
Fire safety-related PSC detainable deficiencies

May 8, 2020



KOREAN REGISTER

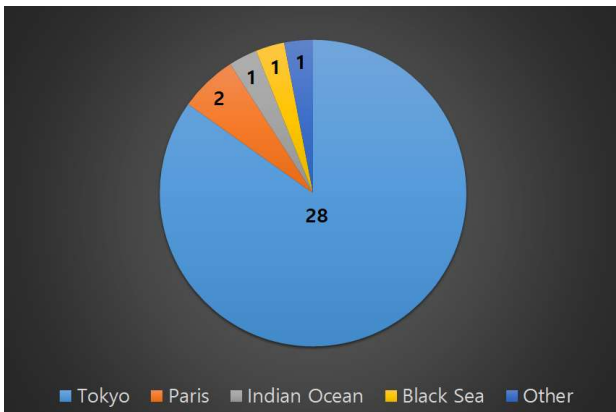
Survey Team

KR Statistics on fire safety-related detainable deficiencies

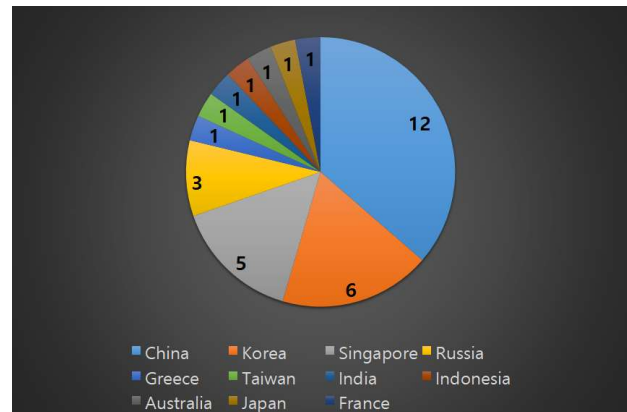
1 TOP 5 PSC detainable deficiencies 2018/2019

2018		2019	
Category	Number	Category	Number
Fire safety	55	Fire safety	33
ISM	36	ISM	19
Life-saving appliances	18	Marine pollution	17
Load line	17	Life-saving appliances	17
Marine pollution	17	Em'cy system	15

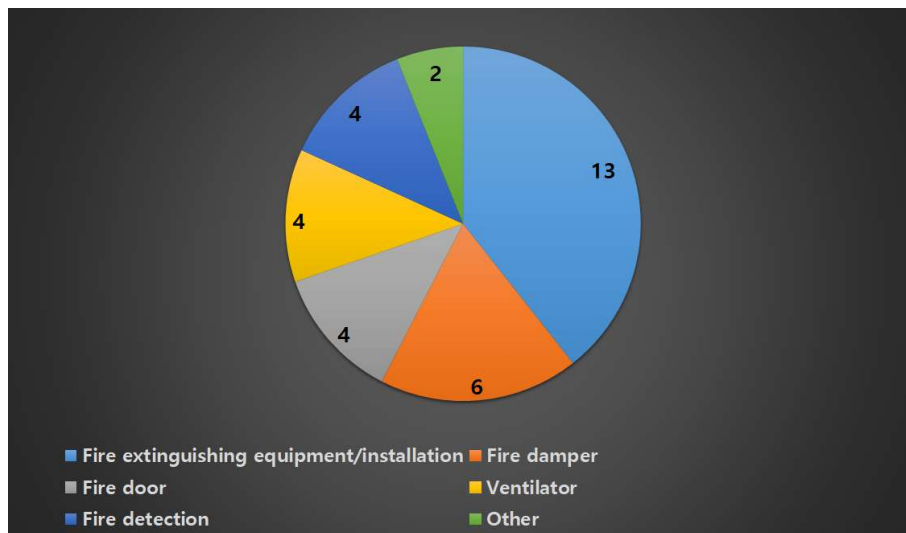
2 Fire safety-related PSC detainable deficiencies 2019



<by PSC MoU>







<by Country>



<by Deficiency>





Notable deficiencies related to fire safety

1 Fire extinguishing equipment/installation

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





2

Fire damper

Photo	Deficiency	Cause (Preventive measure)
	<p>E/R ventilator fire damper holed and thinned.</p>	<p>Damage and broken E/R fire damper by serious corrosion (Periodical inspection and test)</p>
	<p>Fire damper for cargo hold broken.</p>	<p>Damaged fire damper for cargo hold by serious corrosion (Periodical inspection and test)</p>
	<p>Funnel damper heavily corroded.</p>	<p>Damaged funnel damper by heavy corrosion (Periodical inspection and test)</p>
	<p>Fire damper unable to close by remote means for at purifier room.</p>	<p>Internal corrosion of the pneumatic cylinder (Periodical inspection and test)</p>



3

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 not 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>IMO symbol indicates A-class fire door but actual door is applicable to B-class.</p>	<p>Actual door type differs from indication of IMO symbol (Periodical inspection and training for crew members)</p>
	<p>Fire door in E/R tied open.</p>	<p>Inappropriate arrangement (Periodical inspection and training for crew members)</p>



4

Ventilator

Photo	Deficiency	Cause (Preventive measure)
	E/R ventilator holed.	Heavy corrosion (Periodical inspection and maintenance)
	Funnel external plate holed.	Damage by unknown impact (Periodical inspection and maintenance)

5

Fire detection

Photo	Deficiency	Cause (Preventive measure)
	Gas detector not calibrated. No calibration gas on board.	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)
	Fire detection alarm panel switched off.	Crew member switched off intentionally due to continuous alarm (Training for crew members)

6 Root causes and proposals

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.