

WHITE LIST

RANK	FLAG	INSPECTIONS 2022-2024	DETENTIONS 2022-2024	BLACK TO GREY LIMIT	GREY TO WHITE LIMIT	EXCESS FACTOR
WHITE LIST						
1	France	297	1	29	13	-1.78
2	Denmark	1,246	14	103	72	-1.75
3	Norway	1,824	23	146	109	-1.74
4	Netherlands	2,690	46	211	166	-1.61
5	Singapore	1,745	28	140	104	-1.61
6	Cayman Islands (UK)	318	3	30	14	-1.52
7	Finland	364	4	34	17	-1.50
8	Italy	846	14	72	47	-1.48
9	Luxembourg	235	2	23	10	-1.42
10	Japan	232	2	23	9	-1.41
11	Hong Kong (China)	1,596	34	129	94	-1.40
12	Sweden	317	4	30	14	-1.37
13	Germany	486	8	44	24	-1.35
14	China	265	3	26	11	-1.35
15	Greece	599	12	53	31	-1.25
16	Bahamas	1,758	45	141	105	-1.25
17	Portugal	2,050	54	163	124	-1.24
18	United Kingdom	729	16	63	39	-1.22
19	Cyprus	2,226	63	176	136	-1.17
20	Malta	3,747	113	288	236	-1.16
21	Marshall Islands	5,470	181	414	351	-1.09
22	United States	135	1	15	4	-1.07
23	Ireland	91	0	11	2	-1.05
24	Bermuda (UK)	154	2	16	5	-0.90
25	Isle of Man (UK)	354	9	33	16	-0.84
26	Spain	112	1	13	3	-0.81
27	Barbados	863	29	73	48	-0.81
28	Liberia	6,035	257	456	389	-0.76
29	Gibraltar (UK)	293	8	28	13	-0.68
30	Faroe Islands	225	6	23	9	-0.56
31	Belgium	168	4	18	6	-0.48
32	Türkiye	607	25	53	32	-0.42
33	Estonia	84	1	10	2	-0.33
34	Lithuania	100	2	12	2	-0.15
35	Antigua and Barbuda	1,708	95	137	102	-0.14
36	Thailand	51	0	7	0	-0.09
37	Poland	46	0	7	0	0.02
38	Jersey (UK)	44	0	6	0	0.03
39	Canada	36	0	6	0	0.08
40	Egypt	36	0	6	0	0.08

GREY LIST

RANK	FLAG	INSPECTIONS 2022-2024	DETENTIONS 2022-2024	BLACK TO GREY LIMIT	GREY TO WHITE LIMIT	EXCESS FACTOR
GREY LIST						
41	Saudi Arabia	72	1	9	1	0.00
42	Croatia	92	2	11	2	0.01
43	India	55	1	7	0	0.11
44	Latvia	162	7	17	5	0.13
45	Korea, Republic of	178	8	19	6	0.13
46	Morocco	48	1	7	0	0.15
47	Russian Federation	265	14	26	11	0.19
48	Panama	5,854	390	442	377	0.20
49	Lebanon	38	2	6	0	0.39
50	Cook Islands	81	5	10	1	0.42
51	Philippines	105	7	12	3	0.46
52	Albania	58	4	8	0	0.49
53	Algeria	77	6	10	1	0.57
54	Saint Vincent and the Grenadines	246	19	24	10	0.63
55	Sierra Leone	173	14	18	6	0.66
56	Tunisia	30	3	5	0	0.66
57	Bangladesh	43	5	6	0	0.81

BLACK LIST

RANK	FLAG	INSPECTIONS 2022-2024	DETENTIONS 2022-2024	BLACK TO GREY LIMIT	RISK	EXCESS FACTOR
BLACK LIST						
58	Saint Kitts and Nevis	269	29	26	Medium risk	1.30
59	Togo	273	32	27		1.58
60	Palau	489	55	44		1.67
61	Guinea-Bissau	51	9	7		1.94
62	Belize	220	32	22	Medium to high	2.29
63	Vanuatu	357	52	33		2.55
64	Ukraine	43	9	6		2.57
65	Comoros	258	48	25	High risk	3.59
66	Viet Nam	43	12	6	Very high risk	4.42
67	Moldova, Republic of	32	10	5		4.81
68	Tanzania, United Republic of	149	41	16		5.88
69	Cameroon	144	43	16		6.56

Explanatory note – “WHITE”, “GREY” AND “BLACK LIST”

The normative listing of Flags provides an independent categorisation that has been prepared on the basis of Paris MoU port State inspection results over a 3-year period, based on binomial calculus.

The performance of each Flag is calculated using a standard formula for statistical calculations in which certain values have been fixed in accordance with agreed Paris MoU policy. Two limits have been included in the system, the ‘black to grey’ and the ‘grey to white’ limit, each with its own specific formula:

$$u_{black_to_grey} = N \cdot p + 0.5 + z \sqrt{N \cdot p \cdot (1 - p)}$$

$$u_{white_to_grey} = N \cdot p - 0.5 - z \sqrt{N \cdot p \cdot (1 - p)}$$

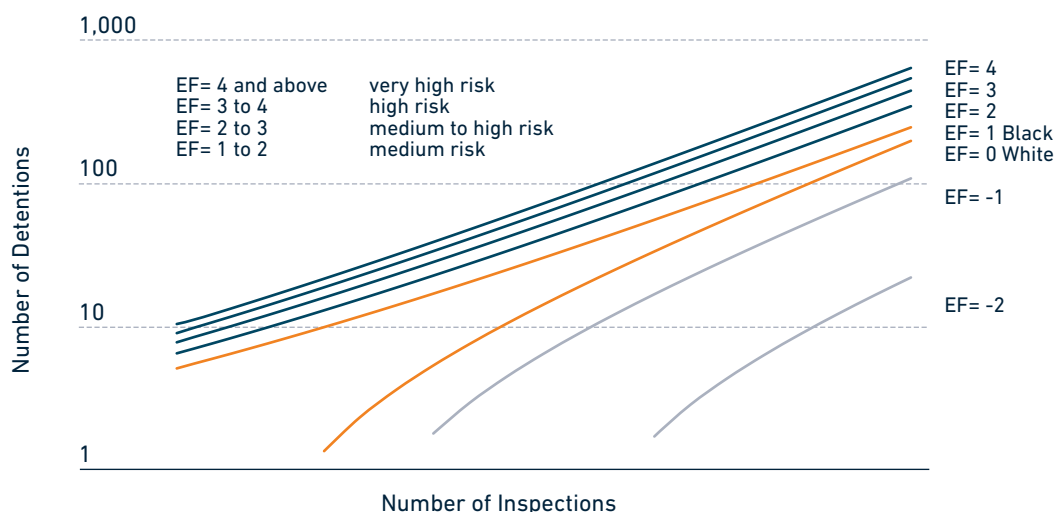
In the formula “N” is the number of inspections, “p” is the allowable detention limit (yardstick), set to 7% by the Paris MoU Port State Control Committee, and “z” is the significance requested (z=1.645 for a statistically acceptable certainty level of 95%). The result “u” is the allowed number of detentions for either the Black or White List. The “u” results can be found in the table. 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 amount of detentions for a particular Flag is positioned between the

two, the Flag will find itself on the Grey List. The formula is applicable for sample sizes of 30 or more inspections over a 3-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 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 of the White, Grey or Black List. The target (yardstick) has been set on 7% and the size of the increment and decrement on 3%.

The White/Grey/Black Lists have been calculated in accordance with the principles above*.

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 as the ‘black to grey’ or the ‘grey to white’ limit.



* Explanatory notes can be found on www.parismou.org/publications