

Nairobi International Wreck Convention

Provides States with a right of direct action against insurers.

Includes a reporting requirement for wrecks within a jurisdiction's exclusive economic zone that also applies to containers lost within that area.

Signed and ratified by 41 contracting countries, representing around 70% of the world fleet in GT.

EU Member States are encouraged to ratify the Convention - only 14 have done so up until now

Applies to the EEZ, but does not apply in international waters. Opt -in for territorial waters.

Thank you for your attention !

<http://ec.europa.eu/transport/modes/maritime>

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