



DOI: <https://doi.org/10.38035/jlph>  
<https://creativecommons.org/licenses/by/4.0/>

## The Impacts And Challenges Emanating As Consequence From The “Black, Grey, And White (BGW) List” On Port State Control In The Asia-Pacific Region

Ferro Hidayah<sup>1</sup>

<sup>1</sup>Sekolah Tinggi Ilmu Pelayaran, Jakarta, Indonesia, [capt.ferrohidayah35@gmail.com](mailto:capt.ferrohidayah35@gmail.com)

Corresponding Author: [capt.ferrohidayah35@gmail.com](mailto:capt.ferrohidayah35@gmail.com)

**Abstract:** This study aims to describe the understanding of the flag-state administration, recognized organizations, and seafarers onboard regarding the implementation of the port State control for dealing with the impacts and challenges resulting from the results of inspections by port State control. The research relies on qualitative analysis. The primary data was obtained from personal experience and informal discussions with Port State Control Officers (PSCO) of Indonesia and related parties to this research. The secondary data was gathered from National regulations relating to the ratification of IMO conventions, the annual port State control reports in the Asia-Pacific region, publications of organization, sources of documentation, journal references, and various works and literature supporting this research's objectives. The ultimate responsibility of keeping the ship in compliance with international standards lies with the shipowner, flag States, and other relevant industry players. The "Black, Grey, and White List" is the driving force for the shipowners and flag State to encourage them to improve their performance. The goal of every flag State should be to appear high up on the list as possible. For example, the ship flags with a consistently low detention record by port State control will be on the White list. The flag state on the White list means meeting its obligation to register safe and seaworthy ships. It also puts the client at minimal risk of operational difficulties. It makes registering vessels with such flag status of interest to shipping associations to recommend that shipping companies or shipowners choose the appropriate flag.

**Keyword:** Port State Control, Flag State Control, Recognized Organizations, Competency.

### INTRODUCTION

The Memorandum of Understanding on Port State Control in the Asia-Pacific Region (Tokyo MOU) was signed in Tokyo on 1st December 1993 and came into effect on 1st April 1994. The Memorandum has 21 (twenty-one) full members, namely: Australia, Canada, Chile, China, Fiji, Hong Kong (China), Indonesia, Japan, Republic of Korea, Malaysia, Marshall Islands, New Zealand, Panama, Papua New Guinea, Peru, Philippines, Russian Federation, Singapore, Thailand, Vanuatu and Viet Nam.

The main objectives of the Memorandum are to establish an effective port State control regime in the Asia-Pacific region through co-operation of its members, harmonization of the members' activities, to eliminate substandard shipping, to promote maritime safety and security, to protect the marine environment and to safeguard seafarers working and living conditions on board ships.

For the purpose of the Memorandum, the following instruments of international regulations are the basis for port State control activities in the region:

1. The International Convention on Load Lines, 1966, as amended.
2. The Protocol of 1988 relating to the International Convention on Load Lines, 1966, as amended.
3. The International Convention for the Safety of Life at Sea, 1974, as amended.
4. The Protocol of 1978 relating to the International Convention for the Safety of Life at Sea, 1974.
5. The Protocol of 1988 relating to the International Convention for the Safety of Life at Sea, 1974.
6. The International Convention for the Prevention of Pollution from Ships 1973, as modified by the Protocol of 1978 relating thereto, as amended.
7. The International Convention on Standards for Training, Certification and Watchkeeping for Seafarers, 1978, as amended.
8. The Convention on the International Regulations for Preventing Collisions at Sea, 1972.
9. The International Convention on Tonnage Measurement of Ships, 1969.
10. The Merchant Shipping (Minimum Standards) Convention, 1976 (ILO Convention No. 147).
11. The Maritime Labor Convention, 2006, as amended.
12. The International Convention on the Control of Harmful Anti-fouling Systems on Ships, 2001.
13. The Protocol of 1992 to amend the International Convention on Civil Liability for Oil Pollution Damage, 1969.
14. The International Convention for the Control and Management of Ships Ballast Water and Sediments, 2004.

The above international conventions have been ratified by the Indonesian flag-state administration through the regulations as follow:

1. The Act No. 17 of 1985 on ratification of the United Nations Convention on the Law of Sea (UNCLOS).
2. The Act No. 15 of 2016 on ratification of the Maritime Labor Convention (MLC), 2006.
3. Presidential Decree No. 47 of 1976 on ratification of the International Convention on Load Lines, 1966.
4. Presidential Decree No. 50 of 1979 on ratification of the Convention on the International Regulations for Preventing Collisions at Sea (COLREG), 1972.
5. Presidential Decree No. 65 of 1980 on ratification of the International Convention for the Safety of Life at Sea (SOLAS), 1974.
6. Presidential Decree No. 46 of 1986 on ratification of the International Convention for the Prevention of Pollution from Ships (MARPOL), 1973 and Protocol of 1978 relating thereto.
7. Presidential Decree No. 60 of 1986 on ratification of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978.
8. Presidential Decree No. 5 of 1989 on ratification of the International Convention on Tonnage Measurement of Ships, 1969.
9. Presidential Decree No. 52 of 1999 on ratification of the Protocol of 1992 to amend the International Convention on Civil Liability for Oil Pollution Damage (CLC), 1969.

10. Presidential Regulation No. 29 of 2012 on ratification of Annex III, Annex IV, Annex V and Annex VI of the International Convention for the Prevention of Pollution from Ships (MARPOL), 1973 as modified by the Protocol of 1978 relating thereto.
11. Presidential Regulation NO. 65 of 2014 on ratification of the International Convention on Civil Liability for Bunker Oil Pollution Damage (CLC Bunker), 2001.
12. Presidential Regulation No. 66 of 2014 on ratification of the International Convention on the Control of Harmful Anti-Fouling System on Ship (AFS), 2001.
13. Presidential Regulation No. 132 of 2015 on ratification of the International Convention for the Control and Management of Ships Ballast Water and Sediments (BWS), 2004.
14. Presidential Regulation No. 57 of 2017 on ratification of the Protocol of 1988 relating to the International Convention for the Safety of Life at Sea, (SOLAS), 1974.
15. Presidential Regulation No. 84 of 2017 on ratification of the Protocol of 1988 relating to the International Convention on Load Line, 1966.

In accordance with the provisions of UNCLOS regarding the rights and enforcement power of the coastal State or port State are stated:

1. In the case of ships proceeding to internal waters or a call at a port facility outside internal waters, the coastal State also has the right to take the necessary steps to prevent any breach of the conditions to which admission of those ships to internal waters or such a call is subject (Article 25, section 2).
2. When a vessel is voluntarily within a port or at an off-shore terminal of a State, that State may undertake investigations and, where the evidence so warrants, institute proceedings in respect of any discharge from that vessel outside the internal waters, territorial sea or exclusive economic zone of that State in violation of applicable international rules and standards established through the Article 7, section 3(a) - A State Party may authorize either an institution or an organization recognized by it to issue the certificate referred to in paragraph 2 (a certificate attesting that insurance or other financial security). Such institution or organization shall inform that State of the issue of each certificate. In all cases, the State Party shall fully guarantee the completeness and accuracy of the certificate so issued and shall undertake to ensure the necessary arrangements to satisfy this obligation or general diplomatic conference (Article 218, section 1).

Port State control (PSC) is the inspection or check on visiting of foreign ships in national ports to verify that the condition of the ship and its equipment comply with the requirements of international rules on safety, pollution prevention and seafarers living and working conditions. PSC comes into the scene when shipowners, recognized organizations and flag-State administrations have failed in their responsibility to implement or ensure compliance with the requirements of the international maritime conventions.

Although it is well understood that the ultimate responsibility for implementing conventions is left to the flag States, port States are entitled to control foreign ships visiting their own ports to ensure that any deficiencies found are rectified before they are allowed to sail. PSC is regarded as measures complementary to the flag State control. The port State can require deficiencies to be corrected and detain the ship for this purpose, if necessary. It is therefore also a port State's defense against visiting substandard shipping.

The report on results of inspections carried out by member Authorities during the year for assessment of performance of the flags State are recorded in port State control statistics and analysis as "Black, Grey, and White (BGW) List". The BGW list presents the full spectrum, from quality flags to flags with a poor performance that are considered high or very high risk. The technical performance of a flag state is measured by a calculation based on the number of inspections and detentions of its ships during 3 (three) years rolling period for flags with at least minimum of 30 (thirty) inspections have been carried out.

The result is a rating which determines the list and the position on that list that the flag state appears. The BGW list have an impact on both the flag state and those ships flying its

flag. The “White list” represents quality flags with a consistently low detention record. Flags with an average performance are shown on the “Grey list”. Their appearance on this list may serve as an incentive to improve and move to the “White list”. At the same time flags at the lower end of the “Grey list” should be careful not to neglect control over their ships and risk ending up on the “Black list”.

In according to UNCLOS article 94 regarding “Duties of the flag State” on paragraph 3 are stated that “Every State shall take such measures for ships flying its flag as are necessary to ensure safety at sea with regard, inter alia, to:

- (a) the construction, equipment and seaworthiness of ships;
- (b) the manning of ships, labor conditions and the training of crews, taking into account the applicable international instruments; and
- (c) the use of signals, the maintenance of communications and the prevention of collisions.

Although UNCLOS has been implemented in Indonesia since 1985, there are still some problems related unable to carry out the obligations of the flag State. “There seems to be no immediate consequences in international law if a flag State neglects to exercise effective jurisdiction and control over its vessels despite the fact that the Law of the Sea Convention of 1982 and other international standards requiring flag States to do so. ...what if such report is unsuccessful, that is the flag State does not take the appropriate measures to remedy the situation? ...what actions non-flag States could take if the flag State is unwilling or unable to enforce its international obligations?” (Tamo Zwinge, 2011).

Under the provisions below, a flag State may authorize a recognized organization to carry out, on its behalf, statutory certification and other services and determination of tonnages only to ships entitled to fly its flag as required by these conventions, inter alia:

1. Regulation I/6 of SOLAS 1974.
2. Articles 13 and 16(3) of Load Line 66.
3. Regulation 6 of MARPOL Annex I.
4. Regulations 4(3), 5(2), 6(1), 8(2) and 9(2) of MARPOL Annex II.
5. Articles 6, 7 and 8 of Tonnage 69; and
6. Paragraph 4.1 of Part I of Code of ROs of in this sense provides “A flag State may delegate authority to an organization recognized as complying with the Provisions of this Code to perform, on its behalf, statutory certification and services under mandatory International Maritime Organizations (IMO) instruments and its national legislation”.

As stated by Goh (2014), “Recently, classification societies have become involved in flag state regulation and ship registration on behalf of governments”. The statement leads to the potential contributing factors of the flag State performance in terms of implementation of IMO instruments through a delegation of authority to recognized organizations.

The competence of seafarers is the most critical factor in the safe and efficient operation of ships, and has a direct impact on the safety of life at sea and the protection of the marine environment. Kuo (1998, p.171) states that the basic objectives of training and education are the same and can be regarded as “to achieve or enhance the competence of individuals for doing a specific task”.

Based on the theoretical, the control over ships mainly relies on the flag State and the other tiers such as shipowners and classification societies which responsible for the safe operation of ships. These several tiers of control should act as a perfect net in preventing substandard ships from operation. However, for various reasons, this net has not worked so well as was expected.

Therefore, the aim of the study is to describe the understanding of the flag-state administration, recognized organizations, and seafarers onboard regarding the implementation of the port State control for dealing with the impacts and challenges resulting from the results of inspections by port State control.

## METHOD

The research relies on qualitative analysis. The primary data was obtained from personal experience and informal discussions with Port State Control Officers (PSCO) of Indonesia and related parties to this research such as the Directorate of Maritime Safety (DMS), the Directorate of Sea and Coast Guard (DSCG) and the expert of Ship Safety Inspection Centre of Excellent (SSI-COE) of Directorate General of Sea Transportation. The secondary data was gathered from National regulations relating to the ratification of IMO conventions, the annual port State control reports in the Asia-Pacific region, publications of organization, sources of documentation, journal references, and various works and literature supporting this research's objectives.

In addition, most of the data utilized in this study is from academic secondary sources, backed up by official primary sources. Some books from the international of maritime law and other related articles were examined to get a thorough insight into the technicalities of port State control.

The initial step of research data collection is to carry out observation of the status of Indonesian-flagged vessels in the annual report on port state control in the Asia-Pacific region from 2018 to 2022. In those years, Indonesian-flagged vessels has move forward from position of the Black list to the White list categories. The next step, data collection is to perform documents analysis of the national regulations related to ratification of conventions, annual reports on port state control, international of maritime law books, publications of articles, journals and literature to increase data comprehensive.

In addition to data collection, the informal structured discussion was conduct with PSCO of Indonesia and person in charge of the Directorate of Maritime Safety, the Directorate of Sea and Coast Guard and the SSI-COE which been previous configure to get the data collected more complex and details.

The data collected is analyzed based on their quality and relevance in determining the outcome of this research. The data obtained from perform documents analysis is grouping analyzed in according to the research needs. The group of data is display in a narrative text description to comparison with the data from observation and discussions.

From the observation of the status of Indonesian-flagged vessels prior to 2018, shows a negative performance of the flag in the Black list categories. Just start in 2018, the flag-state administration has improved the fleet condition and the personnel capability which increase to average performance in the Grey list. Since 2019 until now, Indonesia has succeeded in the White list categories on port State control inspections in the Asia-Pacific region.

Based on data of the perform documents analysis, Indonesia has ratified and implemented the last ratification in 2017 for most of the relevant IMO conventions. The analysis of the report performance of Indonesia during the last five years (2018 - 2022), shows the data as follows:

1. In 2018, of 31,589 inspections, involving 17,301 individual ships, were carried out on ships registered under 99 flags, 17 Indonesian-flagged vessels were detained, leading to a detention rate of 6.37%.
2. In 2019, of 31,372 inspections, involving 17,647 individual ships, were carried out on ships registered under 97 flags, 11 Indonesian-flagged vessels were detained, leading to a detention rate of 3.69%.
3. In 2020, of 19,415 inspections, involving 13,047 individual ships, were carried out on ships registered under 94 flags, 6 Indonesian-flagged vessels were detained, leading to a detention rate of 3.97%.
4. In 2021, of 22,730 inspections, involving 14,951 individual ships, were carried out on ships registered under 97 flags, 5 Indonesian-flagged vessels were detained, leading to a detention rate 3.57%.



5. In 2022, of 24,894 inspections, involving 15,853 individual ships, were carried out on ships registered under 99 flags, 10 Indonesian-flagged vessels were detained, leading to a detention rate 3.86%.

In addition to data of the perform documents analysis above, since 2017 until now, Indonesia flag-state administration have a formal agreement with the classification society to which it was delegating statutory functions. The agreement is set out minimum requirements for classification societies that would need to be fulfilled in order for them to become an RO and carry out statutory functions on behalf of a State, and it required the establishment of a verification system in order to monitor the activities of recognized organizations acting on behalf of the flag State.

Besides the data of observation and perform documents above, the points data obtained from discussion that Indonesia should be continually strive to improve its ship performance on port State control in according to regulating and enforcing of the convention, and to strengthen the human resources in relation to the ship inspection.

In the discussion, the analysis is carried out on:

1. Issuance of the Circular Letter of Director General of Sea Transportation Number UM.003/11/8/DJPL-18 date of 5th February 2018 on arrangement the coordination between flag State officer and PSCO of Indonesia to inspection of the Indonesian-flag vessels before sailing to international voyage and to set up more detailed inspection before issuing the ship clearance, and to restrict the ship that often detained.
2. Performance of workshop and general lectures of port state control to stakeholder including seafarers in Maritime and Education Training Institution (METI).
3. Reinforcement of regulatory instruments and documentation to support the transparency and accuracy of inspection, and capacity building program to systematically develop the training capability for inspectors.

The collected data was processed and analyzed by using qualitative method in order to substantiate the discussion of comprehensive conclusion.

## **RESULTS AND DISCUSSION**

### **Flag State Supremacy**

The flag State is the State whose nationality is held by a ship. In international customary maritime law, the flag State has the primary jurisdiction over ships flying its flag, which is a principle based on the assumption that a ship is a floating part of the flag State's territory. Historically, international law as well as the shipping community relied mainly on flag States to maintain safety over the ships flying their flags.

This principle is clarified in Article 92 of the UNCLOS (1982), which provides that: "Ships shall sail under the flag of one State only and save in exceptional cases expressly provided for in international treaties or in this Convention shall be subject to its exclusive jurisdiction on the high seas". The Article 94 of this Convention requires that "Every State shall effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag". The flag state is required to take such measures that each ship is appropriately surveyed as to condition, equipment and manning to ensure ships flying its flag are safe at sea and environment friendly. In addition, a duty is imposed on flag States to take any steps necessary to secure observance with generally accepted international regulations, procedures and practices, which is further repeated in relation to oil pollution in Article 217.

The concept of flag State Control is also embodied in all of the 30-odd maritime conventions and 700 or so related codes and regulations, which have been developed by the International Maritime Organization (IMO) since its beginning in 1959 in response to the growing awareness of the need for internationally accepted, effective and enforceable maritime safety and environmental standards for shipping (Williamson, 1996).

Article 5 of the UN Convention on the Conditions for Registration of Ships (1986) says that: A flag state should have a competent and adequate national maritime administration...the maritime administration of the flag States shall ensure that ships flying the flag of such State comply with its laws and regulations concerning registration of ships and with applicable international rules and standards concerning, in particular the safety of ships and persons on board and the prevention of pollution of the marine environment. Furthermore, its authorized surveyors should periodically survey such ships in order to ensure compliance with applicable international rules and standards.

Generally speaking, the flag State has the supreme responsibility and obligation to regulate the ships flying its flag. For a flag State who has acceded or ratified an international convention, the flag State is legally bound by the convention and is obliged to establish legislation, such as Shipping Acts, Decrees, Guidelines and Instructions, to implement its provisions. These obligations are mainly fulfilled through the way of issuing certificates indicating compliance with the main international conventions by the flag State or organizations on behalf of the flag State (Hare, 1995). Flag States must also ensure themselves that their own ships have priority, which means that flag States must keep their own fleets in compliance with the relevant international conventions and regulations before they check others (Ulstrup, 2001).

Flag State control was the ideal mechanism to implement those standards, which have been developed for the protection of seafarers, passengers, cargo owners, the environment and responsible ship owners. There will be no necessity for the PSC to back up the system if the flag States had really enforced the safe operation of the ships entitled to fly their flags (Williamson, 1996).

The BGW List is measured by a calculation based on the number of inspections and detentions of its ships which were involved in 30 (thirty) or more port State inspections over the 3 (three) year period. The calculation is using a standard formula for statistical calculations in which certain values have been fixed in accordance with the agreement of the Tokyo MOU. 2 (Two) limits have been included in the new system, the ‘Black to Grey’ and the ‘Grey to white’ limit, each with its own specific formula:

$$U_{\text{black - to - grey}} = N \cdot p + 0.5 + z \cdot \sqrt{N \cdot p \cdot (1 - p)}$$

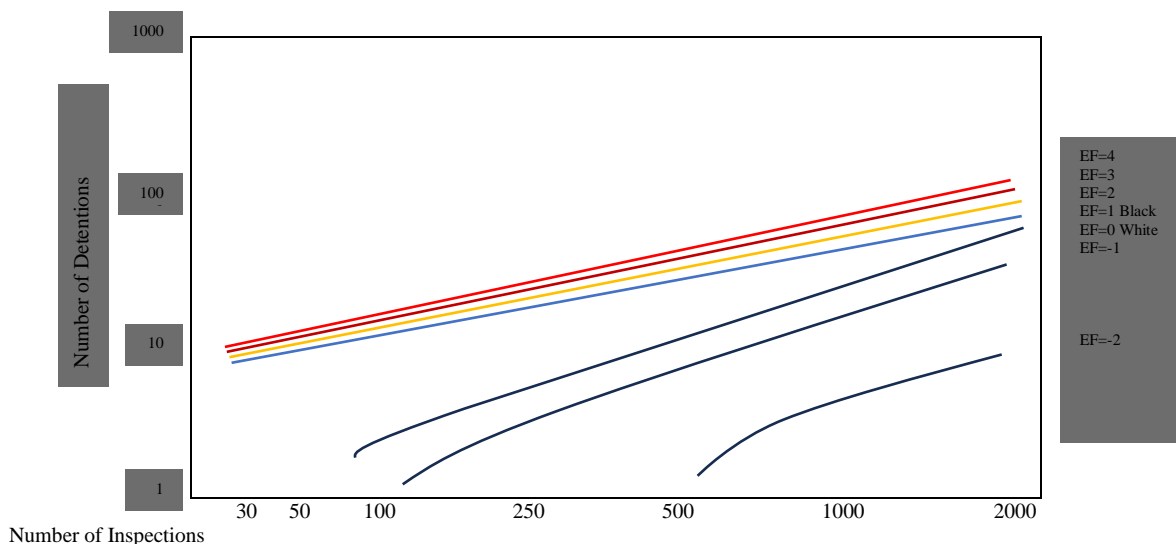
$$U_{\text{white - to - grey}} = N \cdot p - 0.5 - z \cdot \sqrt{N \cdot p \cdot (1 - p)}$$

In the formula "N" is the number of inspections, "p" is the allowable detention limit (yardstick), set to 7% by the Tokyo MOU Port State Control Committee, and "z" is the significance requested (z=1.645 for a statistically acceptable certainty level of 95%). The result "u" is the allowed number of detentions for either the Black or White list. The "u" results can be found in the table as the “Black to Grey” or the “Grey to white” limit. A number of detentions above this “Black to Grey” limit means significantly worse than average, where a number of detentions below the “Grey to white” limit means significantly better than average. When the number of detentions for a particular flag State is positioned between the two, the flag State will find itself on the Grey list. The formula is applicable for sample sizes of 30 (thirty) or more inspections over a 3 (three) year period.

To sort results on the Black or White list, simply alter the target and repeat the calculation. Flags which are still significantly above this second target are worse than the flags which are not. This process can be repeated, to create as many refinements as desired. Of course, the maximum detention rate remains 100% to make the flags’ performance comparable, the excess factor (EF) is introduced. Each incremental or decremental step corresponds with one whole EF-point of difference. Thus, the excess factor EF is an indication for the number of times the yardstick has to be altered and recalculated. Once the excess factor is determined for all flags, the flags can be ordered by EF. The excess factor can

be found in the last column the Black, Grey or White list. The target (yardstick) has been set on 7% and the size of the increment and decrement on 3%. The Black – Grey – White list have been calculated in accordance with the above principles.

The graphical representation of the system below is showing the direct relations between the number of inspected ships and the number of detentions. Both axes have a logarithmic character.



Source: Annual Report on Port State Control in the Asia-Pacific Region

**Figure 1. The Graphic of Direct Relation between Number of Inspections and Number of Detentions**

Based on Annual Report on Port State Control in the Asia-Pacific Region (Tokyo MOU) from 2018 to 2021, the table of BGW list below indicates levels of performance of Indonesia flag State.

**Table 1. Summary of Port State Inspection Data 2016-2018**

FLAG	Inspections 2016-2018	Detentions 2016-2018	Black to Grey Limit	Grey to White Limit	Excess Factor
<b>BLACK LIST</b>					
Fiji <sup>(1)</sup>	44	14	6		5.55
Tanzania	130	32	14		4.87
Cambodia	452	76	41		3.34
Togo	1,110	149	92		2.60
Mongolia	278	40	27		2.37
Micronesia, Federated States of <sup>(2)</sup>	372	46	35		1.90
Palau	209	27	21		1.79
Niue	155	21	17		1.79
Korea, Democratic People's Republic	539	62	48		1.78
Siera Leone	1,149	114	95		1.51
Barbados	59	9	8		1.49
<b>Indonesia</b>	<b>659</b>	<b>58</b>	<b>57</b>		<b>1.03</b>
<b>GREY LIST</b>					
Saint Kitts and Nevis	46	6	7	0	0.92
Jamaica	98	10	12	2	0.84
Dominica	72	7	9	1	0.74
Kiribati	336	24	32	15	0.53
Cook Island	104	7	12	2	0.47
Pakistan	34	2	5	0	0.44
Croatia	95	6	11	2	0.43
Iran	135	8	15	4	0.37



Sri Lanka	49	2	7	0	0.29
Belize	2,411	158	190	148	0.24
Vanuatu	221	12	22	9	0.24
Turkey	114	5	13	3	0.20
Curcao	42	1	6	0	0.20
Bangladesh	156	6	17	5	0.07
Switzerland	105	3	12	3	0.05

Source: Annual Report on Port State Control in the Asia-Pacific Region 2018

**Table 2. Summary of Port State Inspection Data 2017-2019**

Flag	Inspections 2017-2019	Detentions 2017-2019	Black to Grey Limit	Grey to White Limit	Excess Factor
<b>BLACK LIST</b>					
Tanzania	44	15	6		6.20
Togo	1,201	174	99		2.95
Mongolia	261	37	26		2.28
Korea, Democratic People's Republic	315	43	30		2.21
Sierra Leone	1,202	126	99		1.69
Palau	239	29	24		1.64
Niue	127	17	14		1.62
Saint Kitts and Nevis	34	6	5		1.46
Barbados	71	10	9		1.36
Micronesia, Federated States of <sup>(1)</sup>	70	9	9		1.03
<b>GREY LIST</b>					
Jamaica	82	10	10	1	1.00
Kiribati	221	22	22	9	0.98
Comoros	44	6	6	0	0.94
Belize	2,531	183	199	156	0.63
Cook Island	92	7	11	2	0.56
Croatia	92	7	11	2	0.56
Pakistan	39	3	6	0	0.54
Qatar	41	3	6	0	0.52
Sri Lanka	46	3	7	0	0.47
Dominica	89	5	11	2	0.36
Iran	134	7	15	4	0.28
India	248	14	24	10	0.26
Curacao	35	1	5	0	0.26
Turkey	106	5	12	3	0.25
Saint Vincent and the Grenadines	167	8	18	6	0.19
<b>Indonesia</b>	<b>761</b>	<b>45</b>	<b>65</b>	<b>41</b>	<b>0.16</b>
Switzerland	80	2	10	1	0.08
Kuwait	61	1	8	0	0.07
Luxembourg	70	1	9	1	0.01

Source: Annual Report on Port State Control in the Asia-Pacific Region 2019

**Table 3. Summary of Port State Inspection Data 2018-2020**

Flag	Inspections 2018-2020	Detentions 2018-2020	Black to Grey Limit	Grey to White Limit	Excess Factor
<b>BLACK LIST</b>					
Togo	973	128	82		2.48
Sierra Leone	999	105	84		1.66
Mongolia	243	29	24		1.59
Jamaica	62	9	8		1.35
Palau	185	21	19		1.28

Kiribati	118	14	13		1.16
Korea, Democratic People's Republic	143	16	16		1.09
<b>GREY LIST</b>					
Croatia	79	9	10	1	0.91
Barbados	76	8	9	1	0.82
Niue	76	8	9	1	0.82
Comoros	31	3	5	0	0.65
Dominica	74	6	9	1	0.60
Belize	2,188	155	173	133	0.55
Qatar	44	3	6	0	0.49
Pakistan	31	2	5	0	0.47
Sri Lanka	32	2	5	0	0.46
Cook Island	86	5	10	2	0.38
Iran	96	5	11	2	0.31
India	193	11	20	7	0.30
Saint Vincent and the Grenadines	129	6	14	4	0.21
Kuwait	45	1	6	0	0.18
Luxembourg	63	1	8	1	0.05
Turkey	87	2	11	2	0.04
Vanuatu	151	5	16	5	0.01
Saudi Arabia	114	3	13	3	0
<b>WHITE LIST</b>					
Sweden	30	0		0	0
Chile	31	0		0	0
Curacao	33	0		0	0
Switzerland	53	0		0	-0.18
<b>Indonesia</b>	<b>716</b>	<b>34</b>		<b>38</b>	<b>-0.23</b>
United States of America	130	3		4	-0.29
Italy	282	10		12	-0.32
Bangladesh	241	8		10	-0.32

Source: Annual Report on Port State Control in the Asia-Pacific Region 2020

**Table 4. Summary of Port State Inspection Data 2019-2021**

Flag	Inspections 2019-2021	Detentions 2019-2021	Black to Grey Limit	Grey to White Limit	Excess Factor
<b>BLACK LIST</b>					
Mongolia	224	33	22		2.36
Togo	771	100	66		2.35
Sierra Leone	892	89	75		1.47
<b>GREY LIST</b>					
Korea, Democratic People's Republic	65	8	8	1	0.94
Dominica	48	6	7	0	0.89
Croatia	61	6	8	0	0.73
Palau	162	14	17	5	0.73
Jamaica	55	5	7	0	0.66
Niue	48	4	7	0	0.59
Cook Island	79	6	10	1	0.56
Kiribati	68	5	9	1	0.53
Qatar	35	2	5	0	0.42
India	141	9	15	4	0.42
Barbados	68	4	9	1	0.40
Saint Vincent and the Grenadines	96	5	11	2	0.31
Belize	2,039	130	162	123	0.17
Gibraltar (UK)	56	1	8	0	0.10
Iran	61	1	8	0	0.07

Saudi Arabia	84	2	10	2	0.05
Turkey	85	2	10	2	0.05
Luxembourg	67	1	9	1	0.03
<b>WHITE LIST</b>					
Switzerland	36	0		0	0
Italy	211	8		8	-0.04
Antigua and Barbuda	532	23		27	-0.30
Netherlands	211	6		8	-0.44
United States of America	91	1		2	-0.48
United Kingdom (UK)	330	11		15	-0.49
<b>Indonesia</b>	<b>589</b>	<b>22</b>		<b>31</b>	<b>-0.56</b>
Bangladesh	272	7		12	-0.70
Russian Federation	413	12		20	-0.76
Vanuatu	112	1		3	-0.81
Philippines	368	9		17	-0.89
Cayman Island (UK)	257	5		11	-0.94

Source: Annual Report on Port State Control in the Asia-Pacific Region 2021

**Table 5. Summary of Port State Inspection Data 2020-2022**

Flag	Inspections 2019-2021	Detentions 2019-2021	Black to Grey Limit	Grey to White Limit	Excess Factor
<b>BLACK LIST</b>					
Dominica	31	8	5		3.32
Mongolia	240	31	24		1.86
Togo	630	66	55		1.52
Sierra Leone	896	80	76		1.14
<b>GREY LIST</b>					
Cook Islands	78	6	10	1	0.56
Gibraltar (UK)	49	3	7	0	0.44
Palau	156	10	17	5	0.42
Kiribati	51	3	7	0	0.42
Belize	1,981	134	158	119	0.38
India	91	5	11	2	0.35
Qatar	30	1	5	0	0.30
Croatia	48	2	7	0	0.30
Jamaica	53	2	7	0	0.26
Saint Vincent and the Grenadines	83	3	10	1	0.18
Belgium	65	2	8	1	0.17
Russian Federation	138	6	15	4	0.16
Barbados	73	2	9	1	0.12
Antigua and Barbuda	450	24	41	22	0.10
United States of America	78	2	10	1	0.09
Netherlands	171	6	18	6	0.00
<b>WHITE LIST</b>					
Nieu	32	0	5	-1	0
Iran	36	0	6	0	0
Luxembourg	44	0	6	0	0
Saudi Arabia	59	0	8	0	-0.40
Italy	141	3	15	4	-0.45
<b>Indonesia</b>	<b>550</b>	<b>21</b>	<b>49</b>	<b>28</b>	<b>-0.50</b>
Turkey	71	0	9	1	-0.71
France	72	0	9	1	-0.73
Bangladesh	257	6	25	11	-0.77
Malaysia	459	13	42	23	-0.82
Vanuatu	79	0	10	1	-0.86
United Kingdom (UK)	277	6	27	12	-0.88
Bermuda (UK)	83	0	10	1	-0.93

Philippines	334	6	32	15	-1.14
Taiwan, China	273	4	27	12	-1.20
Tuvalu	273	4	27	12	-1.20
Panama	18,332	527	1341	1226	-1.31
Denmark	389	6	36	18	-1.32
Greece	488	8	44	24	-1.35
Liberia	7,513	196	563	489	-1.36
Germany	115	0	13	3	-1.37
Portugal	630	11	55	33	-1.38
Cyprus	1,011	19	85	57	-1.42
Bahamas	1,413	28	115	83	-1.44
Isle of Man (UK)	343	4	32	16	-1.44
Thailand	585	9	52	30	-1.45
Norway	548	8	49	28	-1.46
Cayman Islands (UK)	196	1	20	7	-1.50
Marshall Islands	6,865	145	516	445	-1.53
Viet Nam	1,935	33	154	116	-1.58
Malta	2,106	36	167	128	-1.59
Japan	477	4	43	24	-1.70
Korea, Democratic People's Republic	1,944	27	155	117	-1.70
Hongkong, China	6,783	97	510	440	-1.77
Singapore	4,731	62	361	302	-1.80
China	1,745	8	140	104	-2.21

Source: Annual Report on Port State Control in the Asia-Pacific Region 2022

In **Table 1** of the 2018 annual report, the flag State of Indonesia is record on the Black list categories which indicates the flag state was failed to ensure the ships flying its flag had complied with the relevant requirements and IMO conventions so resulting in many Indonesian ships were detained by port State inspection.

Ships are detained when the condition of the ship or its crew does not correspond substantially with the applicable conventions. Such strong action is to ensure that the ship cannot sail until it can proceed to sea without presenting a danger to the ship or persons on board, or without presenting an unreasonable threat of harm to the marine environment. Where conditions on board are found that are not in compliance with the requirements of the relevant instruments by the port State control officers, these are recorded as deficiencies and required to be rectified.

Furthermore, in **Table 2** of the 2019 annual report, Indonesia has taken action to improve the condition of its fleet, it made a good impact by entering to the Grey list categories which indicates an increase in performance to average performance.

The appearance of Indonesia flag state on the Grey list on 2019 as serve as an incentive to improve for moving toward to the “White List”. Finally, in **Table 3, 4, and 5** of the 2020, 2021, and 2022 annual reports, Indonesia was successfully included in the Whitelist categories which signifies the performance of the state's responsibility and obligation to regulate the ships flying its flag was succeed so that has an impact on the flag state and ships flying its flag.

In the rise of awareness to adopt new public management and to positioning themselves as commercial agents who provide satisfactory level of service to their customers, the flag states see that the ship registration service is a business of reputation and trust. The tendency of shipowners to search on quality and responsible flag states also drives this transformation. The risk of being inspected more thoroughly in port State control as a consequence of sailing on Black list flag is something that shipowners really want to avoid. As customers, most shipowners enjoy the wide options in choosing flag, as well as freedom to choose flag that suits their need.

The BWG list is not the only publication that the shipowners consider, it's also are intended the shipping association incorporated in Baltic International Maritime Council (BIMCO), International Association of Dry Cargo Shipowners (INTERCARGO), International Association of Independent Tanker Owners (INTERTANKO), International Chamber of Shipping (ICS) and International Shipping Federation (ISF) in published the Shipping Industry Guidelines on Flag State Performance to provide recommendation for shipping companies in choosing appropriate flag.

Fortunately, some reputable registers react positively by providing not only uncomplicated administration process, but at the same enforce high safety standard to be considered as responsible flag states. They regarded the list as useful means of advertising and therefore seek the way to improve their rank.

### **Delegation of Authority to the Recognized Organizations (ROs)**

The duties of the flag State may be delegated to the private entities known as classification societies, acting as recognized organizations on behalf the flag States. It was argued that it is not possible to consider flag state responsibilities without also considering the role and performance of the recognized organizations (ROs) that, in the majority of cases, implement many of the technical, but increasingly administrative, operational, and social duties of a flag State.

Flag States have the ability under the SOLAS, MARPOL, Load Line, and Tonnage Conventions to entrust their survey, inspection and certification functions to ROs in accordance with the guidelines provided in IMO resolutions, which have mandatory effect through the SOLAS Convention (regulation I/6). Although the RO then exercises control in these matters over ships registered in that State, the flag State retains responsibility for “taking necessary measures to ensure that ships flying their states flags comply with the provisions of such Conventions, including surveys and certification (SOLAS I/6, Preamble), and for the reporting that is required under various instruments to the IMO. The flag State is also required to monitor the activities of the RO to ensure that they are effective (IMO Resolution A.739 (18), para. 3).

The effectiveness of the control exercised by the RO on behalf of the flag State depends upon that organization meeting the standards laid down in the IMO Resolutions A.739 (18) and A.789 (19) (Mansell, 2009).

The international and national regulatory framework provide for this discharge of the flag State's general duties to the private entities known as recognized organizations. In this respect, Park (2012) stated that: “Recognized organizations, regardless of whether they are public or private enterprises, exercise authority, which is a fundamental component for ensuring full compliance with and enforcement of the regulatory regime over ships on behalf of States...Resolution A.739 (18) provides minimum requirements that should be complied with by flag States and organizations to be delegated by flag States when delegating the State's statutory function. Resolution A.789 (19) provides detailed requirements, which describe specifications under specific functions of ROs that ROs should meet to be recognized”.

The importance of the classification societies as ROs has evolved in the time with regulation of the maritime industry. At the very beginning, the role of the classification societies was to certify the technical aspect of the ship, such as design, construction and condition of ships and survey marine structures. As Carlsson (2016) notes: “The aim of the work of classification societies was to aid and facilitate the various maritime actors in their businesses by providing information on standards. The standards that classification societies have traditionally always assessed are those relating to design, construction and condition of ships and survey marine structures, but they did not look at manning or operations of vessels.



Thus, the assessments were more on the static condition of a ship and not on its operation during voyage”.

It is argued that the issue of certification of ships rests on the responsibilities of flag States as well as classification societies acting as ROs through the delegation of flag States’ responsibilities. The two principal actors on the stage of worldwide standards for ships are the International Maritime Organization (IMO) and Classification Societies (Class). Their roles are inextricably entwined and are reflected in the regulatory regime that has evolved over the last two centuries. The role of Class in the safety of ships, both historical and topical, and their relationship with the IMO and flag States, is identified as a leading and contentious issue, as is the conflict arising from their private and public roles (Mansell, 2009).

The right of a flag State to discharge its general duties to the recognized organizations is also set out in regulation 4.1 of part I of code of ROs, which provides that: “A flag State may delegate authority to an organization recognized as complying with the provisions of this Code to perform, on its behalf, statutory certification and services under mandatory IMO instruments and its national legislation.”

However, according to Takei, (2013, p. 98), “In relation to the delegation of authority, however, there is a general indication that some States do not always perform satisfactorily”,

Silos et al. (2013), in a case study on the role of classification societies in the era of globalization, highlighted the importance of the classification societies acting as ROs in the implementation of flag State duties as follows: “Although in the great majority of States, the inspection and certification of vessels are provided as public services, the classification societies continue being an essential element in maritime traffic, since the official inspections and certifications generally do not take into consideration certain structural aspects or details of vessels”.

Under this recognition, the IMO Assembly has adopted two (2) resolutions pertaining to the delegation of flag State obligations to recognized organizations:

1. Resolution A.739 (18) on the guidelines for the authorization of organizations acting on behalf of the administration.
2. Resolution A.789 (19) on specifications on the surveys and certification functions of recognized organizations acting on behalf of the administration.

By resolutions of the Maritime Safety Committee (MSC) on MSC.349 (92) and the Marine Environment Protection Committee (MEPC) on MEPC (65), IMO has adopted the Code for Recognized Organizations (RO Code), which entered into force on 1st January 2015 and replaces the previous resolutions (Resolution A.739 (18) and Resolution A.789 (19)).

The purpose of the Code is to serve as an international standard consolidated instrument, containing minimum criteria against which organizations are assessed towards recognition and authorization and the guidelines for oversight by flag States.

**Table 6. Specific Requirements for Delegation of Authority regarding IMO Instruments Implementation Code**

IMO IMPLEMENTATION	INSTRUMENTS	REGULATION REFERENCE	RESOLUTION TO BE COMPLIED
SOLAS 1974		<ul style="list-style-type: none"> <li>• Ch. I Reg. 6 (a)</li> <li>• Ch. XI-1 Reg. 1</li> <li>• Ch. XI-2 Reg.1.16</li> </ul>	<ul style="list-style-type: none"> <li>• Res. A.739 (18)</li> <li>• Res. A.789 (19)</li> </ul>
MARPOL 73/78	Annex I	Ch. 2 Reg. 6 para. 3.1	<ul style="list-style-type: none"> <li>• Res. A.739 (18)</li> <li>• Res. A.789 (19)</li> </ul>
	Annex II	<ul style="list-style-type: none"> <li>• Ch. 3 Reg. 8 para. 2.1</li> <li>• Ch. 3 Reg. 8 para. 2.2</li> </ul>	<ul style="list-style-type: none"> <li>• Res. A.739 (18)</li> <li>• Res. A.789 (19)</li> </ul>
	Annex IV	Ch. 2 Reg. 4 para. 3	-
	Annex VI	Ch. 2 Reg. 5 para. (3) (a)	<ul style="list-style-type: none"> <li>• Res. A.739 (18)</li> <li>• Res. A.789 (19)</li> </ul>

LOAD LINES 66	<ul style="list-style-type: none"> <li>• Annex A Article 13</li> <li>• Annex B</li> <li>• Annex I Ch. I Reg. 2-1</li> </ul>	<ul style="list-style-type: none"> <li>• Res. A.739 (18)</li> <li>• Res. A.789 (19)</li> </ul>
MLC 2006	Title 5 Reg. 5.1.1.3	-
TONNAGE 1969	<ul style="list-style-type: none"> <li>• Article 6</li> <li>• Article 7</li> </ul>	-
IGC CODE	<ul style="list-style-type: none"> <li>• Ch. 1 para 1.5.1.1</li> <li>• Ch. 1 para 1.3.30.3</li> </ul>	Res. A.739 (18)
IBC CODE	<ul style="list-style-type: none"> <li>• Ch. 1 para 1.5.1.1</li> <li>• Ch. 1 para 1.5.1.2</li> </ul>	<ul style="list-style-type: none"> <li>• Res. A.739 (18)</li> <li>• Res. A.789 (19)</li> </ul>
NOx CODE 2008	Ch. 1 para 1.2.2	<ul style="list-style-type: none"> <li>• Res. A.739 (18)</li> <li>• Res. A.789 (19)</li> </ul>
AFS 2001	Annex Reg. 1 para. (4)	<ul style="list-style-type: none"> <li>• Res. A.739 (18)</li> <li>• Res. A.789 (19)</li> </ul>
INF CODE	Annex Ch. 1 para. 1.3	<ul style="list-style-type: none"> <li>• Res. A.739 (18)</li> <li>• Res. A.789 (19)</li> </ul>
HSC CODE	Ch. 1 para. 1.5.4	-
ISM CODE	<ul style="list-style-type: none"> <li>• Part B para. 13.2</li> <li>• Part B para. 13.7</li> </ul>	-
GRAIN CODE	Part A para. 3.1	-
IMSBC CODE	-	-
ISPS CODE	<ul style="list-style-type: none"> <li>• Part A para. 4.3</li> <li>• Part A para. 19.1.2</li> <li>• Part A para. 19.2.2</li> </ul>	-

Source: Park, 2012

IMO resolution A.739 (18) introduced 3 (three) main elements in instituting of ROs, as follow:

1. It required each flag State administration to have a formal agreement with the classification society to which it was delegating statutory functions.
2. It also set out minimum requirements for classification societies that would need to be fulfilled in order for them to become of ROs and carry out statutory functions on behalf of a State.
3. It finally required the establishment of a verification system in order to monitor the activities of ROs acting on behalf of the flag State.

The delegating flag state should determine that the recognized organization has adequate resources in terms of technical, managerial and research skills to carry out the tasks being delegated in compliance with the minimum standards for recognized organizations acting on behalf of the administration.

There is a potential relationship between the type of recognized organizations authorized to conduct the statutory functions and the reasons for the high number of detentions of the flagged vessels in its international registry.

The type of recognized organization means the distinction between the recognized organizations which are members of International Association of Classification Societies (IACS) and those which are not members of this Association. According to the IMO Global Integrated Shipping Information System (IMO GISIS) database, eighty-six (86) recognized organizations have currently been reported and categorized into two (2) groups. IACS has thirteen (13) member classification societies which are regarded as equipped with well-developed standards and their consultative status with IMO has been granted since 1969.

**Table 7. List of Recognized Organizations**

No.	Recognized Organization (RO)
1.	Aegean Register of Shipping
2.	Alpha Ship Classification

3.	American Bureau of Shipping
4.	Asia Classification Society
5.	Asia Shipping Certification Services
6.	Azure Naval Architects BV
7.	Biro Klasifikasi Indonesia
8.	Bolivian Register of Shipping
9.	Bulgarski Koraben Registar
10.	Bureau Veritas
11.	China Classification Society
12.	Columbus American Register
13.	Cosmos Marine Bureau
14.	CR Classification Society
15.	Croatian Register of Shipping
16.	Cyprus Bureau of Shipping
17.	Danforth Marinesurvey & Certification Services
18.	DNV AS
19.	Dromon Bureau of Shipping
20.	Emirates Classification Society TASNEEF
21.	Foresight Ship Classification
22.	Hellas Naval Bureau of Shipping S.M.P.C
23.	Hellenic Register of Shipping
24.	Honduras International Surveying and Inspection Bureau
25.	Indian Register of Shipping
26.	Intermaritime Certification Services, S.A.
27.	International Marine Survey Association
28.	International Maritime Register
29.	International Naval Surveys Bureau
30.	International Register of Shipping
31.	International Ship Classification
32.	Iranian Classification Society
33.	Isthmus Bureau of Shipping
34.	Isthmus Maritime Classification Society S.A.
35.	Korea Classification Society (former Joson Classification Society)
36.	Korea Ship Safety Technology Authority
37.	Korean Register
38.	Limdal Marine Services
39.	Lloyd's Register
40.	M&P Surveyors, S. de R.L. de C.V
41.	Macosnar Corporation
42.	Maritime Bureau of Shipping
43.	Maritime Lloyd Ltd, Georgia
44.	Maritime Technical Systems and Services
45.	Mediterranean Shipping Register
46.	National Shipping Adjusters Inc
47.	Nautx, Ltd
48.	New United International Marine Services Ltd
49.	Nippon Kaiji Kyokai
50.	Novel Classification Society S.A.
51.	Overseas Marine Certification Services
52.	Panama Bureau of Shipping
53.	Panama Maritime Documentation Services
54.	Panama Shipping Registrar Inc.
55.	Phoenix Register of Shipping
56.	Polski Rejestr Statkow
57.	Qualitas Register of Shipping S.A.
58.	Registro Brasileiro de Navios de Aeronaves
59.	RINA Services S.p.A.
60.	RINAVE Portuguesa

61.	Royal Bureau of Shipping
62.	RS Classification Services MON IKE
63.	Russian Maritime Register of Shipping
64.	Russian River Register
65.	Ship Classification Malaysia
66.	Shipping Register of Ukraine
67.	SingClass International Pte Ltd
68.	Sing-Lloyd
69.	Turkish Lloyd
70.	Union Bureau of Shipping
71.	United Maritime Survey
72.	Universal Maritime Bureau
73.	Universal Shipping Bureau
74.	Vega Register Inc.
75.	Veritas Register of Shipping
76.	Vietnam Register

Source: Annual Report on Port State Control in the Asia-Pacific Region

**Table 8. Performance of Recognized Organizations**

Recognized organization (RO)	No. of overall inspections 2020-2022	No. of RO responsible detentions 2020-2022	Low/Medium Limit	Medium/High Limit	Excess Factor	Performance Level
Asia Shipping Certification Services	104	5	5	0	1.05	Low
Foresight Ship Classification	113	4	5	0	0.80	Medium
Union Bureau of Shipping	534	11	17	5	0.53	
Sing-Lloyd	66	1	4	0	0.43	
Polski Rejestr Statkow	149	2	6	0	0.35	
Dromon Bureau of Shipping	246	2	9	1	0.14	
Universal Maritime Bureau	442	5	14	3	0.14	
Cosmos Marine Bureau	390	1	13	3	-0.68	
Biro Klasifikasi Indonesia	426	1	14	3	-0.79	
CR Classification Society	435	1	14	3	-0.81	
Overseas Marine Certification Services	1,356	9	36	18	-0.82	
International Register of Shipping	305	0	11	2	-0.84	
Panama Maritime Documentation Services	1,319	6	35	18	-1.10	
Intermaritime Certification Services, S.A.	2,156	11	54	32	-1.18	
Russian Maritime Register of Shipping	425	0	14	3	-1.43	
Vietnam Register	2,020	6	51	30	-1.49	
Isthmus Bureau of Shipping	1,049	2	29	13	-1.52	
Korean Register	6,037	13	139	102	-1.72	
RINA Services S.p.A.	2,998	3	73	47	-1.83	
Lloyd's Register	10,008	13	224	177	-1.84	
Nippon Kaiji Kyokai	24,644	28	530	456	-1.87	
Bureau Veritas	9,177	8	206	161	-1.89	
American Bureau of Shipping	8,669	3	195	151	-1.95	
DNV AS	16,178	5	353	294	-1.96	
China Classification Society	6,246	1	144	106	-1.97	

Note: 1. In this table, only recognized organizations (RO) that had more than 60 inspections are taken into account. The formula used is identical to the one used for the BGW List. However, the values for P and Q are adjusted to P=2% and Q=1%.

2. ROs involving 60-179 inspections with zero detention are not included in this table.

Source: Annual Report on Port State Control in the Asia-Pacific Region 2022

IACS members put their work together to accomplish uniform implementation of their rules or IMO instruments through unified interpretations or unified requirements and more than 90% of world tonnage is accounted for by IACS member classification societies. Therefore, recognized organizations that are members of IACS can be categorized as high performance ROs that is to say, they have adequate resources and enjoy experience and technical and managerial skills to effectively perform the delegated tasks.

On the other hand, there are many other classification societies and organizations non-members of IACS that lack consistency of standards and have shown relatively low performance in terms of implementation of international instruments. The ROs non-IACS member do not come anywhere near to meeting the minimum requirements of IMO Resolutions and to some extent reflects the negative performance recorded which has recognized and authorized them to carry out statutory functions.

It is most likely obvious that the majority of them are generally regarded as lacking adequate resources and experience to perform the tasks they are assigned on behalf of flag administration. This situation often results in substandard surveys of substandard ships and the issuance of meaningless statutory certificates on behalf of the flag State, with associated risks to the lives of crews and to the marine environment.

The number of overall inspections and overall detentions is calculated corresponding to each recognized organizations that issued statutory certificates for a ship. In case that ship's certificates were issued by more than one ROs, the inspection and detention would be counted to each of them. The number of detentions of the flagged vessels is evidence that the majority of the recognized organizations do not meet the minimum conditions of IMO resolution and therefore perform poor surveys and issue certificates that do not reflect the safety condition of the ships.z

Hence, the necessity for the flag State to control and monitor the performance of those recognized organizations. It is also to remedy this poor performance of flag State inspection that the port State control regime was instituted.

### **Contribution of Maritime and Education Training Institution (METI)**

Competency of seafarers is one of the most important aspects to achieve sustainable development of the industry (El Ashmawy, 2012). The seafaring professional is a specialized professional, who has to meet the requirements of both shipping companies and international maritime regulations (Shicheng, 2009). Indeed, seafarers should be equipped with the desired skills and proper knowledge of and personal attitudes towards the shipping industry (Lau & Ng, 2015, p. 315).

Seafarers should be motivated, i.e., the training courses should not be considered just a process to gain the certification so that employment opportunities will be available, but should be felt as the acquisition of knowledge and skills for a conscientious protection of human life, the seas and the cargo entrusted to their care (Manuel, 2005).

The quality seafarers refer to those with good experiences on board, excellence in seamanship, computer operations, English language skills, ship management, interpersonal communication, professional virtues and commitment, which are beyond the standards of competences in the STCW (Shicheng, 2009, p. 5). The competent seafarer means the seafarer has the competency to demonstrate and perform the standards of competence stated in the STCW.

International Maritime Organization (IMO) officials attempted to set the standards of training for seafarers (Wilcox, as cited in Emad & Roth, 2008). The first international set of standards of training, certification and watchkeeping for seafarers (STCW) was adopted on 7 July 1978. By reviewing the evolution of STCW in the past years, it is clear that some training requirements were amended based on the current issues occurring in the shipping industry. In STCW 1978, most training courses were not included for simulator training, but it is added in



1995 amendments. In 2010 Manila amendments, ECDIS training and special training requirements for liquefied gas carrier were added.

Regulation I/2 of the Manila amendments to STCW Convention provides that an application for a Certification of Competence (COC) shall meet the standards of competence set out in the rules for the capacities, functions and levels specified in the endorsement of the certificate. The functions specified in the standards of competence are divided into seven categories: Navigation, Cargo handling and stowage, Control of ship operation and care of personnel on board, Marine engineering, Electrical, electronic and control engineering, Maintenance and repair, and radio communication. There are three levels of responsibility: management, operational, and support.

The STCW Convention sets minimum requirements and minimum standards of competence to be met globally by all the different education systems of maritime nations. Seafarer training courses should at the least meet the minimum requirements and minimum standards of competence in the STCW Convention and Code. Seafarers' training courses follow the international mandatory standards required by the International Convention of Standards of Training Certification and Watchkeeping (STCW) 1978, as amended, which is a unique international standard for the training of seafarers.

However, in recent years, digitalization technology is dramatically changing the shipping industry and seafarers should require more technical knowledge to operate ships safely and efficiently. Arguably, international regulations evolve at a slower pace and it can be argued that it is proactive Maritime Education and Training Institution (METI) that should ensure that seafarer training continues to meet industry requirements more speedily.

IMO has established a common minimum standard for seafarers Certification of Competence, which provides guidance for METI to conduct competence assessment for seafarers through a standardized competence assessment system, which serves as the basis for the issuance of competence certificates for seafarers (Ghosh et al., 2016).

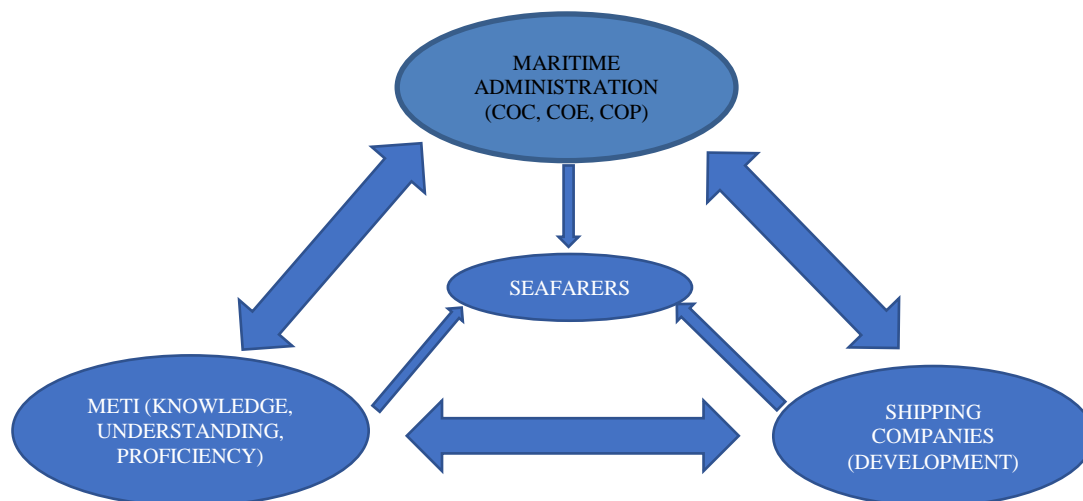
METI plays a significant role in promoting safety at sea, protection of the environment, and economical ship operation. METI is a proactive sector in the industry that should be relevant to the reality of shipboard operations at the right place at the right time.

The concept of Triple Helix of University-Industry-Government relations, which initiate a general framework for exploring and high technology development in the knowledge-based society can be applicable in the context of Maritime and Education Training (MET) sector. Maritime Administrations (Government), METI and the Shipping Industry are interrelated with each other.

The government are supposed to monitor the effectiveness of mandatory training courses required by STCW continuously. The government, as a member state of IMO, has the responsibility to implement the international instruments of IMO effectively and has to legislate international laws as national laws. The government as an executive body to be ensure the implementation of obligations of the country through national policies and laws in order to govern all maritime affairs and shipping related matters. The government shall ensure that all training and assessment of seafarers for certification under the Convention are in accordance with written programmers, whose main attribute should be clear learning outcomes. The government shall conduct, monitor, evaluate and support the training courses by appropriate qualified instructors, supervisors and assessors.

METI implement the training courses including mandatory and non-mandatory courses for the needs of the shipping industry. METI should effectively develop training courses based on the requirements of international regulations, national policies/legislation and shipping industry needs. Maritime education and training are the acquisition of the knowledge and skills related to tasks to be performed on board the ship and have the purpose supplying competent seafarers to the shipping industry.

The shipping industry (shipping companies) support the continuous professional developments of seafarers. The shipping companies that own the Indonesian flagged vessels in accordance with the Shipping Act through the seafarer recruitment companies should be to employ the local seafarers. Some shipping companies ask seafarers to attend some specific training required as per company policies or onboard operations and seafarer supply companies need to know the present requirements of the shipowners.



Source: The Concept of Triple Helix

**Figure 2. The Interlink of their Roles relate to Seafarers**

The seafarers as crew on board with the competencies possessed should be ensure that the condition of the ship and its equipment comply with the requirements of international regulations and the ship is manned and operated in compliance with these instruments and ensure maritime safety and security and prevent pollution.

Where conditions on board are found that are not in compliance with the requirements of the relevant instruments by the port State control officers, these are recorded as deficiencies and required to be rectified or the vessel to be detained in associate with the instrument deficiencies.

The majority of the deficiency codes are related to the relevant instruments, to lack of maintenance, documents and certifications, adherence to procedures and good record keeping can result in a conclusion of poor Safety Management that implemented by seafarer on board.

**Table 9. Comparison of Deficiencies by Categories**

Nature of Deficiency		Number of Deficiencies		
		2020	2021	2022
Certificate & Documentation	Crew Certificates	765	803	877
	Documents	1,427	1,955	2,572
	Ship Certificates	601	880	1,038
Structural Conditions		1,109	1,368	1,454
Water/Weathertight Conditions		2,457	2,561	3,092
Emergency System		2,278	2,897	3,418
Radio Communications		578	831	964
Cargo Operation including		403	436	488
Fire Safety		5,902	5,929	7,107
Alarms		259	254	367
Safety of Navigation		3,681	4,743	6,405
Life Saving Appliances		4,177	5,192	5,918
Dangerous Goods		36	38	48
Propulsion and Auxiliary		2,073	2,050	2,337

Working and Living Condition	Living Condition	303	380	323
	Working Condition	1,311	1,321	1,412
Labor Conditions	Minimum Requirements for Seafarers	37	34	22
	Condition of Employment	523	441	385
	Accommodation, Recreational Facilities, Food and Catering	1,032	1,221	1,245
	Health Protection, Medical Care, Social Security	2,090	2,376	2,647
Pollution Prevention	Anti Fouling	6	13	7
	Ballast Water	384	563	686
	MARPOL Annex I	723	712	766
	MARPOL Annex II	11	7	18
	MARPOL Annex III	11	9	9
	MARPOL Annex IV	456	366	490
	MARPOL Annex V	745	920	1,003
	MARPOL Annex VI	372	323	312
ISM		871	899	988
Other		303	316	372
<b>Total</b>		<b>34,924</b>	<b>39,838</b>	<b>46,769</b>
ISPS		623	632	802
<b>Grand total</b>		<b>35,547</b>	<b>40,470</b>	<b>47,571</b>

Source: Annual Report on Port State Control in the Asia-Pacific Region 2022

Clearly, the only way to prevent this is to properly manage safety on board by the seafarers. The seafarers should always ensure they have competency to do the minimum required for compliance and necessary to follow a good quality seamanship.

On board, the commitment starts from the Captain and the Chief Officer to adhere and implement the IMO instruments. When senior officers believe in the system they are operating, a culture of safety has created amongst the whole crew and a positive attitude to high safety standards was growth so that no energy worrying about the risks of port State control inspection.

To eliminate the gap between acquired knowledge from the institutes and its application to practice, the relevant stakeholders should take appropriate actions in advance. METI is the right stakeholder and the main actor of this. METI is a proactive mechanism in the shipping industry to reduce the unnecessary deficiency or detained of the ships happening in the shipping companies and optimize competence.

The METI plays a significant role in the success of the maritime industry in terms of supply competent seafarers to the shipping industry. The shipping industry cannot be sustained without competent seafarers. METI is the executive arm of national maritime training policies as the major backbone of the shipping industry should be always perform the sustainable development of the quality of seafarers for the success of the maritime industry.

## CONCLUSION

It is the responsibility of a flag state to ensure which the ships that fly its flag meet all the various maritime requirements and IMO conventions. To fail to do this means that more of their ships are liable to be detained. This in turn can have a negative impact on their rating and position on the BGW List. The impacts as a consequence of the flag state in the Black list categories to let the ships fly its flagged to continue sailing would be inspected more thoroughly in port State control. Unless the flag state has taken measures to improve the condition of its fleet, the more likely the number of detentions will increase.

Additionally, when a ship is flying a Black listed flag, any detentions and prevention of operations are taken into account for a longer period of time. This means that the ship is more

susceptible to being banned from a region and the shipping association incorporated would be provide recommendation for shipping companies in choosing appropriate flag.

For a ship owner, quality of safety standard as responsible of the flag states become consideration in determine to use of the ship flag. By flying the flag of a flag state with a poor record and which appears on the Grey and Black lists heightens the chances of their ships being inspected. Ships that fly the flag of a state on the Black list are considered to have a high-risk profile.

In regard to the detainable deficiencies in connection with the delegation of authority, it was identified that all the detained due to the poor performance of recognized organizations (ROs) would be remain as responsibility of the flag state. The direct impacts as consequence of delegation authority to low performance of the ROs would be contributed to the negative or poor performance of the flag state.

The ROs is required to meet the condition of adequate resources in terms of technical, managerial, and research skills to carry out the tasks being delegated in compliance with the minimum standards for ROs acting on behalf of the administration since appointed to carry statutory functions and capable to demonstrate its technical competence which governed by the principles of ethical behavior.

The ROs is to be subject to the certification of its quality system by an independent body of auditors accepted by the administration. If it is at the discretion of the State to decide on the extent of authority to be delegated to ROs, the type and degree of authority to be delegated should be determined following the demonstration of the size, structure, experience and capacity of ROs and assessment by the flag State.

The shipping companies will continue to face strict of port state inspections. How to control and prevent the risk of ships from being detained in port state inspections will test all persons engaged in shipping especially the ship's crew on board.

The quality of ship's crew has a direct bearing on the ship's overall performance. It is not necessarily true to say that sub-standard ships always have sub-standard crews but a sub-standard crew almost certainly means a sub-standard ship.

If the ship is often detained in port state inspections, it can be ascertained that the ship's crew is sub-standard or not competence. It will be certainly having the impact on crew recruitment by the shipping companies mentioned. Only by using the ship's crew competence approach to manage in port state inspections can be avoid the detention as a sub-standard ship.

The challenge of the Indonesian flag state is continually striven to improve its ship performance on port State control in regulating and enforcing the convention as well as to strengthen the human resources in relation to the ship inspection.

As an effort made of the flag State administration, Indonesia must be sustainable to set up more detailed inspection before issuing the ship clearance to the international voyage and provide the flag control officer in a capable safety inspection regime with transparent regulation processes providing reliable enforcement of Convention obligations and standards.

As the flag states delegate the undertaking of statutory surveys to ROs, Indonesia has challenges to carry out strict monitoring of the delegation by the flag state. Exclusively for Maritime and Education Training Institution (METI), Indonesia has challenges to examine how they will use resources efficiently and effectively to achieve the learning outcomes of training courses in accordance with the requirement of competency. Additionally, Indonesia must be sustainable to conduct workshop, seminars, forum group discussion for inspector, stakeholders and seafarers for understanding of port State control.

The goal of every flag state should be to appear on the Whitelist, and as high up on the list as possible. To fail to appear on the Whitelist indicates that the flag state is not fulfilling its obligation of ensuring that its fleet is meeting the requirements of the international community.

To improve their rating, a flag state must monitor the performance of its fleet. This should be done in the form of flag state inspections, and by targeting the most common areas which are causing their fleet to be detained. Smaller and older vessels are more prone to be found with deficiencies and therefore to be detained. Often this will be due to poor general maintenance, and when a ship is not operating under a Safety Management System in accordance with the ISM Code.

By failing to be on the White list, a flag state is not only failing to meet its obligation in terms of registering safe and seaworthy ships, it is also putting its clients at greater risk of operational difficulties. This in turn makes the registering of a ship with such a flag state much less desirable to a ship owner.

## REFERENSI

- Annual Report on Port State Control in The Asia-Pacific Region, 2018 – 2022, Tokyo MOU.
- Carlsson, F. (2016), Classification Societies Acting on Behalf of States. Oslo: University of Oslo. <https://www.duo.uio.no/bitstream/handle/10852/51495/5503.pdf?sequence=1>.
- El Ashmawy, M. E. (2012). The maritime industry and the human element phenomenon. Proc. The 13th Annual General Assembly of the IAMU.
- Emad, G., & Roth, W. M. (2008). Contradictions in the practices of training for and assessment of competency: A case study from the maritime domain. *Education + Training*, 50(3), 260-272.
- Ghosh, S., Bowles, M., Ranmuthugala, D., Brooks, B. (2016). Authentic assessment in seafarer education: using literature review to investigate its validity and reliability through rubrics. *WMU J Marit Affairs* (2016) 15:317–336. P.317. DOI: <https://doi.org/10.1007/s13437-015-0094-0>.
- Ghosh, S., Bowles, M., Ranmuthugala, D., Brooks, B. (2015). Reviewing seafarer assessment methods to determine the need for authentic assessment, *Australian Journal of Maritime & Ocean Affairs*, DOI: 10.1080/18366503.2014.888133.
- Guidelines for authorization of organizations acting on behalf of the Administration, Assembly Resolution A.739 (18), adopted on 4 November 1993, IMO. <http://www.sjofartsverket.se/upload/5121/739.pdf>.
- Goh, L.-B. (2014). A way forward for ship classification and technical services. *The Asian journal of shipping and logistics*, 56. <https://core.ac.uk/download/pdf/82463229.pdf>.
- Hare, J. (1994). Flag, Coastal & Port State Control. *Sea changes*, 16, 57-67.
- International Convention on Load Lines, 1966, IMO.
- International Convention on Tonnage Measurement of Ships, 1969, IMO.
- International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, IMO.
- International Convention for the Safety of Life at Sea, 1974, as modified by the and its Protocol of 1988 relating thereto, IMO.
- International Convention on Standards of Training, Certification and Watchkeeping (STCW) for Seafarers, 1978, IMO.
- International Safety Management Code, IMO.
- IMO Instruments Implementation Code, Assembly Resolution A.1070 (28), adopted 4 December 2013, IMO. <https://docs.imo.org/>.
- IMO Code for Recognized Organizations (RO Code), Assembly Resolution A.739 (18) adopted 21 June 2013, IMO. <https://docs.imo.org/>.
- Kuo, C. (1998). *Managing Ship Safety*, London: LLP Reference Publishing.
- Lau, Y. Y., & Ng, A. K. (2015). The motivations and expectations of students pursuing maritime education. *WMU journal of maritime affairs*, 14(2), 313-331.
- Mansell, J. N. (2009). *The Regulatory Regime for Discharge of Flag State Duties: The Role of Classification Societies*.



- Mansell, J.N.K (2009). Flag State Responsibility, Historical Development and Contemporary Issues. Berlin: Springer.
- Manuel, M. E. (2005). Beyond Rules, Skills and Knowledge: Maritime Education and Training for Optimised Behaviour (Mater Dissertation).  
Maritime Labour Convention, 2006, IMO.
- Memorandum of Understanding on Port State Control in the Asia-Pacific Region, Tokyo MOU.
- Park, J. C. (2012). study on the oversight scheme over recognized organizations under the international instruments. Malmö: World Maritime University.  
<https://commons.wmu.se/cgi/viewcontent.cgi?article=1030&context=all>.
- Resolution A.1155 (32) Adopted on 15 December 2021, Procedures for Port State Control, 2021, IMO.
- Shicheng, Y. (2009). Challenges and Opportunities for Maritime Education and Training: China's Perspective.
- Silos et al. (2013), the role of the Classification Societies in the era of globalization: a case study. <https://doi.org/10.1080/03088839.2013.776184>.
- Specifications on the survey and certification functions of recognized organizations acting on behalf of the Administration. Assembly Resolution A.789 (19), adopted on 23 November 1995, IMO. [www.imo.org](http://www.imo.org).
- Takei, Y. (2013). Assessing Flag State Performance in Legal Terms: Clarifications of the Margin of Discretion. International Journal of Marine and Coastal Law 28, pp. 97-133.
- Tamo Zwinge, Duties of Flag States to Implement and Enforce International Standards and Regulations - And Measures to Counter Their Failure to Do So, Journal of International Business and Law, Vol. 10, Issue 2, Article 5 (2011).
- The International Chamber of Shipping (ICS), The International Shipping Federation (ISF), Publications Catalogue 2013, by The Editorial Team, 19 February 2013.
- Ulstrup, A. (2001). Port State Control. Unpublished lecture handout, World Maritime University, Malmö, Sweden.
- United Nations Convention on the Law of the Sea 1982, UN, (1982).
- United Nations Convention on the Conditions for Registration of Ships 1986, UN, (1986).
- United Nation. (1998). Duties and obligations of Flag States and Port States. Retrieved March 27, 2001. [http://www.un.org/Depts/los/YO98/Flag\\_Port\\_State.htm](http://www.un.org/Depts/los/YO98/Flag_Port_State.htm).
- Williamson, H.M. (1996, September). Port State Control. Paper presented at the Fourth Asia/Pacific Port State Control Committee Meeting, New Zealand.