Influence and transparency at the IMO: the name of the game

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1 Introduction

The International Maritime Organization (IMO) is a specialized agency of the United Nations (UN) regulating maritime transport. Its areas of competence include maritime safety, maritime security, marine environmental protection, legal matters, technical cooperation and others.

The purpose of this paper is to shed some light on the following issues: What are the main parameters of ‘influence’ at the IMO? Who among member states, industry or other players are the main influencers? And is the process transparent enough? To address these issues, a perspective mainly but not exclusively based on the authors’ own experience from the activities of the IMO’s Marine Environment Protection Committee (MEPC) and, specifically, its recent focus on how to decarbonize shipping is taken.

Recently, the IMO has been under attack from various non-governmental organizations (NGOs) with regard to its stance on environmental issues, especially climate change, the influence of industry in the regulatory process and transparency in that process. Triggered by this, the paper reviews the position of the NGOs accusing the IMO as regards influence and transparency, describes the IMO regulatory structure and then analyses several issues that may be relevant, including delegation size, delegation composition, number of submissions and other factors that may affect representation and influence in IMO decision-making.

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If the above issues are examined in a focussed way, perhaps no other topic is more relevant than climate change and, specifically, greenhouse gas (GHG) emissions from ships and what the IMO is doing to reduce them. In fact, and after many discussions, the first ever mandatory global GHG reduction regime for ships was set in July 2011, when a roll call vote at the IMO/MEPC resulted in the adoption of mandatory measures. These were the Energy Efficiency Design Index (EEDI) and the Ship Energy Efficiency Management Plan (SEEMP), which were adopted as an Annex to MARPOL's Annex VI. Note that, as is common practice among UN bodies, the IMO operates on a consensus basis and voting is therefore avoided, as it is perceived to be too divisive. However, with respect to EEDI/SEEMP, it was impossible to achieve consensus, and the measures were adopted by vote in spite of fierce resistance by a group of developing countries, including China, India, Brazil and Saudi Arabia.

The issue of GHG emissions was at stake again in all meetings of the MEPC after 2011. But even before 2011, the IMO initiated a parallel discussion on market-based measures (MBMs) to reduce GHG emissions from ships, discussion of which was suspended in 2013, and in 2016, the so-called IMO roadmap to reduce GHGs was adopted. This roadmap stipulated the formulation of an initial strategy on GHGs emissions by 2018, with a view to finalizing the strategy by 2023 (Psaraftis 2018).

The GHG agenda was set high as the IMO entered the 72nd session of the MEPC (MEPC 72, 9–13 April 2018), where some important issues were about to be addressed, including drafting a strategy for the reduction of GHGs, the implementation of the 2020 sulphur cap, the Ballast Water Management Convention and the recently addressed issue of marine litter. In a historic move, MEPC 72 adopted the so-called Initial IMO Strategy, which set out a vision to drastically reduce GHG emissions from international shipping. An ambitious target was set to reduce CO₂ emissions per ton-mile of cargo transportation as an average across international shipping by at least 40% by 2030, pursuing efforts towards 70% by 2050, compared with 2008; and to reduce the total annual GHG emissions by at least 50% by 2050, whilst pursuing efforts towards totally phasing them out (IMO 2018a).

It was actually during the period between MEPC 71 in July 2017 and before MEPC 72 in April 2018, and perhaps not by coincidence, that the IMO was put under fire for its allegedly weak governance structure, which according to some reports, supposedly allowed the private shipping sector to stall action on climate change.

In October 2017, the British not-for-profit think-tank InfluenceMap published a report entitled 'Corporate capture of the UN IMO: How shipping lobbies to stay out of the Paris Agreement on climate' (InfluenceMap 2017), which pointed to the industry's unusually large influence in the IMO; For instance the report claimed that the Marshall Islands, the flag with the world's third largest fleet in the world, is represented in part by International Registries Inc. (IRI), a US-based private shipping company that operates the country's open registry, and that 'payments to the Marshallese government make up about 10% of the state's yearly non-aid revenue'.

Three main industry trade associations which have observer status at the IMO—the International Chamber of Shipping (ICS), the Baltic and International Maritime Council (BIMCO) and the World Shipping Council (WSC)—were directly accused

of lobbying to delay GHG emissions reduction measures, of rejecting any binding GHG emission targets and of ‘collectively opposing ambitious energy efficiency standards, appearing unsupportive of a price on carbon’.

Although the above report raised some valid points on how industry can influence IMO negotiations, its scoring methodology was, to the authors’ view, simplistic and questionable; For instance, through an analysis of websites, social media and even CEO messaging, companies and trading associations were scored, based on their support to binding GHG emission standards or carbon policies, e.g. taxes or trading schemes. Points were taken away if these players opposed to raising the ambitions of the EEDI or if they did not support the emissions trading system (ETS) of the European Union (EU). However, if an organization expresses caution on GHG targets, on the ETS or on further improvements to the EEDI because it feels a certain measure might not be technically feasible or because it might compromise safety or create distortions, this does not necessarily mean that this organization has adopted this position to delay progress at the IMO. The BIMCO and the ICS, among others, have replied to these allegations (ShippingWatch 2017a, b).

Ahead of the MEPC 72 meeting in April 2018, where IMO member states and other stakeholders were expected to agree on a future environmental strategy, the above NGO released a new report which focussed on the influence of individual countries and their close ties to shipping companies (InfluenceMap 2018). The report published the findings of their research, exploring how around 25 key nations lobbied to influence the outcome of IMO talks on climate change. The research on engagement at the last four MEPC meetings¹ showed that, despite their large amount of registered tonnage and contribution to IMO’s budget, ‘open registry’ states such as Panama and Liberia were not particularly active. Instead, the most active countries were found to be Japan, Korea, Denmark, China and Germany. Finally, the report sharply criticized Japan for using its economic influence over open registries, such as Panama, to push against ambitious climate policies.

A little after MEPC 72 and in advance of the IMO’s council meeting (Council 120th session, 2–5 July 2018), Transparency International, an international NGO based in Berlin, released a full report assessing the IMO’s governance structure (Transparency International 2018b). The report described a number of flaws in the IMO’s governance, including a disproportionate influence of private industry and an unequal influence of certain member states in the policymaking process; it also highlighted the lack of delegate accountability and the fact that the public, and also NGOs, are often unable to find out their national delegation’s position in debates and negotiations. Transparency International had actually published earlier (April 2018) a summary of the report, raising concerns that included the following (Transparency International 2018a):

- Journalists are unable to report freely on the IMO meetings, and non-profit organizations with consultative membership status to the IMO can face expulsion if they criticize the agency or report on country views;

¹ Based on the number of submissions, speaking time during the plenary meetings and the size of delegations.

- Member states are able to appoint employees of corporations, including shipping companies, to their delegations, and these have dominated some delegations. These delegates can actually determine ‘their government’s position on IMO policy’ and ‘are not subject to conflict of interest rules nor to a code of conduct’.

The full report concluded with a long list of recommendations towards better transparency (Transparency International 2018b).

We believe that the reports of Transparency International present some valid observations and highlight several areas that need attention, for instance on shipping companies’ being allowed to send people to national delegations and also on open access to information and publishing participant lists of all meetings, including working groups. At the same time, we also suspect that the above NGO does not fully understand how the IMO works, and because of this, it has probably missed the chance to recommend more concrete improvements on the IMO governance and transparency.

Triggered by the above reports, as well as by the recent drive to decarbonize shipping, we think that further analysis is in order. To that effect, the remainder of this manuscript is organized as follows: The section that follows provides some further background on IMO processes. Then, the next section carries out our own analysis, including looking at delegation size, delegation composition and number of IMO submissions as potential indicators of influence at the IMO. Finally, the concluding section looks at the way ahead and provides some recommendations for better IMO governance.

2 Background on IMO processes

2.1 IMO membership and stakeholders

The IMO currently has 174 member states and 3 associate members (Faroe Islands, Hong Kong and Macao). Most UN member states are also members of the IMO, except some landlocked countries such as Afghanistan, Botswana, Liechtenstein, Rwanda and others. All major maritime nations are represented at the IMO. It may be noticed that Bermuda, the 10th largest ship-owning country in terms of dead-weight tonnage (DWT) according to the UN Conference on Trade and Development (UNCTAD) (2018), is not an IMO member state. Bermuda is however a party to all major IMO conventions through the United Kingdom (UK), which is a member state and signatory to IMO conventions on its own account, of course, and its overseas territories. Bermuda is actually the largest UK overseas territory in terms of population.

Various industry interests are also, more explicitly, expressed through NGOs that have the ability to make substantial contributions to the work of the IMO, as they have been granted consultative status by the IMO Council. To date, the various interests are well represented, as there are 81 NGOs in consultative status, including shipowner associations e.g. BIMCO, ICS, International Association of Dry Cargo Shipowners (Intercargo), International Association of Independent Tanker Owners

Fig. 1 IMO's structure. *Source* ClassNK (2019)

(Intertanko), various shipping-related associations such as the International Association of Classification Societies (IACS), Community of European Shipyards' Associations (CESA), International Association of Ports and Harbors (IAPH), Cruise Lines International Association (CLIA), Oil Companies International Marine Forum (OCIMF), but also well-established environmental organizations such as Greenpeace International, World Wide Fund for Nature (WWF) and Friends of the Earth International (FOEI) and even academic organizations such as the International Maritime Lecturers' Association (IMLA) or the International Association of Maritime Universities (IAMU), or professional associations such as the Institute of Marine Engineering, Science and Technology (IMAREST) and the Royal Institution of Naval Architects (RINA).

In addition, the IMO has entered into agreements of cooperation with other inter-governmental organizations (IGOs) on matters of common interest. To date, there are 64 intergovernmental organizations which have signed agreements of cooperation with the IMO, including the Caribbean Community (CARICOM), the Commonwealth Secretariat, the Council of Europe, the Organisation for Economic Co-operation and Development (OECD) and others.

2.2 Structure, operations and financing

The IMO is mainly a technical organization, and most of its work is carried out in a number of committees and sub-committees. As illustrated in Fig. 1, the main committees, which are open to participation from all member states, are the Maritime Safety

Committee (MSC), the Marine Environment Protection Committee (MEPC), the Legal Committee (LC), the Technical Cooperation Committee (TCC) and the Facilitation Committee (FAL). The IMO's basic fora, dealing with maritime safety and security, are the Maritime Safety Committee (MSC) and the Marine Environment Protection Committee (MEPC), for matters concerning marine environmental protection. There are one or two annual meetings of each of these committees and, between them, progress on specific matters is also achieved through correspondence groups, participation in which is open to all interested parties, with member states and NGOs being particularly active. For specialized matters, intersessional meetings (that is meetings between consecutive committee meetings) may take place. On the subject of GHGs, MEPC held five intersessional meetings between MEPC 70 (2016) and MEPC 74 (2019).

The IMO's highest governing body, the Assembly, consisting of all IMO member states, meets once every 2 years, and in between, the Council, consisting of 40 member governments elected by the Assembly, acts as the IMO's governing body and supervises the work of the IMO.

Finally, the IMO is supported by a permanent secretariat of employees who are representative of the organization's members. The secretariat is composed of a Secretary-General who is periodically elected by the Assembly, and various divisions such as those for marine safety, environmental protection and a conference section. Kitack Lim (Republic of Korea) was elected Secretary-General of the organization by the 114th session of the IMO Council in June 2015 for a 4-year period, beginning 1 January 2016, and has recently secured the organization's support for a second term. The two previous Secretary-Generals were Mr. Koji Sekimizu (Japan, 2012–2016) and Mr. Efthimios Mitropoulos (Greece), who served for two terms (2004–2011).

The IMO's activities are mainly funded by assessed contributions on its member states and associate members, however voluntary contributions from member states, governmental agencies, intergovernmental bodies and other public, private and non-governmental sources are also accepted. Further income is received through commercial activities and through miscellaneous revenue. The IMO is very transparent when it comes to its financial statements; the ones for 2010 through 2017 are publicly available on the IMO website (IMO 2019).

3 Analysis

The analysis in the present work looks at delegation size, delegation composition and number of submissions as factors that may be connected with 'influence' in the IMO, with a focus on MSC and MEPC meetings. To do so, IMODocs, which is the IMO document repository, was used to find more than 10,000 submissions to the MEPC and also the MSC by 47 IMO member states and NGOs. MSC submissions were added to see if there is a difference from the MEPC, since the two committees interact regularly on a number of issues. Analysis of delegation size was based on the list of participants in each session; of the 47 IMO members, an average of more than 1000 delegates per MSC or MEPC session were processed (details follow).

3.1 Delegation size

Is delegation size a proxy for influence at the IMO? In a strict sense, it is not, as a large delegation may be, theoretically at least, not very visible in terms of submissions to the IMO or the discussions there. By contrast, a small delegation can be very vocal or prolific in terms of submissions. However, to the extent that the members of a delegation can be used to represent the delegation not only at plenary but also at the various working groups that take place simultaneously, then obviously a large delegation may have an advantage over a smaller one. In addition, a large delegation may project a sense of superiority in meetings if the size of the delegation is perceived by some as related to the resources that the delegation has at its disposal (and in a sense this may be true).

Each delegation is structured into the following personnel categories, not all of which may appear in a specific delegation's roster: the head of delegation, representatives, alternates, advisers and observers. Typically, heads of delegations, representatives and alternates are staff members of the respective member government (more on the composition of delegations is reported below).

Table 1 lists delegation sizes for the top 20 IMO member states (in terms of controlled fleet in 2018) that attended the MEPC 72, the landmark MEPC that adopted the Initial IMO Strategy, again in 2018. Representation at the MEPC 72 (IMO 2018b) is considered as a good proxy of representation at the MEPC in general (aggregate statistics of the most recent meetings of the MEPC and the MSC are presented below). The table also juxtaposes delegation size versus the DWT of the controlled fleet of the Member State, and it also shows the ratio of delegate size divided by fleet size (DWT).

A number of observations can be made from this table:

1. The number of delegates among member states ranges widely. There seem to be no guidelines on delegation size, either as a total or in terms of the various sub-categories. This decision is totally left to the discretion of each member state.
2. No apparent correlation between delegation size and fleet size seems to exist; For instance Greece, the member state with the largest controlled fleet in the world, has a rather small delegation, in fact of the same size as Turkey, whose fleet is about 8% the size of Greece. Greece has the smallest non-zero ratio of delegation size/fleet size.
3. Japan is by far the most populous delegation (45), Rep. of Korea and Denmark (24 each) are distant seconds, with Indonesia (23) not far behind. The USA, Germany, China and Norway form a cluster of countries that follow next (between 17 and 20);
4. Indonesia is top in terms of ratio of delegation/fleet size, with Denmark a distant second;
5. Two countries with significant fleets (Bermuda and Taiwan) send no delegations. It was noted above that Bermuda is not a member of the IMO.
6. Some countries which were very vocal at the MEPC 72, especially on GHGs, e.g. Brazil (22 delegates) and Saudi Arabia (12 delegates), are not in the top-20 table.

Table 1 Delegation size of the top 20 fleets. *Source* IMO (2018a) and UNCTAD (2018)

Member state	Head of delegation, representatives, alternates	Advisers, observers	Total = N	DWT of controlled fleet (000 tons)	10,000 N /DWT
Greece	3	7	10	330,176	0.303
Japan	12	33	45	223,615	2.012
China	3	15	18	183,094	0.983
Germany	4	16	20	107,119	1.867
Singapore	1	10	11	103,583	1.062
Hong Kong	2	1	3	97,806	0.307
Rep. Korea	5	19	24	77,277	3.106
USA	3	15	18	68,930	2.611
Norway	6	11	17	59,380	3.031
Bermuda	0	0	0	54,252	0
Taiwan	0	0	0	50,422	0
UK	3	14	17	49,989	3.401
Mexico	3	4	7	39,323	1.780
Denmark	10	14	24	39,212	6.121
Turkey	3	7	10	27,241	2.550
India	3	0	3	24,852	1.207
Switzerland	2	2	4	24,805	1.613
Belgium	3	2	5	23,630	2.116
Russia	3	10	13	22,219	5.851
Indonesia	21	2	23	20,299	11.331

As a side note, a reasonable estimate of the cost of more than 40 delegates travelling from Japan to London for a week is 150,000 USD, and if we also consider that many of these people also attended the intersessional meeting on GHGs the week before and that Japan traditionally hosts a welcoming reception right before the MEPC, we can get an idea of the resources that some member states are allocating to the IMO meetings; And this is only for the MEPC and does not take into account resources allocated to preparing submissions to the IMO (of which more below).

It could be argued, however, that the small size of its IMO delegation has certainly not prevented Greece from being number one in terms of world fleet. The question of course is the extent to which this or other countries are able to influence IMO decision-making process and the factors that may contribute to such influence.

Table 2 is the equivalent to Table 1 for some of the major IMO observer organizations. These are listed by decreasing order of delegation size. There is no official differentiation on personnel categories for each delegation. The table is not exhaustive.

Again, there seem to be no guidelines on delegation size. It can be seen that the delegations of some IMO observer organizations may surpass in size that of some of the IMO member states. It is remarkable, for instance, that the Clean Shipping Coalition (CSC), an NGO, had 29 delegates under its umbrella at the MEPC 72 (more

Table 2 Delegation size, IMO observer organizations, MEPC 72. *Source* IMO (2018b)

Observer organization	Number of delegates
CSC	29
European Commission	20
IACS	20
ICS	18
CLIA	10
IMAREST	10
OCIMF	8
Intertanko	7
CESA	7
BIMCO	5
WSC	5
Intercargo	4
Interferry	2
OECD	2
IAPH	2
IPTA	1

on this later). It is also interesting that shipowners are represented by not one but several distinct organizations. In the above table, ICS, BIMCO, CLIA, Intertanko (representing tanker owners), Intercargo (representing dry bulk owners), WSC (typically representing container shipping), Interferry (representing owners of Ro–Ro ferries) and even the International Parcel Tanker Association (IPTA) can be seen. Collectively, these organizations fielded as many as 47 representatives at the MEPC 72. Of the above associations, ICS and BIMCO are ship-type neutral and the others represent sectoral interests, which however appear quite fragmented.

To shed more light, we turn to an analysis of the composition of each delegation in the section that follows.

3.2 Delegation composition

After a cursory investigation and using again the MEPC 72 (IMO 2018b) as a representative example, the following remarks can be made:

1. There seem to be no rules on who may be allowed to take part in a delegation. The willingness of the delegation to include someone is about the only prerequisite. To be included in the roster of a delegation, it is not even necessary to be a citizen of that member state. A national delegation can have a mixture of government officials and industry representatives, with no established norm on composition.
2. An industry representative has the choice of being part of a number of delegations. Only one can be used for a specific meeting, but there is a choice; For

instance if someone is a staff member of a shipping company, he can come under any of the shipping industry observer organizations (see above) or under a specific member state.

3. If shipowner interests could field 47 representatives at the MEPC 72, as shown above, the number itself would be misleading, as a shipping company person can alternatively be included in the roster of a member state as an adviser or as an observer; For instance of the 45 Japanese delegates, 7 were from the Japanese Shipowners Association. Of the 10 Greek delegates, 4 were from the Union of Greek Shipowners (they could also come under the umbrella of the Hellenic Chamber of Shipping—HCS— but that was not the case in the MEPC 72). Of the 24 Danish delegates, 2 were from Danish Shipping and 4 from A.P. Møller-Mærsk; and so on. In that sense, shipowner interests are very well represented at the IMO, even though there is certainly a lot of fragmentation.
4. The same is true of the representation of other members of industry. Of the 21 Brazilian delegates at the MEPC 72, 5 were from mining and logistics giant Vale. Also, a staff member of a classification society can be included either under IACS or under a specific member state. As an example, classification society DNV GL had 4 delegates with the German delegation, 4 delegates with the Norwegian delegation, and 2 delegates under IACS (that is a total of 10 delegates). The Korean Register of Shipping had 5 delegates with the Republic of Korea delegation, plus 5 under the IACS delegation (again a total of 10 delegates). And so on. Numerous additional representation possibilities shall be seen for class societies below. This means that class is extremely well represented at the IMO, far beyond its official representation, which is IACS;
5. The European Commission (EC) delegation (20 members) included not only European Commission staff but also members of the European Parliament (7 members), even though their roles are distinctly different. The European Commission has only observer status at the IMO, even though it has long sought to become a regular member. The European Commission, together with the EU 28 member states, is entitled to make submissions to the IMO on matters that supposedly have 'EU content'. For these submissions, an EU member state is not allowed to deviate from the position expressed in the EC submission.
6. The composition of the CSC delegation at the MEPC 72 is worth noting. The delegation consisted of 29 people, by far the largest of all observer organizations and second only to Japan (Table 1). None of these people are CSC staff members, as CSC is an umbrella organization that hosts several others. In the delegation, people from NGOs such as Seas at Risk, Transport and Environment, Environmental Defense Fund, International Council on Clean Transportation, International Windship Association and from a variety of other organizations including University College London (UCL) (5 members) can be seen. Influence Map, the NGO that raised the issue of corporate capture at the IMO, was also under the CSC umbrella at that meeting.
7. The affiliations of delegates can sometimes be misleading or hidden; for instance a shipping company staff member may come as an adviser of the Greek delegation, but his affiliation, as it appears in the IMO delegates list, is not the one of his own company but that of the HCS, which is the official adviser to the Greek

government on shipping matters and the one that sends him there to represent them. This means that the original affiliation of someone who attends the IMO meetings may be partially or completely hidden.

8. Other cases of hidden affiliation are with IMAREST, which is a marine professionals association. IMAREST regularly lists under its delegation selected university and classification society staff, with their employers' identities suppressed. A hidden identity may allow any organization to promote its interests without been listed or quoted by its real name, in addition to other possible channels it can use, and this has the potential to lead to conflict-of-interest situations.
9. Who can speak at the IMO? People who take the floor on behalf of member states are not limited to the heads of delegation or to official representatives (e.g. civil servants working in specific ministries, coast guards, embassies etc.) but may also include advisers who come from a broad spectrum of organizations, including national research institutes, universities, national industry or maritime advisory associations, shipping companies, classification societies, consulting companies etc. Apparently, the right to take the floor is given to these people by the respective member state, and what they can say has been first cleared by that state in accordance with its position on the subject being discussed. This scheme allows a specific company or group (such as for instance classification societies mentioned earlier) to be given the floor not via one but via multiple delegations in the same meeting.
10. The same is true as regards people who take the floor on behalf of observer organizations. Even though most observer organizations have specific rules on who may take the floor and what should be said, others are less strict, and situations where what the speaker says on the floor favors primarily their original affiliation (which as mentioned above may be hidden), vis-à-vis the position of the delegation on behalf of which they speak, may be seen. And even if the latter is the case, the fact that a company or a group can be given the floor not via one but via multiple delegations may very well distort representation.
11. There seem to be no rules on possible switching among delegations, which appears to be free. In that sense, a person may come under delegation A in one meeting and under delegation B in another meeting, with the listed affiliations not necessarily being the same (if they are not hidden). This possibility maximizes the benefits of that person's original affiliation to promote its interests as they see fit.

3.3 Number of submissions

The number of submissions to the IMO is surely an indicator of influence or power. Simply speaking, if you do not submit, only by coincidence will someone else submit something that conforms to your interests. A member state that regularly submits say 5 to 10 submissions per MEPC (or MSC) meeting has a higher chance of seeing some of its submissions adopted than another member state that sends many fewer or no submissions. Of course, submission does not necessarily guarantee adoption, however persistent submissions project a sense of leadership and may bear fruit in

Fig. 2 MSC and MEPC (left vertical axis, bar chart) and total IMO submissions (right vertical axis, solid line) since 2010

the long run. A member state that habitually does not submit cannot aspire to have a leadership position and is relegated to the role of commentator on other delegations' submissions (in the best case) or simply to the role of observer (in the worst case). If you want to lead, you have to submit.

Of course, submission, non-submission or limited submission is a matter of choice. Nobody forces someone to submit, and it may very well be that as a matter of national strategy some delegations may have chosen to adopt a 'passive' role, i.e. that of mainly commenting on others' submissions or staying at the sidelines and watching others debate the issues. Making a non-trivial submission takes significant resources, possibly involving R&D or studies to support positions, and if these resources are not available or are limited, maybe the best strategy is to use them for responding rather than proposing. Of course, such a strategy is not necessarily the best way to pursue one's interests.

Some aggregate IMO submission statistics for MEPC and MSC meetings since 2010 are presented in Fig. 2. As mentioned above, MSC submissions were added to see whether there is a difference versus the MEPC, particularly since the two committees regularly interact on a number of issues. To get a wider perspective, the total number of submissions to the IMO was also added, as further explained below.

The left vertical axis of Fig. 2 shows the MSC and MEPC submissions of various delegations since 2010. Submissions are shown as a bar chart (blue: MSC, green: MEPC). The right vertical axis of the same figure shows the total number of IMO submissions in the same period (not limited to the MSC or MEPC). The ranking on the horizontal axis of Fig. 2 is by the total number of MSC and MEPC submissions. Joint submissions are counted for each of the submitters. In the period since 2010, there have been a total of 10,146 submissions to the IMO, of which 2252 have been

Fig. 3 Average delegation size against total number of submissions and fleet size for selected member states (size of the circles proportional to controlled fleet size in 2018)

to the MEPC and 1780 to the MSC (the rest have been submitted to other IMO committees, subcommittees, working groups or other bodies).

In Fig. 2, submissions by the EU-28 (submitted via the European Commission) are treated separately (label EC) and do not count in the submissions of each of the 28 EU member states. For joint submissions, information on who, among the submitters, took the initiative to draft the submission was not readily available and is not reflected in the figure. In that sense, the figure probably underestimates the leadership position of delegations that originated joint submissions by putting them at an equal footing with their co-submitters. The figure also does not show the submissions by the IMO Secretariat, as these do not shed any light on the influence of any particular delegation.

It can be observed from Fig. 2 that, for the period since 2010, the USA, Japan, Germany, IACS and Norway have been the top five IMO delegations (in that order) by total number of submissions. The order in terms of MSC+MEPC submissions is very similar: Japan, USA, Germany, IACS and Norway. Greece, the world's top fleet, is ranked as low as number 17 in terms of MSC and MEPC submissions and number 18 in terms of total IMO submissions. There seems to be no substantial difference in activity between MSC and MEPC submissions, i.e. one delegation being very active at the MSC but not very active at the MEPC or vice versa. Some individual differences do exist, for instance Japan being more active in the MEPC than in the MSC, while IACS is more active in the MSC versus MEPC.

Figure 3 shows average delegation size for the last two MSC and the last three MEPC meetings, against total number of submissions since 2010, for selected IMO member states. The total number of delegates registered in these five sessions was

5427. The size of the circle for each member state is proportional to that member state's controlled fleet in 2018.

In Fig. 3, Japan (and to a lesser extent the USA) stand out as outliers, in terms of average delegation size (for Japan) and, to a lesser extent, in terms of number of submissions (for both the USA and Japan). It should be noted that, according to UNCTAD (2018), in 2017, China, Korea and Japan accounted for 23.34, 22.51 and 12.94 million gross registered tonnage (GRT) in new buildings, respectively. These three countries total 58.79 million GRT versus 64.99 million GRT for the world shipyards (this is a share of 90.45% of global ship production). This, together with fleet size, can perhaps explain the high submission profiles of these countries. It should be noted that shipbuilders' interests are also represented in Europe by Community of European Shipyards' Associations (CESA) and in Asia by the Active Shipbuilding Experts' Federation (ASEF). In the above period, CESA made only 13 submissions (joint with a number of other observer organizations) and ASEF, which was granted consultative status in 2017, had only one. So, even though it seems that shipbuilding industry associations are not very active in terms of IMO submissions, the member states that represent major shipbuilding interests are.

The high submission profiles of Norway, Germany, UK and to a lesser extent, Denmark can perhaps be explained by the significant maritime clusters that are present in these countries. These clusters include shipbuilding, marine equipment, class, banking, marine insurance and other related industries. In contrast, Greece, number one in the world by controlled fleet but practically non-existent in terms of shipbuilding, looks like a 'sleeping giant' in terms of both delegation size and total number of submissions.

Of course, its few IMO submissions certainly did not prevent Greece's controlled fleet from attaining number one status in the world. In this case, it is clear that IMO submissions and delegation size are clearly not relevant for a member state's controlled fleet size. However, a question that can be asked is, which of the major IMO regulatory developments in recent years has experienced the distinct footprint of Greece? We can think of only one, the bulk carrier double hull issue, when due to the intervention of Greece in 2004 (IMO 2004), the IMO reversed its earlier decision, requiring double hulls for bulk carriers. That was an MSC activity. By contrast, in major recent IMO regulatory activity, including the MEPC drive to decarbonize shipping and the initial IMO Strategy which is likely to significantly influence the shape of the industry in the years ahead, Greece has been conspicuously low-key, at least thus far. In the words of a prominent member of the Greek shipping industry, 'In the nineteenth century we were part of the transport system. Now we are just taxi drivers waiting for someone to hire our cab.'

Figure 4 is a variant of Fig. 3 with fleet size removed but with observer organizations added.

Among IMO observer organizations, IACS clearly stands out, being number four in terms of overall submissions and even surpassing all member states except the USA, Japan and Germany. Other industry associations such as ICS, BIMCO and Intertanko follow at a distance. Given that (as in previous sections) some IACS members can also participate in an IMO meeting under multiple different delegations (including IACS itself) and thus may influence discussions via these

Fig. 4 Average delegation size against total number of submissions and fleet size for selected member states (blue) and observer organizations (red). (Color figure online)

delegations as well, the above confirms the significant and perhaps extraordinary profile of class societies in IMO matters.

In fact, our analysis confirms that class society influence on the shipping industry is significant, and due to the very lax IMO governance rules, perhaps it is way more significant than what it ought to be. Thus, and even though we may stop short of claiming that ‘what is good for DNV-GL is good for Norway’ (or for Germany for that matter), the fact that the IMO rules allow class to be represented via multiple outlets and act in unison on selected matters with no checks and balances whatsoever ought to be, in our opinion, a source of concern for IMO governance and something to be seriously looked at going forward.

4 The way ahead

4.1 IMO discussion on reform

The publication of Transparency International’s report was actually the second time in just 6 months that the IMO was hit by massive criticism, after that by InfluenceMap. Both reports have attracted much attention from the media, and various articles were published in Lloyd’s List, ShippingWatch and other outlets.

Australia, in a submission to the Council’s 121st session (IMO 2018c), identified a number of options to increase public access to discussions and decisions, including providing access to documents prior to consideration at meetings, providing public access to live video streaming of plenary meetings of the Council and the committees, reform

of the media guidelines to allow more comprehensive reporting of the IMO issues and providing free electronic copies of consolidated versions of key IMO instruments and administrative documentation. The submission dealt with an important issue that was also highlighted in Transparency International's criticism, namely the fact that the press cannot name speakers in open plenary or quote their views without their consent. Then, in November 2019, the IMO Council actually agreed to permit journalists to quote delegations during plenary meetings without seeking prior approval.

4.2 IMO governance versus the initial IMO strategy

Is the shipping industry deliberately trying to slow down the IMO in its quest to decarbonize shipping, as claimed by InfluenceMap? This is a very serious accusation, and to prove it, intent would need to be proven, which is very difficult if not impossible. We were not able to do so in the current analysis, but the comments that follow might serve a purpose in this regard.

The adoption of the so-called Initial IMO Strategy to reduce GHG emissions in April 2018 (MEPC 72) was certainly a landmark decision (IMO 2018a). The big question however is what happens next and how fast one can move to implement measures that would make a difference. Indicative of the pace at the IMO is the fact that, following a fierce debate at the MEPC 73 in October 2018, the updated plan all the way to the MEPC 80 in 2023 replaced the initially suggested word 'prioritization'² by the word 'consideration', which surely projects a much weaker political will. This choice of wording can explain why no decision was made on any measures at the MEPC 74 in May 2019. The MEPC 74 did exactly what the MEPC 73 instructed it to do: it just considered the measures that were proposed. When the IMO will move to the next click, from consideration to prioritization or even to decision, is anybody's guess.

Was the shipping industry behind the above change in wording? It is hard to say, let alone prove, and in our opinion, the wording was chosen so as to bring on board member states such as the USA and Saudi Arabia, who reserved their position on the Initial IMO Strategy, not to mention Brazil, India and others who have expressed serious concerns about it. In that sense, using the word 'consideration' was a compromise solution: in order not to lose consensus, use a wording that gets the least common denominator, even though the use of such wording might compromise what could eventually be achieved afterwards and the 'speed' at which this could be achieved.

However, the Initial IMO Strategy itself is full of such compromises; for instance the two stated principles that are centrally included in the Strategy, i.e. (a) non-discrimination/no more favorable treatment and (b) common but differentiated responsibilities and respective capabilities (CBDR-RC) are in direct conflict with each other. The latter principle was included so as to placate a group of developing countries (mainly Brazil, Saudi Arabia and India) who stood and continue to stand firmly behind CBDR-RC. According to this principle, the formulation of which dates as far back as the Kyoto Protocol, developing countries claim they have a 'differentiated' (read 'lower degree') obligation to reduce GHG emissions, at least vis-à-vis developed countries. It is not the purpose of this paper to comment on CBDR-RC

² In the context of the candidate measures to reduce GHGs.

(Psaraftis 2018); but in our opinion, if there is a single major obstacle to any progress on maritime GHG emissions reduction, it is definitely CBDR-RC, and a way to circumvent or even eliminate this principle altogether will need to be found if any serious progress is to be made. So long as CBDR-RC is there, and it is clear it is there for political reasons, any talk of industry dragging its feet on GHGs misses the point.

It is of course conceivable that shipping companies or other industrial interests in Brazil, Saudi Arabia, India and others are responsible for these countries' stance on CBDR-RC and hence GHGs. In other words, it is conceivable that CBDR-RC, even though it invokes a societal cause enshrined in the Kyoto Protocol, is used as an argument to 'camouflage' whatever other real reasons might exist for those countries' stance on GHGs. However, the extent to which something like this would be the case is only speculation. For their part, industry associations such as the ICS and BIMCO are not advocates of CBDR-RC, but in the specific debate between CBDR-RC advocates (mainly developing countries) and opponents (mainly developed countries), these associations are side lined and prefer not to be directly involved. Whether such a continuing debate suits them, so that discussion on GHGs does not move very fast, is a hypothesis that may feed into the 'theory' that the shipping industry is deliberately trying to slow down the drive to decarbonize, but in our opinion, this is a hypothesis that cannot be proven.

An important issue that can potentially test the shipping industry (or the entire maritime community) as to its resolve to move faster towards decarbonization is the subject of market-based measures (MBMs). This is because the development of alternative fuels and energy-saving technologies could be incentivized by a bunker levy or another MBM. MBMs were examined by the IMO/MEPC in 2010, but after many discussions, there was no preference for any of the 11 MBM proposals, and finally, the discussion was suspended in 2013. The main reason behind this development was the objection of the developing countries mentioned above (plus China at the time), on grounds that MBMs are allegedly incompatible with CBDR-RC (Psaraftis 2012, 2018).

At this point in time, MBMs are included in the Initial IMO Strategy as a candidate medium-term measure (to be finalized and agreed to between 2023 and 2030) as follows: 'New/innovative emission reduction mechanism(s), possibly including Market-based Measures (MBMs), to incentivize GHG emission reduction.'

Note the word 'possibly', which means that the fate of MBMs at the IMO is unclear at best. After the above ill-fated discussion, interest in MBMs, at least at the IMO, seems currently slim, and this is all across the stakeholder spectrum. France and some Pacific Islands have proposed that the discussion be reopened, but this has not yet happened (Psaraftis 2019).

What is the shipping industry's stance on MBMs? It is lukewarm in the best case and negative in the worst case. As things stand, such a stance is only expressed as a profound distaste for one specific type of MBM, the emissions trading system (ETS). Rather, shipping industry associations have expressed a preference for another type of MBM, a levy on bunker fuel. However, such a preference stops short of proposing such a levy, as presented below.

It was only after the new President of the European Commission revealed that, in the context of the European Green Deal (EU 2019), shipping would be included in the EU ETS, that the shipping industry revealed, albeit in an oblique way, its

stance on MBMs. Thus far, the position of the EU has been to align itself with the IMO process on decarbonization and essentially refrain from acting on a possible inclusion of shipping into the EU ETS before seeing what the IMO intends to do on GHGs. The EU ETS is a major instrument in EU energy policy, covering electricity production and several other major industries (but not shipping). The European Commission has been closely monitoring the IMO process, starting from what was agreed on the initial strategy in 2018 and all the way to 2023. Until recently, the Commission had refused to take the ETS option off the table or even to specify what would trigger action on its part. However, as of 11 December 2019, this has changed, and the European Green Deal clearly points to the ETS path for shipping.³

One week after the European Green Deal was announced, and as this paper was being finalized, all major observer organizations to the IMO (ICS, BIMCO, WSC, Intertanko, Intercargo, Interferry, CLIA and IPTA) publicly announced to the IMO a (to be jointly funded) project for a 5 billion USD fund that would be used to finance R&D for technologies and fuels towards decarbonization. This would be raised by a 2 USD/ton mandatory surcharge on bunker fuel (ICS 2019).

This proposal, which had actually been prepared by the shipping industry for some time now but essentially kept in the drawer until its recent public release, is not labelled as an MBM, and in fact, it is hardly an MBM. It is clear that 2 USD/ton will not reduce GHG emissions, either in the short run or in the long run. A fortiori, any link between the R&D that could be conducted going forward and any actual decarbonization that might occur as a result of this R&D is sketchy at best. The proposers state that the R&D fund would only cover applied research and not commercial development of fuels and other technologies, which would be left to other stakeholders, such as shipbuilders, engine manufacturers, energy producers, ports etc. At the same time, the proposers state that their proposal is not intended to frustrate or delay the development of an MBM, should there be consensus for this among member states, and that the architecture of their proposal could be used, should the IMO proceed with a levy (implying that this would be their preferred MBM).

Is this latest move by the shipping industry a proof of their drive towards decarbonization? Or is it proof of the hypothesis that they are deliberately trying to stall the process? In our opinion, neither of the two is the case, and the question is tantamount to asking if one considers if a glass is half full or half empty.

Whatever the case, the European Green Deal and its link to shipping decarbonization via the EU ETS has suddenly upgraded the role of the EU as an important player in the IMO process. After this news was announced, the IMO Secretary-General rushed to defend the overall IMO approach and indicated his willingness to talk to the European Commission and Parliament. How these discussions will evolve remains to be seen.

Substance-wise, our position is that the main plus of the European Green Deal, as regards shipping of course, is the increased pressure it will exert on the IMO to move faster and that a levy on bunker fuel or on carbon emissions would be a far better MBM than ETS in the quest to decarbonize shipping. For a discussion of the relevant issues see Psaraftis (2012) and Psaraftis and Lagouvardou (2019).

³ The intent of the new European Commission President to include shipping within the EU ETS was actually known since the new President's election.

4.3 Conjectures

A number of conjectures are presented herein before any recommendations based on the above analysis can be made. We use the term ‘conjectures’ instead of ‘conclusions’ because these are based on a non-encyclopaedic amount of factual evidence augmented by our own experience, and for these reasons, our results are not necessarily generalizable.

1. For a UN agency tasked with such important responsibilities, and even though the IMO appears to be functioning reasonably well, IMO governance sometimes is lagging, and to many, it might be liable to considerable improvement. In particular, rules regarding representation are too lax and may open the door to situations that do not necessarily promote transparency and a level playing field.
2. At the same time, a variety of reasons, mostly political, are responsible for the slow pace of the regulatory process to decarbonize shipping. There seems to be no evidence of collusion by the IMO stakeholders to that effect.
3. As regards the shipping industry’s willingness (or lack thereof) to be the main driver behind decarbonization, the hypothesis that there is a deliberate attempt to stall the drive to decarbonize cannot be supported by evidence thus far at our disposal. At the same time, we think that an approach bolder than the recent proposal for a 2 USD/ton R&D fund would serve the IMO decarbonization targets far better.
4. The IMO member states that seem to be the most potent influencers of IMO policy are Japan, the USA, Germany, Norway and China, with Denmark and Korea not too far behind.
5. The above is matched or sometimes even surpassed by IACS, whose members have the additional privilege of being allowed to influence IMO policy via multiple additional outlets, in addition to IACS itself. This constitutes, in our opinion, a serious deficiency in IMO governance.
6. Greece, the world’s number one shipping power in terms of controlled fleet, has adopted a low-profile role at the IMO and does not seem to be a main influencer in IMO business.
7. Representation within some delegations and especially NGOs is sometimes hidden and non-transparent. This is another serious deficiency in IMO governance.
8. The EU has the potential to influence IMO developments, mainly as regards the pace of the decarbonization process and, more recently, in the context of the European Green Deal. However, up until recently, it has not taken full advantage of this potential.

4.4 Recommendations

Can something be recommended to improve IMO governance? In Table 3 below we suggest some possible reform actions, the majority (or perhaps all) of which are probably too radical to be agreed upon in the foreseeable future.

Table 3 Suggestions for IMO governance reform

Suggestion	Comment
Limit the size of each delegation, For instance five people maximum as regular members, plus up to five advisers or observers	There should be enough people to attend the plenary session and working groups running in parallel. Japan may find this measure unfair, but delegation size cannot be uncontrollable
For member states, regular delegates should be public servants and staff of the respective member governments	This may sound self-evident and is coupled with the no-outsourcing requirement (see below)
For observer organizations, regular delegates should be employees of the respective organization	This would eliminate the possibility of NGOs fielding a delegation whose members belong to organizations that may have little in common and where each member promotes their own interests
Representation at the IMO cannot be outsourced	We also find this self-evident, as the interests of the representer and those of the represented may not coincide. Delegations can include advisers and observers, but these cannot officially represent them (see also next point)
Advisers and observers cannot take the floor	This is coupled to the no-outsourcing requirement and is a measure to avert conflict-of-interest situations
The real affiliations of delegates should be listed. These are the delegates' employers. There should be no hidden affiliations	Again, self-evident
If a delegate has dual or multiple employers, only one can be used at an IMO meeting, but all employers should be listed	There should be full transparency on who is who at the IMO
An organizational entity (shipping company, port, consulting company, university, research organization, class, shipyard, consulting company or any other private company) cannot send delegates to more than one delegation	This would avoid interests being represented via multiple parallel channels
Class can only send delegates to IACS	Class societies will scream in protest at this suggestion, however the current very lax scheme allows them way too many representation possibilities and hence undue influence
Switching delegations between different IMO sessions should not be automatic but subject to request by the delegate and approval by the IMO secretariat	There should be some control on how various 'hats' can be switched at the IMO
Each delegate should sign a form stating that there is no conflict of interest in representation and also listing his/her previous employers during the last 5 years	This is self-evident. A question is how this will be enforced. There should be penalties for violators
The identity of persons who speak at the IMO should be recorded and be publicly available. All meetings, including working group meetings, are video-taped and can be made available	Another suggestion in the interest of transparency. Of course, knowing that what is said will be publicly available may change the content of what is said, however people and delegations should be held accountable for their positions

Table 3 (continued)

Suggestion	Comment
In discussions on the terms of reference of studies or procurement contracts, taking the floor under any delegation should disqualify one's employer from bidding	This is a very serious issue and is suggested so as to avoid situations in which people hidden under judiciously chosen delegations promote the interests of their real affiliations by participating in discussions on the terms of reference of the very studies for which they will later bid. Regrettably, such conflict-of-interest situations are possible under the current IMO governance rules

References

- ClassNK. 2019. "Topics at IMO", Nippon Kaiji Kyokai—ClassNK. https://www.classnk.or.jp/hp/en/info_service/imo_and_iacs/topics_imo.html. Accessed 16 June 2019.
- EU. 2019. Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions "the European Green Deal" (Com/2019/640 Final).
- ICS. 2019. Proposal to establish an International Maritime Research and Development Board (IMRB) Submitted to IMO/MEPC 75 by BIMCO, CLIA, ICS, INTERCARGO, INTERFERRY, INTER-TANKO, IPTA, and WSC.
- IMO. 2004. "Comparative FSA study on single- and double-side skin bulk carriers", doc. MSC 78/INF.6, Submitted by Greece, the International Maritime Organization, February 2004.
- IMO. 2018a. Initial IMO strategy on reduction of GHG emissions from ships, 13 April 2018, International Maritime Organization. <http://www.imo.org/en/OurWork/Documents/Resolution%20MEPC.304%2872%29%20on%20Initial%20IMO%20Strategy%20on%20reduction%20of%20GHG%20emissions%20from%20ships.pdf>. Accessed 16 June 2019.
- IMO. 2018b. "List of Participants, MEPC 72nd Session", doc. MEPC 72/INF.1, International Maritime Organization, April 2018.
- IMO. 2018c. "Access to information", doc. C 121/3(b)/5, Submitted by Australia, International Maritime Organization, October 2018.
- IMO. 2019. IMO Financial Statements, International Maritime Organization. <http://www.imo.org/en/OurWork/Pages/Financial-Statements.aspx>.
- InfluenceMap. 2018. "Decision time for the IMO on climate: The polarized struggle among states for ambitious climate policy on shipping", April 2018, Report. https://influencemap.org/site/data/000/309/IMO_Shipping_Report_April_2018.pdf. Accessed 16 June 2019.
- InfluenceMap. 2017. "Corporate capture of the International Maritime Organization: How the shipping sector lobbies to stay out of the Paris Agreement", October 2017, Report. https://influencemap.org/site/data/000/302/Shipping_Report_October_2017.pdf. Accessed 16 June 2019.
- Psaraftis, H.N. 2012. Market based measures for green house gas emissions from ships: a review. *WMU Journal of Maritime Affairs* 11: 211–232.
- Psaraftis, H.N. 2018. Decarbonization of maritime transport: To be or not to be? *Maritime Economics & Logistics*. <https://doi.org/10.1057/s41278-018-0098-8>.
- Psaraftis, H.N. 2019. Speed optimization vs speed reduction: Are speed limits better than a bunker levy? *Maritime Economics and Logistics*. <https://doi.org/10.1057/s41278-019-00132-8>.
- Psaraftis, H.N., S. Lagouvardou. 2019. Market based measures for the reduction of green house gas emissions from ships: a possible way forward. *Samfundskøkonomien*, in press.
- ShippingWatch. 2017a. "ICS describes critical IMO report as "nonsense", ShippingWatch, Published 06 Nov 2017. <https://shippingwatch.com/carriers/article10005273.ece>. Accessed 16 June 2019.
- ShippingWatch. 2017b. "BIMCO responds to criticism from InfluenceMap", ShippingWatch, Published 07 Nov 2017. <https://shippingwatch.com/secure/carriers/article10008886.ece>. Accessed 16 June 2019.
- ShippingWatch. 2018. "IMO subject to new criticism for lack of transparency", ShippingWatch. <https://shippingwatch.com/secure/carriers/article10728806.ece>. Accessed 2 July 2018.

- Transparency International. 2018a. “Week Governance at UN Shipping Agent Delaying Action on Climate Change”, Press release of the Summary Report, 3 April 2018. https://www.transparency.org/news/pressrelease/weak_governance_at_un_shipping_agency_delaying_action_on_climate_change. Accessed 16 June 2019.
- Transparency International. 2018b. “Governance at the International Maritime Organization: The case for Reform”, Report, July 2018. https://www.transparency.org/whatwedo/publication/governance_international_maritime_organisation. Accessed 16 June 2019.
- Transparency International. 2018c. “Obstacles to Reform at UN Shipping Agency Threaten Climate Goals”, News release. https://www.transparency.org/news/pressrelease/obstacles_to_reform_at_un_shipping_agency_threaten_climate_goals. Accessed 15 Nov 2018.
- UNCTAD. 2018. “Review of Maritime Transport”, UN Conference and Trade and Development, Report. <https://unctad.org/en/pages/PublicationWebflyer.aspx?publicationid=2245>. Accessed 16 June 2019.

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