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# Fire safety, ISM-related PSC detainable deficiencies

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April, 2022



KOREAN REGISTER

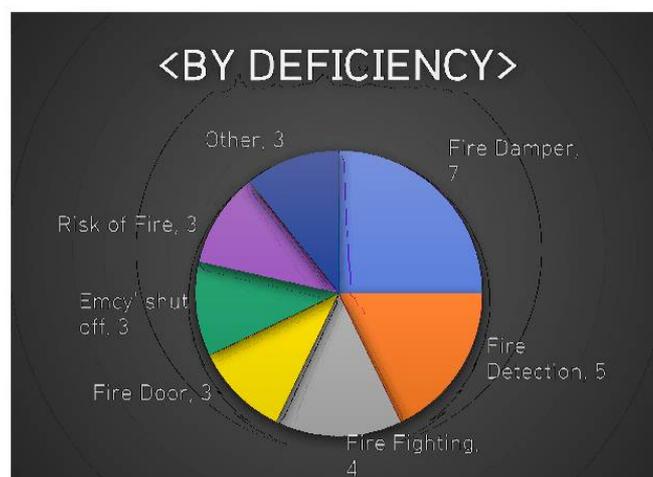
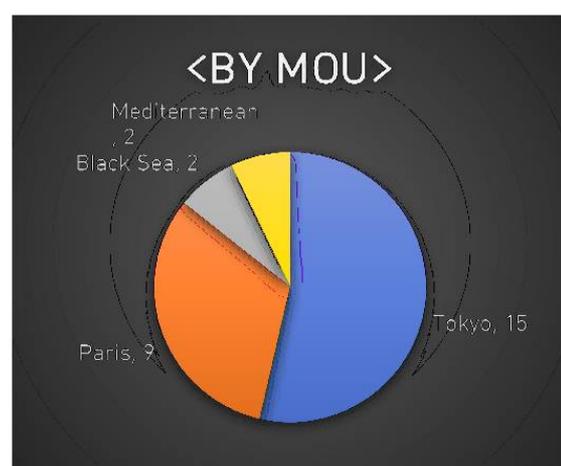
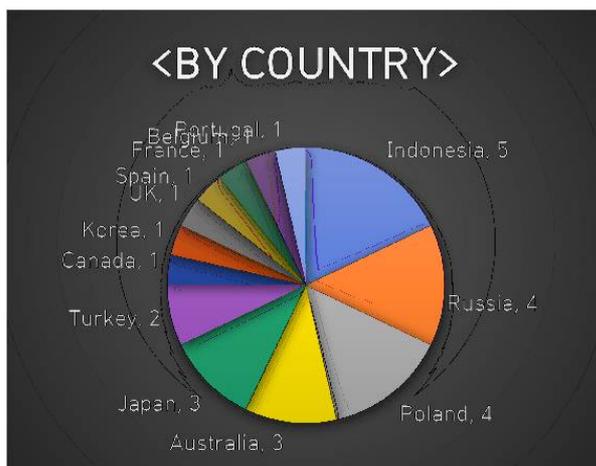
Survey Team

# KR Statistics on fire safety, ISM-related detainable deficiencies

## 1 TOP 5 PSC detainable deficiencies 2020/2021

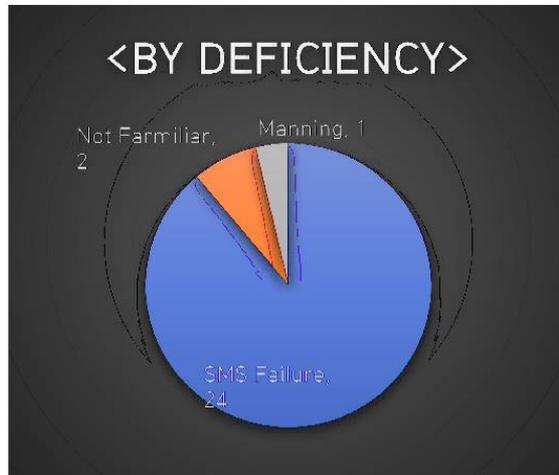
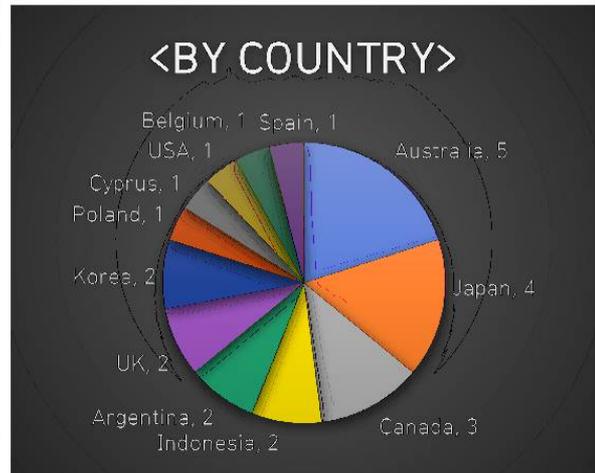
2020		2021	
Category	Number	Category	Number
<b>Fire safety</b>	<b>26</b>	<b>ISM</b>	<b>24</b>
<b>ISM</b>	<b>26</b>	<b>Fire Safety</b>	<b>23</b>
Safety of Navigation	19	Pollution Prevention	15
Marine pollution	15	Emergency System	13
Life-saving appliances	14	Life-saving Appliance	12

## 2 Fire safety-related PSC detainable deficiencies 2021



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# ISM-related PSC detainable deficiencies 2021



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## Notable deficiencies related to fire safety, ISM

### 1 Notable deficiencies related to Fire safety

#### 1. Fire Damper

Photo	Deficiency	Cause (Preventive measure)
	E/R ventilator fire damper holed and thinned.	Damage and broken E/R fire damper by serious corrosion (Periodical inspection and test)
	Fire damper for cargo hold broken.	Damaged fire damper for cargo hold by serious corrosion (Periodical inspection and test)
	Funnel damper heavily corroded.	Damaged funnel damper by heavy corrosion (Periodical inspection and test)

## 2. Fire detection system

Photo	Deficiency	Cause (Preventive measure)
	<p>Gas detector not calibrated. No calibration gas on board.</p>	<p>Expired calibration date (Training for crew in charge to follow maker's instruction) Calibration gas not provided (Spare gas should be on board a ship)</p>
	<p>Fire detection alarm panel switched off.</p>	<p>Crew member switched off intentionally due to continuous alarm (Training for crew members)</p>

## 3. Remote isolation valve

Photo	Deficiency	Cause (Preventive measure)
	<p>Remote closing isolation valve of G/E fuel oil supplying line not closed.</p>	<p>Remote closing isolation valve stuck. (Periodical test)</p>

## 4. Fire extinguishing equipment/installation

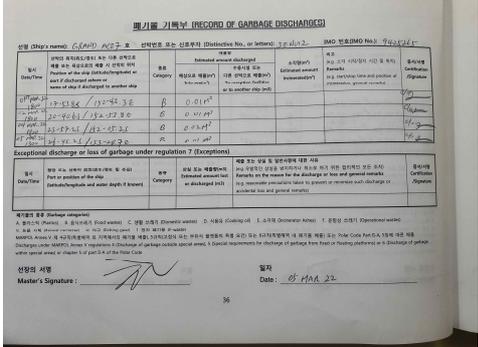
Photo	Deficiency	Cause (Preventive measure)
	<p>Six sprinklers for water spray system in paint room blocked.</p>	<p>Substances such as mud inside the pipeline (Periodical test)</p>
	<p>Em'cy fire pump not pressurized sea water sufficiently.</p>	<p>Insufficient pressure (Periodical test)</p>
	<p>Fire main piping rusted seriously and leaking on main deck.</p>	<p>Insufficient maintenance (Periodical inspection and maintenance)</p>

## 5. Fire door

Photo	Deficiency	Cause (Preventive measure)
	<p>Frame of entrance door for E/R em'cy escape trunk defective.</p>	<p>Corrosion and damage (Periodical inspection and maintenance)</p>
	<p>Door frame for escape trunk in E/R made of combustible material and door itself damaged.</p>	<p>Arbitrary repair done and not reported to class society (Safety-related repairs should be reported to class for confirming its appropriateness)</p>
	<p>Fire door in E/R tied open.</p>	<p>Inappropriate arrangement (Periodical inspection and training for crew members)</p>

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# Notable deficiencies related to ISM

Photo	Deficiency	Cause (Preventive measure)
	<p>1<sup>st</sup> Officer not familiar with MARPOL. (Discharged food waste in prohibited area)</p>	<p>Unfamiliar with MARPOL (Periodical training)</p>
	<p>Fire and Abandon ship drill not carried out within 24 hours after more than 25% of crew were changed.</p>	<p>Unfamiliar with ISM Code (Periodical drill)</p>
	<p>Not familiar with launching drill.</p>	<p>Unfamiliar with launching drill. (Periodical drill)</p>
	<p>ISM implementation deficiency originated from lots of defective items.</p>	<p>Failure of SMS implementation. (Periodical training and drill)</p>

### 3 Root causes and proposals

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#### Root causes

- o Insufficient inspection/test/maintenance on board a ship
- o NOT following the relevant procedures
- o NOT reporting to company and/or class on important repairs
- o NOT familiar with PSC matters

#### Proposals

- o **(Company)** Monitoring the fleet thoroughly and visiting ships periodically
- o **(Company)** Providing crew members with periodical training
- o **(Company)** Supporting personnel/spare parts in a timely manner
- o **(Ship)** Doing periodical inspection/test/maintenance
- o **(Ship)** Implementing periodical training for crew members
- o **(Ship)** Being familiar with SMS
- o **(Class)** Conducting more thorough survey with great interest in major PSC items

Recent PSC detainable deficiencies mostly come from disobeying the Shipboard Management System(SMS) based on the ISM Code. It is worth noticing that failure on SMS implementation may result in a maritime accident, which leads to serious damage to a ship or even loss of life.