

# Sea-PeAce

Consideration about IMDE code. The Criteria of HNS shipment of vessel



# INDEX

## 01. BACKGROUND

- IMDG code

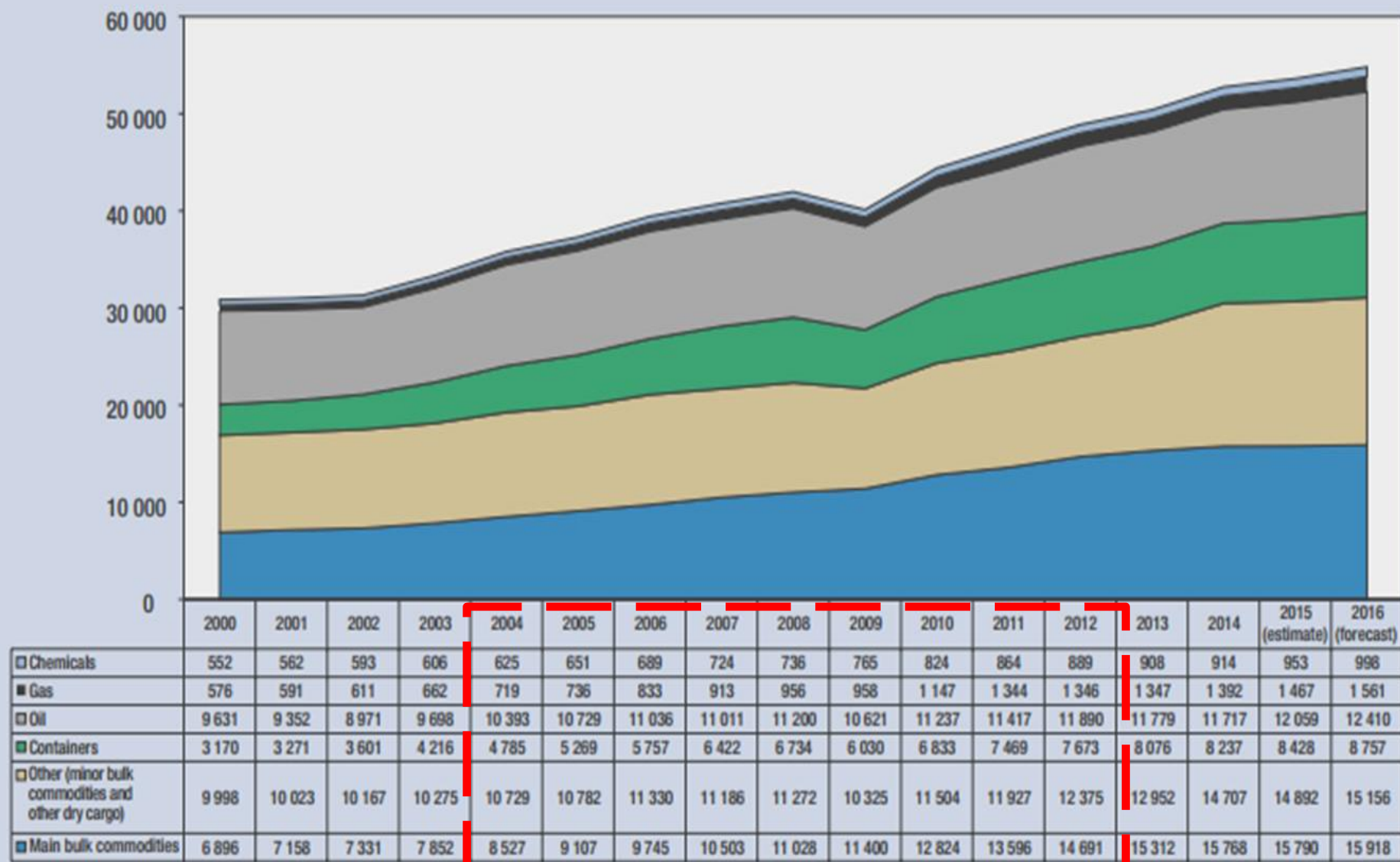
## 02. PROPOSALS

- Placarding
- Training
- Container pocket

## 03. CONCLUSION



**Figure 1.3 World seaborne trade by cargo type, 2000–2016 (Estimated billions of ton–miles)**



Source: UNCTAD secretariat calculations, based on Clarksons Research, 2016a.



# What is IMDG code?

---

## International Maritime Dangerous Goods Code

Is accepted international guideline to the safe transportation or shipment of dangerous goods or hazardous materials by water on vessel .

# What is IMDG code?

---

Protects

Crew members

Marine pollution

# Risk

# = Frequency x Severity

\*Frequency : No. of an accidents

\*Severity : Seriousness of accidents



# IMDG\_Risk

International Maritime Dangerous Goods Code

Reduce

Frequency

Placarding

Training

Severity

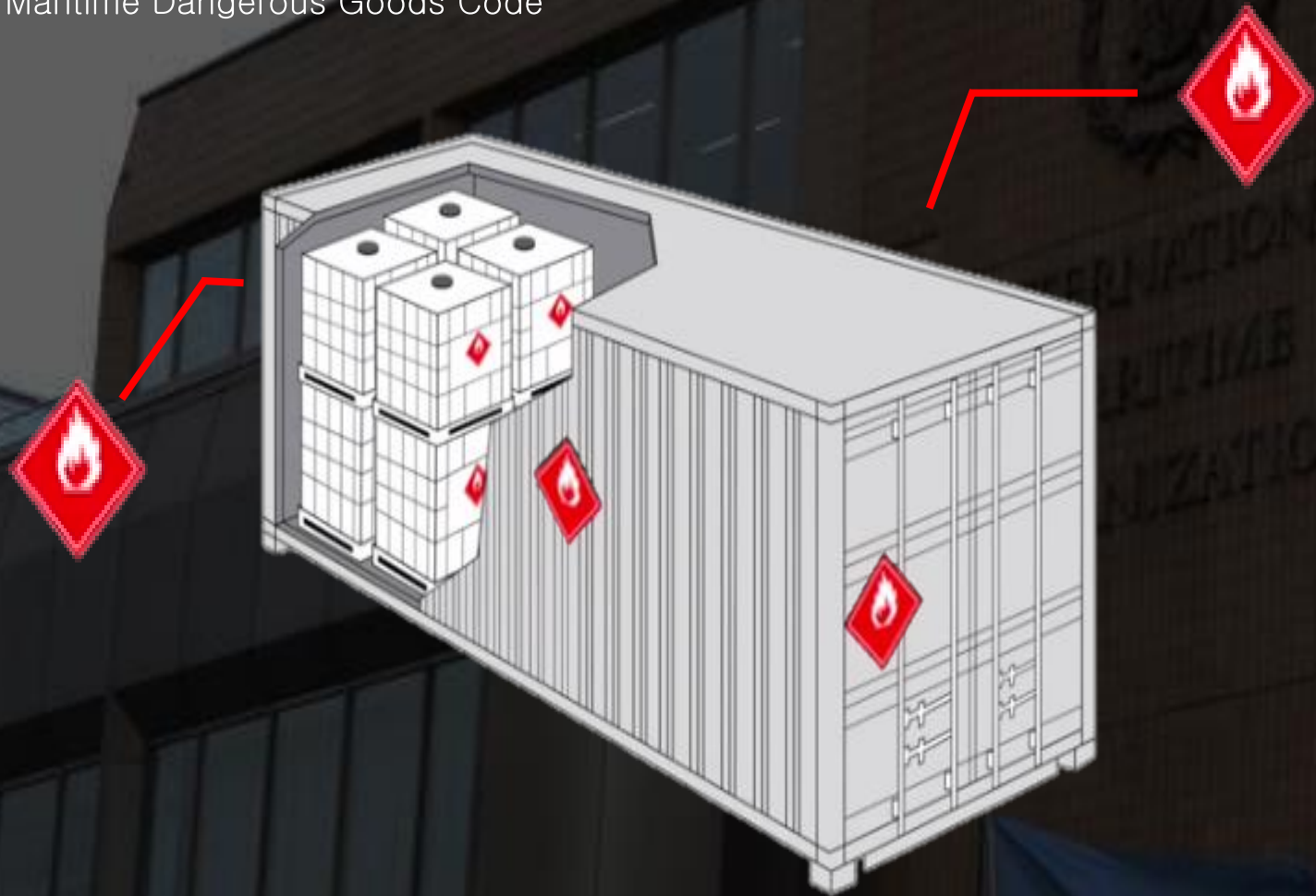
Container pocket



# Frequency

# IMDG\_Placarding

International Maritime Dangerous Goods Code



# IMDG\_Placarding

International Maritime Dangerous Goods Code

Symbols



Class No.

Current Placarding

Class	Rule	Tools
1	Careful for Explosion	Copious quantities of Water
4.1 5.2	Oxygen Dilution	Sand CO <sub>2</sub>
2.1	Do not try to extinguish Stop Ventilation	Fire fight as far as possible
2.2	Copious quantities of Water	Water Spray
3	Water is also possible	Foam Extinguisher
4.2 4.3	No Water	Metal Fire Extinguisher Sand
5.1	No Oxygen Dilution	Copious quantities of Water Sand
7	Stop Ventilation	Water Spray
2.3 6.1 6.2 7 8 9	Avoid, Wash	Protective Clothing Breathing Apparatus



# IMDG\_Placarding

International Maritime Dangerous Goods Code



# IMDG\_Placarding

International Maritime Dangerous Goods Code



Increase efficiency  
of first action

Increase probability  
of survival

Increase safety  
of crews

Reduce scale of  
damage

Reduce scale of  
an accidents

Reduce chain of  
communication

# IMDG\_Placarding

International Maritime Dangerous Goods Code



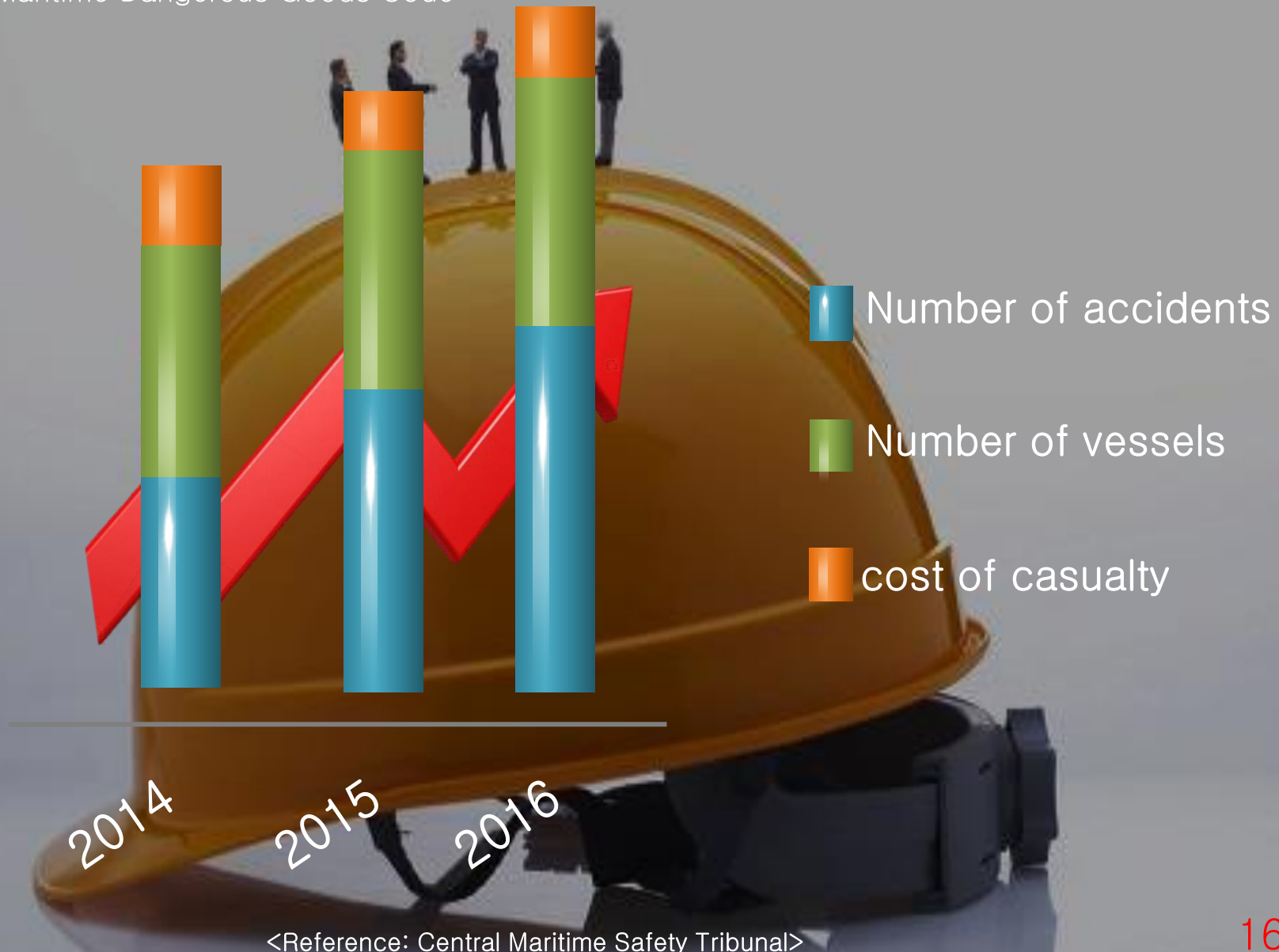
**IMO**  
International Maritime  
Organization

ABS KR DNV-GL CLASS NK CCS Lloyd's

Ships association in each countries

# IMDG\_Training

International Maritime Dangerous Goods Code





# IMDG\_Training

International Maritime Dangerous Goods Code



## 1.3.1.2 Shore-based personnel such as those who:

- classify dangerous goods and identify proper shipping names of dangerous goods;
- pack dangerous goods;
- mark, label or placard dangerous goods;
- load/unload Cargo Transport Units;
- prepare transport documents for dangerous goods;
- offer dangerous goods for transport;
- accept dangerous goods for transport;
- handle dangerous goods in transport;
- prepare dangerous goods loading/stowage plans;
- load/unload dangerous goods into/from ships;
- carry dangerous goods in transport;
- enforce or survey or inspect for compliance with applicable rules and regulations; or
- are otherwise involved in the transport of dangerous goods as determined by the competent authority shall be trained in the following:

Sea feares are not  
included in traini  
ng



Severity

# IMDG\_ Container pocket

International Maritime Dangerous Goods Code



## \*Sealand Mariner

- Containership
- April 1998, Off Crete
- Explosion then fire ( 2 facilities )

With the reference from "accidents caused by DG by prof "rotak jeong">



# IMDG\_ Container pocket

International Maritime Dangerous Goods Code

## \*DG Harmony

- Containership
- November 1998, USA to Brazil
- All cargo destroyed (16\$m total loss)



# IMDG\_ Container pocket

International Maritime Dangerous Goods Code

## \*Hyundai Fortune

- Containership (5500teu)
- March 2006, Indian Ocean
- Explosion aft (No casualty)

With the reference from "accidents caused by DG by prof "rotak jeong">

# IMDG\_ Container pocket

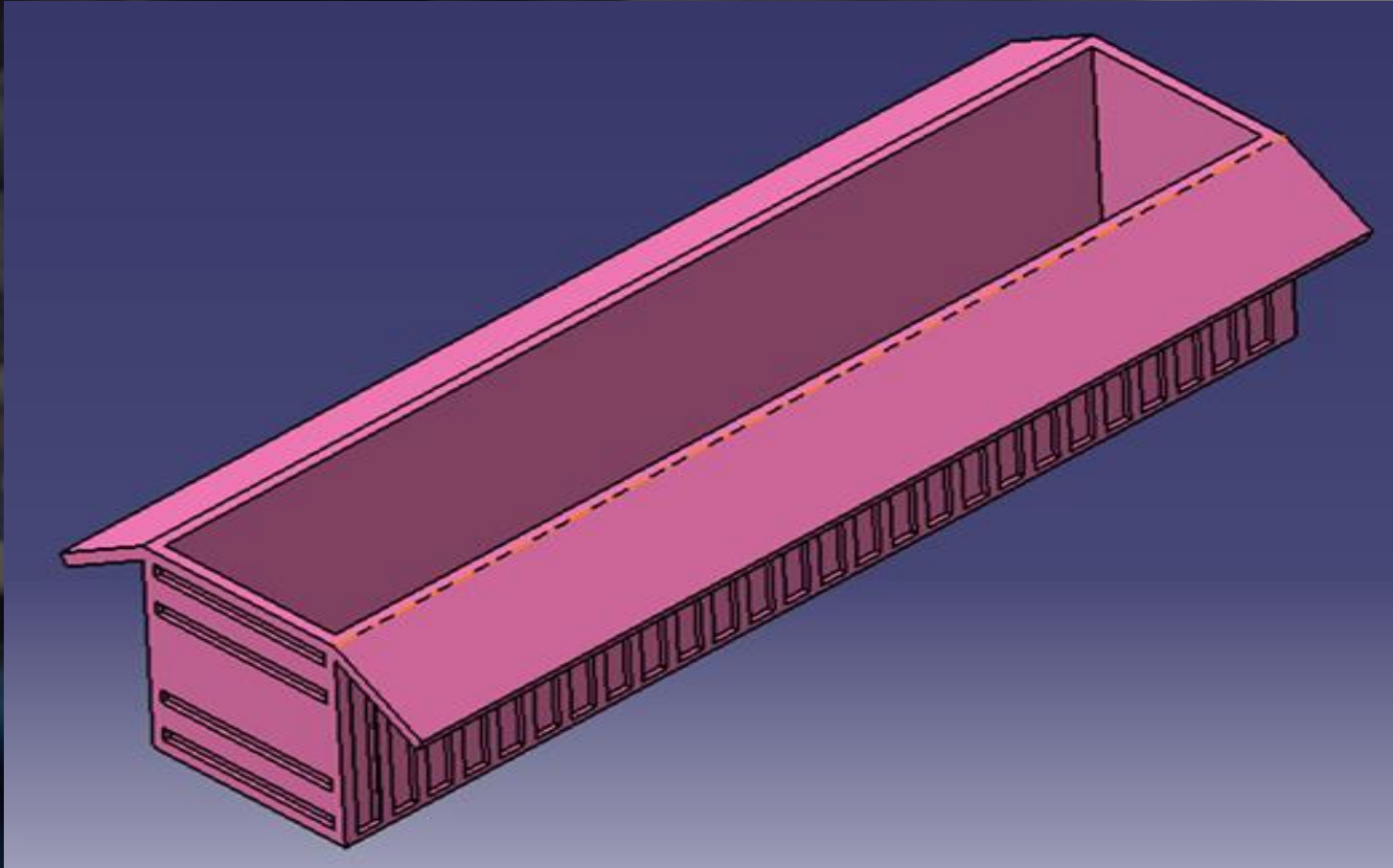
International Maritime Dangerous Goods Code



15~30m

# IMDG\_ Container pocket

International Maritime Dangerous Goods Code



## Discarded Idea



# IMDG\_ Container pocket

International Maritime Dangerous Goods Code



x 10

<20 feet container>



# IMDG\_Conclusion

International Maritime Dangerous Goods Code

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Grand Total
Four	64					45					4
Wre	29					28					9
Fire	19					8					3
Coll	23					3					0
Mac	11					6					4
Hull	4					3					6
Miscellaneous	1					1					3
Contact (e.g. harbor wall)	2	2	1	1			2		1		9
Piracy		1		1	2	1					5
Missing/overdue	1	1			1						3
Grand Total	154	171	149	129	125	95	123	112	88	85	1,231

Placarding

Training

Container pocket

# IMDG\_ Conclusion

International Maritime Dangerous Goods Code

\$800m



\$80000

Placarding



Training



Container  
pocket



**IMO**  
International Maritime  
Organization

# Thank you.

## Sea-PeAce

Consideration about IMDG code. The Criteria of HNS shipment of vessel