## OVERLOAD

ship instability, personal injury, incorrect vessel stowage supply chain delay, higher operating costs

# AND AND 5

## **VERIFICATION OF GROSS MASS**

The IMO Model Assembly 2016



Team KOI





# Background

RENA MONROVIA 01

## Background of VGM



#### MSC Napoli structural failure (2007)

-The second most expensive wreck in maritime history -20% of the containers on deck had different actual weights -The total weight of misdeclared containers was <u>312 tons heavier</u> than on the cargo manifest

## Present Condition OF VGM

02

## Verified Gross Mass



- In 2014, IMO adopted the SOLAS to become law on July 1st, 2016
- · Packed containers have to be weighed prior to loading aboard the ship
- $\cdot$  VGM requires

Verified Gross Mass unit, signature of the shipper, and methods of weighing

## Present Condition -Basic principles

Before a packed container can be loaded onto a ship, its weight must be determined through weighing – A verified weight is a condition for loading a packed container onto a ship.

No VGM  $\Rightarrow$  No Load.

The shipper is responsible for the verification of the gross mass of a container carrying cargo.

All extra cost, risk and liability incurred as a consequence of failure to meet VGM requirements shall be accountable by shipper.

No VGM No Load

2

## Present Condition -Basic principles

In the absence of the shipper providing the verified gross mass of the packed container, the container should not be loaded on to the ship. 4

SOLAS Contracting Governments acting as port States should verify compliance with the SOLAS requirements. Governments may ap ply enforcement toler ance limits.



VGM should be used by the terminal operators and vessel operators in the ship stowage plan.

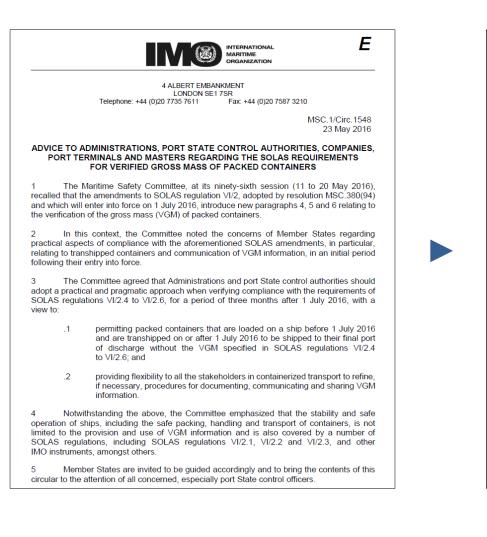
## Present Condition – Two methods



Severe lack of measuring equipment ▷ Higher utilization rate of Method 2 **" C**onstant effort to develop VGM measuring equipment "

## MSC 96<sup>th</sup> session (25/05/2016)





2. The Committee noted the concerns regarding practical aspects of compliance with the SOLAS amendments, in particular, relating to transshipped containers and communication of VGM information, in an initial period.

## Problems of VGM

03

Interview with hands-on workers Low reliability of using fax/email Discordance between the key values Difficulty of handling T/S VGM information Unclear locus of responsibility for discrepancies

## **Interview with hands-on workers**



Small shipper & forwarder assistant manager

"Shippers have the ERP system by each stages. So we're experiencing information gap problem."

#### Shipping company's terminal manager assistant manager

"We have an exclusive web. No big issue, no problem in VGM implementation."



#### Port authority worker senior manager

"There aren't VGM department or inspector in our port."

#### Logistics IT company workers chief / senior manager / assistant manager

"Ultimately, integrated information system is the resolution for efficient VGM implementation"

## Interview with hands-on workers







integrated WGM system

Difficulty of handling T/S VGM information Uncertain MO guideline Validator & matter of responsibility clause

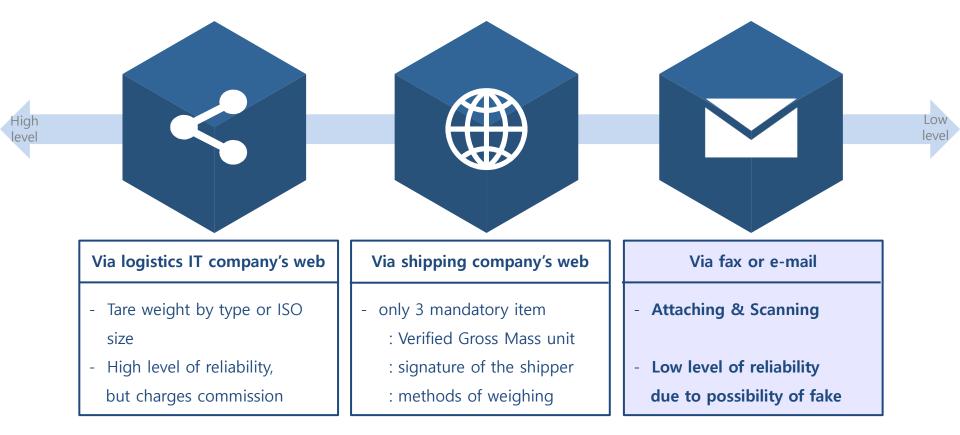






## Low reliability of using fax/e-mail

-Major digital channels of submitting VGM data-



## Discordance between the key values



Vital weight information on shipping document

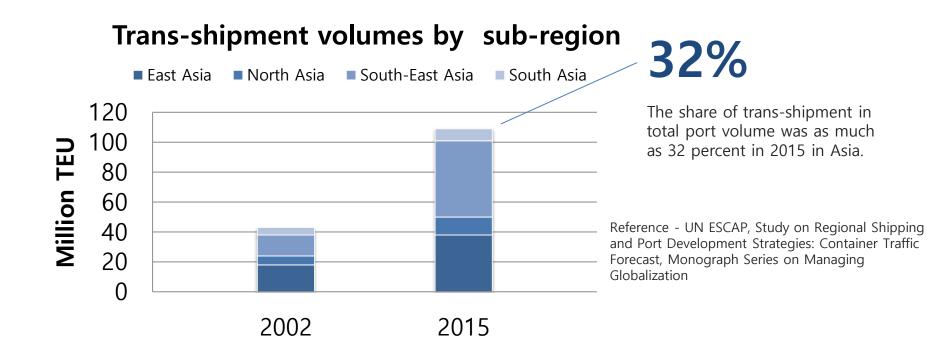
|   | ping comp<br>MAS(Loadir   |   | 7        |                | : Shij                           |                | per A                    |                        |                          | ŧ |           | م<br>hij | pper B<br>f Landing                         |        |  |
|---|---|---|----------|----------------|----------------------------------|----------------|--------------------------|------------------------|--------------------------|---|-----------|----------|---|--------|--|
| Loading List<br>Order No<br>Hem Code Description  | Seal No.<br>Container ID No.<br>Shipment No 8<br>Priority Quantity<br>Them Basinovier Quantity Loaded | Total Pided Status  | Ship No. |                | date of Cargo                    |                | 1                        |                        |                          |   | JNIT PACK | -        | ARRIER INFORMATION<br>COMMODITY DESCRIPTION | LTL 0  |  |
| 1         7         200203 U         0kl Bench + Leather Unf           2         38         200201 U         Coffee Table           3         39         200201 C         Coffee Table           4         42         200201 C         Coffee Table | 3<br>29<br>3<br>20  | Not Packed     Not Packed     Not Packed     Not Packed     Not Packed     Not Packed |          | 12 Shipping Ma | ks 13, No 8r kind<br>of packages | 14.Description | 15, Measurement<br>(CBM) | 16, Net weight<br>(kg) | 17. Gross weight<br>(kg) |   |           |          |   | RECEIV |  |
| 5 9 200001 Coffee Table<br>6 103 200203 Old Bench + Leather   | 5   | * Not Packed  |          |                |                                  |                |                          |                        |                          |   |           |          | GRAND TOTAL                                 |        |  |

### Different key values make inefficiency

: an increasing business hours : high expense of developing network : low reliability of container information

## Difficulty of handling T/S VGM information





## Difficulty of handling T/S VGM information

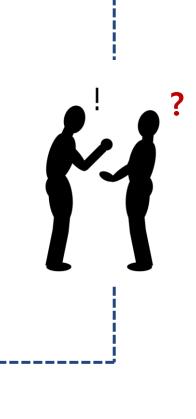
#### 8 Intermodal container movements and transhipments

8.1 The verified gross mass of a packed container should be provided to the next party taking custody of the container.

8.1.1 If a packed container is transported by road, rail or a vessel to which the SOLAS regulations do not apply and delivered to a port terminal facility without its verified gross mass, it may not be loaded onto a ship to which the SOLAS regulations apply unless the master or his representative and the terminal representative have obtained the verified gross

8.1.2 If a packed container is delivered to a port terminal facility by a ship to which the SOLAS regulations apply for transhipment onto a ship to which the SOLAS regulations also apply, each container being delivered is required by the SOLAS regulations to have had a verified gross mass before loading onto the delivering ship. All packed containers discharged

| 제 3조(적용범위)   |
|--|
| 이 기준은 수출을 위하여 화물이 적재된 개별 컨테이너에 적용하며, 다음 각 호의 경우에는 적·       |
| 하지 아니한다.   |
| 1. 공 컨테이너 및 환적 컨테이너  |
| 2. 단국제항해에 종사하는 로로선박(roll-on/roll-off)에 의해 운송되는 컨테이너 화물로서 섀 |
| (chassis) 또는 트레일러(trailer) 등과 같은 차량에 탑재된 컨테이너              |



Reference

1) IMO, Guidelines regarding the Verified Gross Mass of a Container Carrying Cargo, 9 June 2014, MSC.1/Circ.1475 2) Ministry of Ocean and Fisheries, The Standard of Gross Mass of Container Cargo

## Unclear locus of responsibility for discrepancies



MSC.1/Circ.1475 9 June 2014

#### **GUIDELINES REGARDING THE VERIFIED GROSS**

#### 4 Main principles

4.1 The responsibility for obtaining and documenting the verified gross mass of a packed container lies with <u>the shipper</u>.

#### 9 Discrepancies in gross mass

9.1 Any discrepancy between a packed container's gross mass declared prior to the should be resolution if shipper give incorrect weight.
9.2 Any disc obtained prior a verified grow weighing of the container should be resolution be resolved by use or the latter verified gross mass obtained by the port terminal facility.

19

## Proposal

04

#### VGM Information Network with The Amendment

Proposal VGM Information Network Amendment Benefits Thank You!



#### **VGM Information Network(VIN)**

The integrated system for VGM information Interchange. All ports in the world share VGM by VIN.

The Amendment of IMO Guideline The amendment for MSC.1/Circ.1475 and SOLAS chapter VI. Locus of responsibility, T/S VGM and key values are handled.

Uncertain Standardization of VGM leads to Inaccuracy of VGM information, responsibility problem and marine accidents

"VIN with The Amendment ⇒

**Efficient Stabilization of VGM**"

## VGM Information Network

#### Character

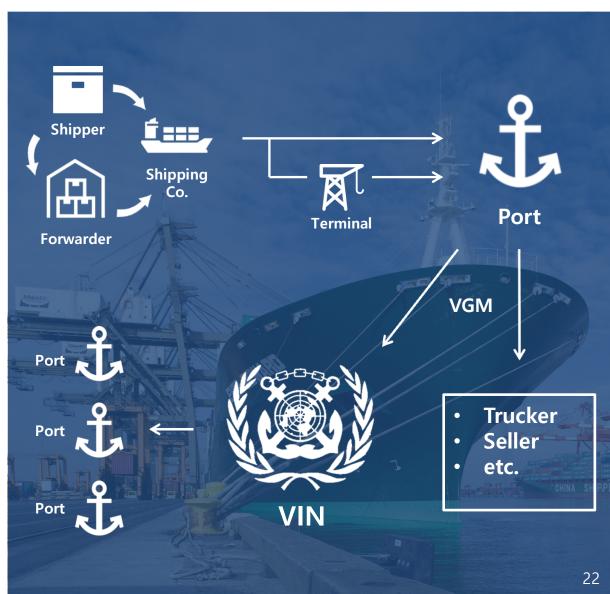
The international, non-profit cooperative network for VGM information interchange between port authorities

#### **Objective**

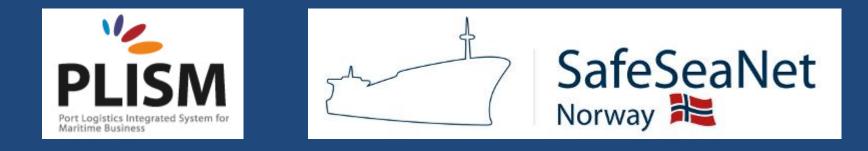
Improve the accuracy of VGM information Prevent maritime accidents

#### 🔰 Structure

The department supervised by Maritime Safety Committee(MSC) & Facilitation Committee(FAL)



# VGM Information Network





Northeast Asia Logistics Information Service Network

"VIN system is not just a dream International society is already prepared"

## Amendment

• The amendment content of SOLAS CHAPTER VI – CARRIAGE OF CARGOES AND OIL FUELS

#### **Regulation 2 – Cargo information**

The following new paragraphs 7 is added after existing paragraph 3:

7 VGM Information Network (VIN) system means the international network system for VGM interchange. This system:

.1 is supervised by Marine Environmental Protection Committee(MSC) and Facilitation Committee(FAL).

.2 's basic process is that VGM information provided by all port authorities is that internationally shared through VIN system.

.3 The development of VIN system makes progress with IMO's projects which are 'SETTING UP A SINGLE WINDOW SYSTEM IN MARITIME TRANSPORT (FAL.5/CIRC.36) and 'STRATEGY FOR THE DEVELOPMENT AND IMPLEMENTATION OF E-NAVIGATION (MSC 35/26/ADD.1)'.

"VIN system is not an IT project, but a change coordination project,

Technical problem is already being solved with Single window & Enavigation"

## Amendment

The amendment content of MSC.1 Circ.1475

- GUIDELINES REGARDING THE VERIFIED GORSS MASS OF A CONTAINER CARRYING CARGO

#### 4. Main principles

4.3 Shipping company or terminal provides B/L, VERMAS and booking number. with VGM Information to a port authority. After, the port authority transmits to VIN system specified in SOLAS chapter VI, part A, regulation 2.

#### 6. Documents

6.1.1 All shipper and shipping company priory use VIN system specified in SOLAS chapter VI, part A, regulation 2 for communicating data for VGM and avoid using E-mail or fax.

#### 9. Discrepancies

9.3 Each port authority operates an organization and inspector for examining discrepancies in gross mass.

9.4 If the maritime accident occurs by discrepancies in gross mass, the locus of responsibility is clarified through VIN system.

#### This amendment will help

#### the clear guideline for stabilization of VGM





## "Safe, secure and efficient shipping on clean oceans"

- Slogan of IMO



## THANK YOU!

Verification of Gross Mass



**Team KOI**