

*Tokyo MOU*



# Case Study

# PSC Detentions

**KR Survey Team**

August 2020

# Contents

## I. Statistics of Tokyo MOU Detention

### Statistics of PSC Detention

Statistical data from Tokyo MOU - first half 2020

## II. Case Study

### Case

Case Study of Tokyo MOU

## III. Countermeasures

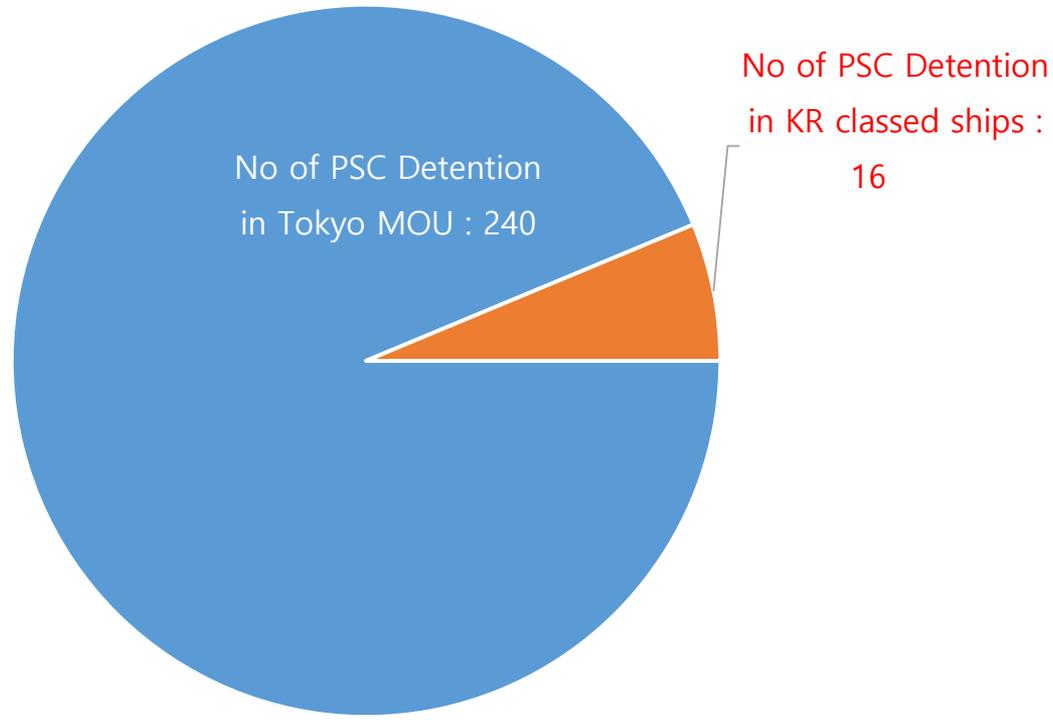
### Countermeasures

Countermeasures against PSC detention



**KR PSC Performance in Tokyo MOU (2020.01 ~ 2020.06)**

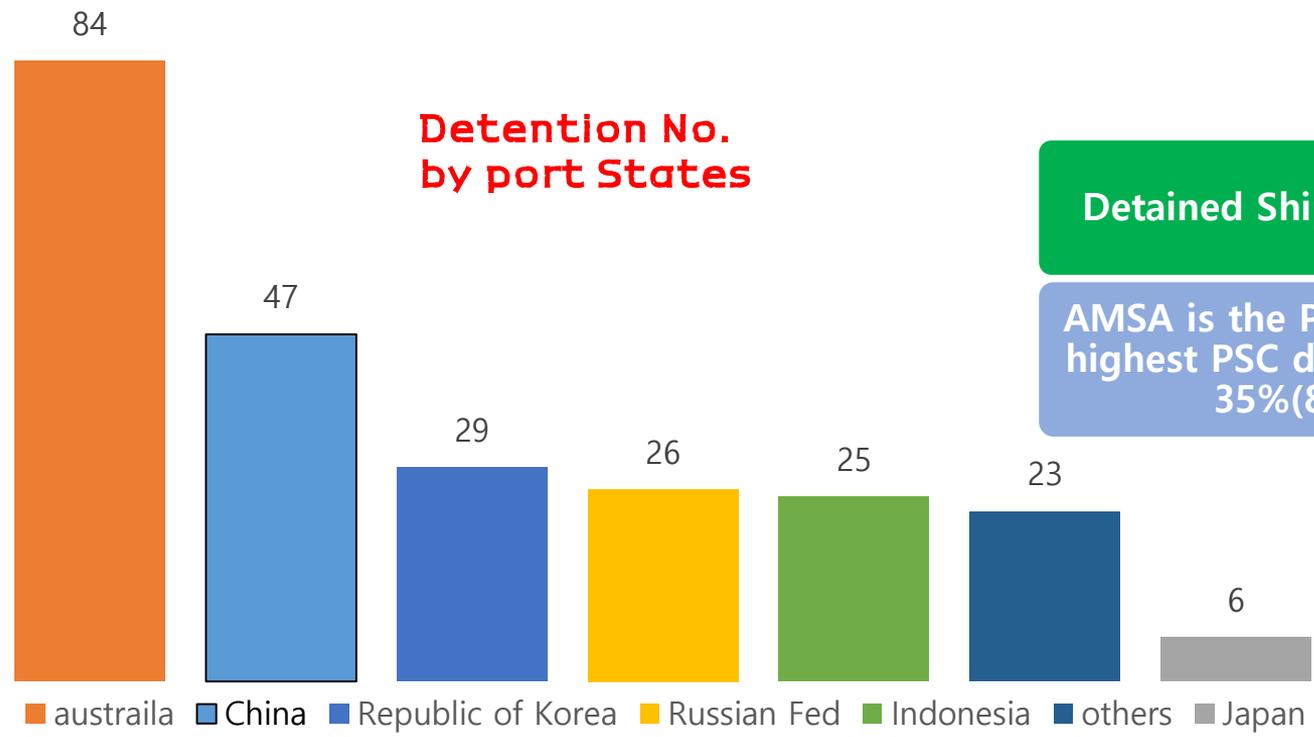
**Percentage of ships detained by Tokyo MOU**



**Detentions : 16 ships registered in KR**

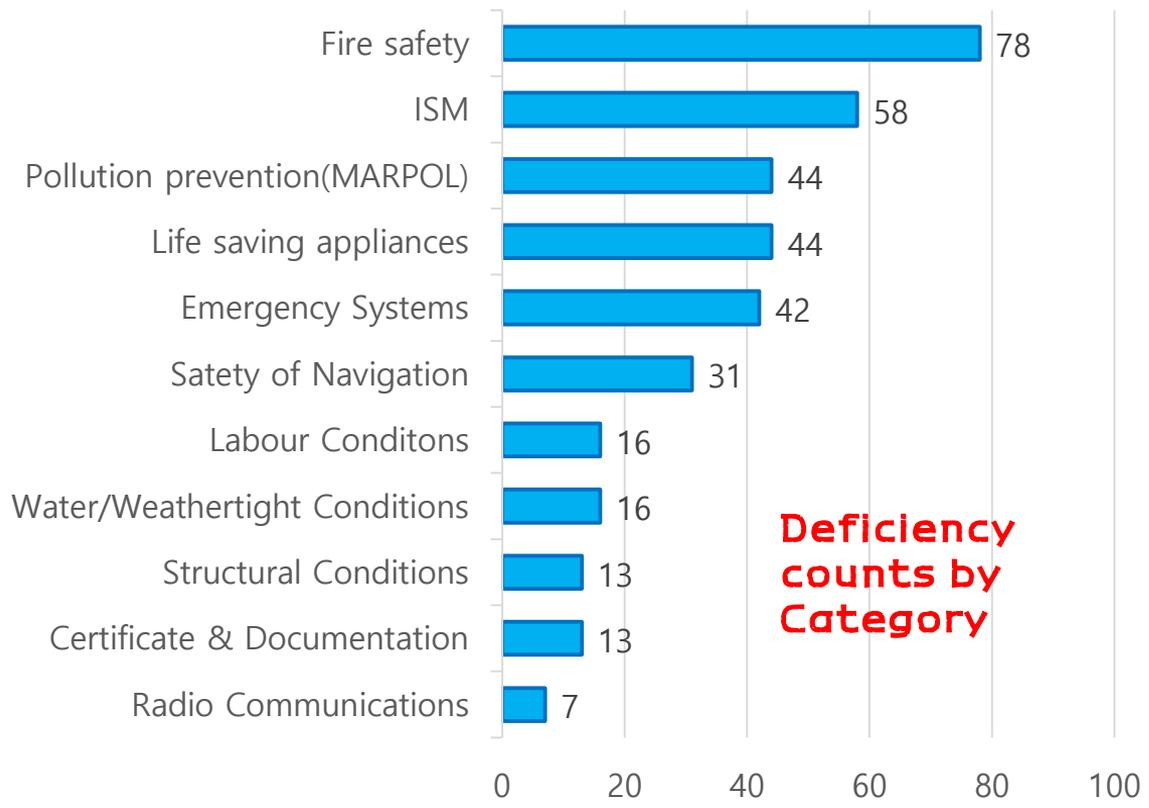
- Category**
- Fire Safety & Life Saving
  - Safety of Navigation
  - Pollution Prevention
  - ISM and others

Detentions by Port Authorities (2020.01 – 2020.06)





## Detainable Deficiencies by Categories in Tokyo MOU (2020.01 – 2020.06)



**Deficiency counts by Category**

**Detained Ship Nos. : 240 Ships**

**A total of 557 Detainable Deficiencies recorded**

**Top Three Categories of Detainable Deficiencies**

- 1. Fire Safety (14.0%)**
- 2. ISM (10.4%)**
- 3. Life Saving, Pollution (7.8%)**



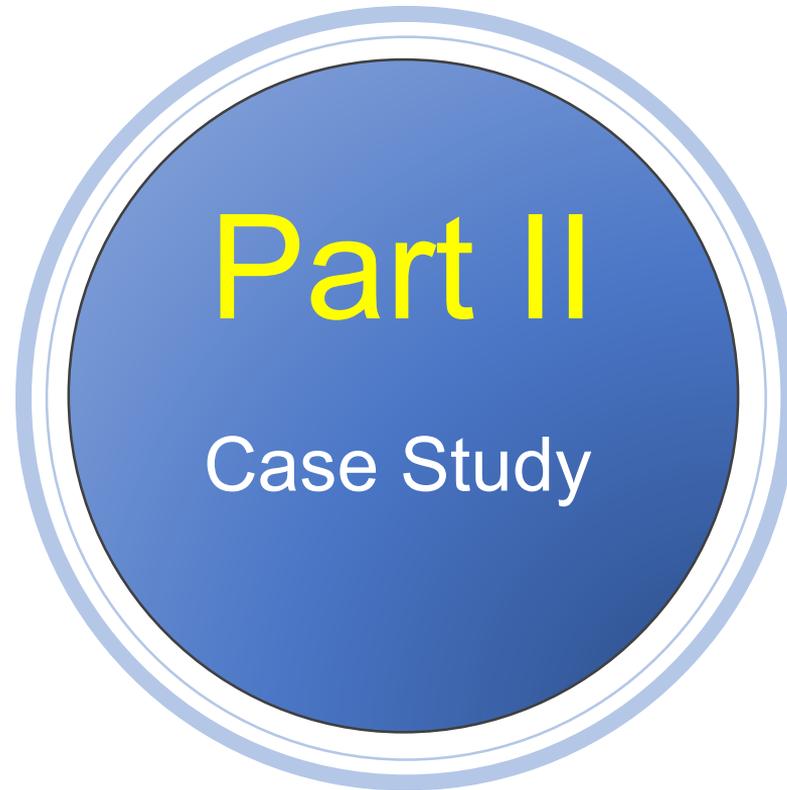
## Details of Detainable Deficiencies reported in Tokyo MOU

Deficiency Categories	Details
Fire Safety	<ol style="list-style-type: none"> <li>1) Engine room fan dampers defective &amp; unable to be closed from F.C.S</li> <li>2) Damper located in protected space and unable to accessed outside</li> <li>3) Emergency fire pump unable to started</li> <li>4) A-60 fire door damaged / remained holes by self modification</li> <li>5) Funnel damper, Ventilator unable to close</li> </ol>
ISM	<ol style="list-style-type: none"> <li>1) Chief engineer and engineer in charge not familiar with auto start E'cy generator</li> <li>2) Maintenance of shipboard equipment is not effectively implemented</li> </ol>
Life Saving	<ol style="list-style-type: none"> <li>1) Safety net for gangway ladder not fitted properly</li> <li>2) Stored mechanical power for Rescue boat launching appliance not proper for emergency use</li> <li>3) Engine for lifeboat &amp; rescue boat unable to start</li> <li>4) Lifeboat on-load release system arrangement defective</li> </ol>
Safety of Navigation	<ol style="list-style-type: none"> <li>1) Admiralty notice to mariners not up-to-date</li> <li>2) Nautical publications necessary for the last and intended voyage not updated</li> <li>3) Liquid of magnetic compass has bubble</li> <li>4) Voyage plan was not covered berth to berth</li> </ol>



## Details of Detainable Deficiencies reported in Tokyo MOU

Deficiency Categories	Details
Pollution Prevention	<ol style="list-style-type: none"> <li>1) Oil discharged to port by mistake</li> <li>2) Sulphur content of fuel oil exceed 0.5% by portable analyzer</li> <li>3) Sewage Treatment Plant defective</li> <li>4) Untreated sewage discharged to port</li> </ol>
Load Line	<ol style="list-style-type: none"> <li>1) Air pipe of numerous ballast tank on deck defective</li> <li>2) Numerous hatch cleats defective &amp; dogs missing</li> <li>3) Rubber &amp; washer for C/H hatch cover perished</li> </ol>
Emergency System	<ol style="list-style-type: none"> <li>1) M/E Over-speed simulation trip failed</li> <li>2) Remote closing isolation valve of G/E fuel oil supplying line not closed</li> </ol>
Cert/Document	<ol style="list-style-type: none"> <li>1) Safe manning certificate expired</li> <li>2) Deck log book not signed by master</li> <li>3) No certificate(Renewal survey) shall be extended for a period of longer than 3 month(SOLAS Ch.1/reg.14.(e)) / before COVID-19 pandemic</li> </ol>
Labor Conditions	<ol style="list-style-type: none"> <li>1) Multiple seafarers not paid, in full, in accordance with seafarer employ contract</li> <li>2) Watch handed over to an officer impaired with alcohol</li> <li>3) Only one officer keeping navigation watch at night</li> </ol>



## Case 1. Substantial corrosion on Air pipe, C/H hatch & its securing device



### Overview

- o Ship type : BULK CARRIER
- o Date : 2020. 01
- o Place : CAIRNS, AUSTRALIA
- o Detained due to 'Overall & Heavy corrosion at ICLL facilities on upper deck  
: Air pipe, C/H Hatch Cover & its securing devices



### Cause & Action

The ICLL facilities on deck overall corrosion due to insufficient maintenance by regular interval.

No evidence was presented to confirm that the Master had made, any reasonable efforts to carry out what the Port State – prior to the detention



### Measures

The ICLL related items on exposed deck shall be regularly fixed by determining the speed of corrosion, and shall be kept clean during the PSCO onboard.

Maintaining cleanliness so that more diverse detailed inspection are not carried out through small matter on deck.

## Case 2. Both lifeboats engine starting failed



### Overview

- o Ship type : CONTAINER SHIP
- o Date : 2020. 01
- o Place : VLADIVOSTOK, RUSSIA
- o Detained due to both lifeboats can not started



### Cause & Action

Lack of periodical test to life boat attributed to the PSC detention.

LSA Code: "shall start the engine at an ambient temperature of **-15°C** within **2 min** of commencing the start procedure"



### Measures

Increase the number of starting test in severe cold areas (Russia) in consideration of possible delays or failure.  
(for example: Lifeboats, rescue boats, emergency generator)

The PSC detained rate associated with LSA facilities is the third highest frequency in the Tokyo MOU.

## Case 3. Maintenance of LSA, FSA



### Overview

- o Ship type :  
OIL/CHEMICAL TANKER
- o Date : 2020. 02
- o Place : TANJUNG PRIOK, INDONESIA
- o Detained due to ISM code failure
  - Emergency preparedness
  - Shipboard operation
  - Maintenance of the ship and equipment



### Cause & Action

- SMS implementation failed with the following deficiencies evidenced by PSCO:
- 1) A-60 fire door, damaged
  - 2) Rescue boat engine, unable to start
  - 3) Funnel damper, unable to close



### Measures

- The 3 out of 5 detention occur in Indonesia (First half 2020, Tokyo MoU)
- Point items in this region are mainly equipment(SOLAS LSA & FSA), due to lack of periodic maintenance
- Actively implemented & incorporated into ship's PMS manual.

## Case 4. Reasonable response to PSCO



### Overview

- o Ship type :  
OIL/CHEMICAL TANKER
- o Date : 2020. 06
- o Place :  
-TANJUNG PRIOK, INDONESIA
- o Detained due to
  - Fire damper unable to close
  - Insufficient cooling water (R/B Engine)



### Cause & Action

No information to RO when deficiencies were made.

Emotional response to PSC Officer.

Response to the ship itself without assistance of company & R.O.



### Measures

Deficiencies were made, R.O did not receive any information from vessel.

Request to attending KR surveyor nearby KR branch office, if PSC is expected.



# 1 | PSC Countermeasures

## To Conduct Self-Examination

- . Actual inspection to be carried out in accord. with checklist.
- . PSC trends for the intended port to be confirmed thru. KR local site office.
- . Proper records to be confirmed.
  - Oil record book, Garbage record book, Rest hour record
  - Log book
- . Cleanliness in E/R to be maintained, esp. oil, rags, etc.

※ The malfunctioned equipment to be reported to **flag, port authority and class with the proper repair plan.**

## Good First Impression

- . Strict gangway watch
- . Cleanliness

## Appropriate Response to PSC

- . Recommend senior officer be on board
- . Positive/friendly attitude toward PSCO
- . Prompt action for deficiencies
- . If required, contact with KR branch office



**Before entering a port**



**Just after berthing**



**PSCO on board the ship**



## Successful Prevention of PSC Detention

- . Improvement of company's ability to PSC
- . Enhancement of company's image
- . Prevention of unnecessary costs

# 2 How to deal with PSC matters and approach to them ?



