Acting without Autonomy? The International Maritime Organisation and Global Environmental Governance

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Abstract

Roughly 90% of all traded goods reach their destinations by ships that travel through waters governed by different laws and conventions. Tanker accidents as well as operational discharges of oil, sewage and ballast water pose major threats to a vital marine life. In addition to facilitate the safety of shipping, since 1967 the International Maritime Organization (IMO) is also responsible for fighting marine pollution resulting from ships. As central features, it provides a forum for intergovernmental negotiations and also issues codes and regulations. In this paper, I discuss how internal characteristics and the institutional design of IMO contribute to its rather mixed record in fighting marine pollution.

This study is part of the MANUS research project that tries to explain the effectiveness of intergovernmental environmental organizations along a set of independent ('polity', 'peoples and procedures', and 'problem structure') and dependent ('cognitive', 'executive', and 'normative' effects) variables. Interviews with senior IMO staff members as well as an international stakeholder survey have been conducted for this paper. As a first conclusion, it turned out that while the IMO accomplishes to foster co-operation by preparing meetings and drafting conventions, it has little leverage to sanction member states that fail comply with international agreements. These mixed results of the IMO's efforts to prevent marine pollution can partly be explained by it being deeply rooted in the sea farers' world which is reflected both in the staff composition and the institutional design. Large flags state avail of a de facto veto in the assembly and the lack of environmental experts can be perceived as a disadvantage. In addition, the secretariat has especially well developed contacts to the shipping industry. Finally, the IMO disposes of a very dense bureaucracy that rather hampers innovation and change.

Contents

Acronyms

OAPEC	Organization of Arab Petroleum Exporting Countries
CBT	Clean Ballast Tanks
CLC	Civil Liability Convention
COW	Crude Oil Washing
CSD	Commission for Sustainable Development
EEZ	Exclusive Economic Zone
FUND	International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage
GloBallast	Global Ballast Water Management Programme
GPA	Global Programme of Action for the Protection of the Marine Environment from Land-based Activities
IMCO	Inter-Governmental Maritime Consultative Organization
IMDG	International Maritime Dangerous Goods Code
IMLI	International Maritime Law Institute
IMO	International Maritime Organization
ISO	International Organization for Standardization
ITCP	Integrated Technical Co-operation Programme
MARPOL 73/78	International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto
MEPC	Marine Environment Protection Committee
OILPOL	International Convention for the Prevention of Pollution of the Sea by Oil
OPA	(US) Oil Pollution Act
OSPAR	Convention for the Protection of the Marine Environment of the North-East Atlantic
PARCOM	Convention of Marine Pollution from Landbased-Sources
POP	persistent organic pollutants
SBT	Segregated Ballast Tanks
TBT	Tributyltin
UNEP	United Nations Environment Programme

1 Introduction

This study is part of the research project *MANUS - Managers of Global Change* that assesses the effectiveness and learning of international bureaucracies in the field of environmental politics.[2] In this project we analyze the effects international bureaucracies have on the behavior of other actors. Three groups of effects have been observed: Secretariats influence the knowledge base, they foster capacity building, and they have normative effects. We try to explain the performance of an international bureaucracy with reference to three independent variables, namely the polity of a bureaucracy, i.e. the constitution that governs the structure of a secretariat. Second, we look into the inner life, the peoples and procedures of an organization, and, finally, we assess the particular structure of the environmental problem at stake. In this paper, the results of the case study on the International Maritime Organization are presented.[3]

The IMO secretariat shows excellent results in providing technical expertise on ship design and construction, it serves as knowledge broker and has established various clearing houses. This can be explained by the fact that IMO staff has predominantly seafaring or naval engineering backgrounds and very good contacts to the shipping industry. Second, efforts to improve capacity building as a prerequisite for the enforcement of IMO conventions have been intensified due to internal restructuring. Finally, the IMO as a member organization has proven to be an effective forum for negotiations. In addition, IMO staff has directly influenced negotiation outcomes. This can be explained by the little autonomy of the secretariat that guarantees the impartiality of IMO staff. That very feature enables them to serve as negotiation brokers.

The IMO secretariat sees itself confronted with very demanding tasks. Shipping is a truly global business, and ships from different countries of origin with international crews travel through different jurisdictions and territories. The performance of the IMO has been discussed by scholars that assessed the formation and the effectiveness of international environmental regimes (Haas 1989; Biermann 1994; Mitchell 1994; Peet 1994; Breitmeier 1997; Peterson 1997; Jones 1999; Mitchell, McConnell et al. 1999; Carlin 2002; Kim 2003; Mason 2003), by international lawyers (M'Gonigle and Zacher 1979; Dempsey 1984; Lauwaars 1984; Seidl-Hohenveldern and Böckstiegel 1988; Strubel 1988; Brubaker 1993; Ilg 2001), and by scholars of ocean management (Foders 1989; Cicinsain and Knecht 1993; World Commission on the Oceans 1998; Hinds 2003; Huber, Duce et al. 2003; Kimball 2003). Yet, none of the studies has concentrated on the work of the IMO secretariat as an international bureaucracy, and none has tried to measure its outcome and to explain it with reference to the particular features of the international bureaucracy.

This research builds on primary and secondary literature. Nine interviews with senior officers of the maritime safety division, the technical co-operation division, and the marine environment division were conducted in June 2003. The chapter is organized as follows: In the next section, the IMO will be introduced and its most important features presented. Then I will analyze the effectiveness of the IMO secretariat's work. In the following, I try to explain the IMO's achievements and failures along our independent variables, i.e. problem structure, polity, and peoples an procedures. The chapter closes with a conclusion.

To promote "safe, secure and efficient shipping on clean oceans" is the official slogan of the International Maritime Organization, the UN specialized agency responsible for shipping safety and prevention of marine pollution from ships. The Inter-Governmental Maritime Consultative Organization (IMCO) was

[2] This research has been supported by the Volkswagen Foundation. MANUS is part of the Global Governance Project (glogov.org), a joint research effort of the Vrije Universiteit Amsterdam, the Potsdam Institute for Climate Impact Research, the Freie Universität Berlin, and Oldenburg University.

[3] I am grateful for valuable comments from the MANUS project team and Philipp Pattberg.

founded in March 1948 with the adoption of the IMCO-Convention that entered into force in 1958.[4] Marine environment protection was officially added to the IMO's mandate in 1967, partly as a response to the sinking of the *Torrey Canyon*, one of the ship accidents having the worst consequences for the marine environment ever. Reflecting its growing importance for maritime safety and maritime pollution politics, its name was changed in 1982 to 'International Maritime Organization' (Lampe 1983)[5].

The IMO has 164 members that represent 98.48% of the world merchant shipping tonnage. There are three associated members (IMO 2003a), and 63 non-governmental organizations have been granted consultative status (IMO 2003c). In addition, the IMO has formal co-operation agreements with 61 intergovernmental organizations (IMO 2003d). To administer the work of the organization, a secretariat was created which resides in the IMO headquarters in London. The IMO is a multi-issue organization that favors economic over environmental interests. It has four committees that are open to all members of the organization: The Maritime Safety Committee, the Legal Committee, the Technical Co-operation Committee, and the Marine Environment Committee. The Facilitation Committee reports to the Council.

Three hundred people work in the IMO secretariat and only a small share of them on environmental issues. The Maritime Safety Division employs 36, the Marine Environment Division 20, the Legal Affairs and External Relations Division 23, and Technical Co-operation Division 20 people. In those divisions, only 60% are technical officers or higher (UN salary categories P, D), and 40% are support staff. The remaining 200 people work in the Administrative Division and in the Conference Division, with the latter including translators.

The IMO's mandate is stated in article 1 of the IMO Convention. The organization is asked

> (a) To provide machinery for co-operation among Governments in the field of governmental regulation and practices relating to technical matters of all kinds affecting shipping engaged in international trade, and to encourage the general adoption of the highest practicable standards in matters concerning maritime safety, efficiency of navigation and prevention and control of marine pollution from ships; and to deal with administrative and legal matters related to the purposes set out in this Article;
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> (b) To encourage the removal of discriminatory action and unnecessary restrictions by Governments affecting shipping engaged in international trade so as to promote the availability of shipping services to the commerce of the world without discrimination; assistance and encouragement given by a Government for the development of its national shipping and for purposes of security does not in itself constitute discrimination, provided that such assistance and encouragement is not based on measures designed to restrict the freedom of shipping of all flags to take part in international trade;
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> (c) To provide for the consideration by the Organization of matters concerning unfair restrictive practices by shipping concerns in accordance with Part II;
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> (d) To provide for the consideration by the Organization of any matters concerning shipping that may be referred to it by any organ or specialized agency of the United Nations;
>
> (e) To provide for the exchange of information among Governments on matters under consideration by the Organization.

While these four provisions refer to the overall aim of IMO as a member organization, on the operational level the IMO secretariat has mainly three tasks. It reviews all issues brought up by any member state or intergovernmental organization and issues recommendations, this also applies for disputes among member states. Second, it prepares and drafts conventions and agreements, and fosters the exchange of infor-

[4] Convention on the Intergovernmental Consultative Maritime Organization, adopted 6 March 1948, entered in force: 17 March 1958, *United Nations Maritime Conference. Held at Geneva, Switzerland from 19 February to 6 March,1948. Final Act and Related Documents. Lake Success, New York. United Nations Publication 1948 VIII.2*

[5] The Japanese delegation first objected to this name, because 'Imo' means 'hot potato' in Japanese. The delegates then agreed to pronounce it single letters: 'I-M-O' (Lampe 1983: 86).

mation among member states. Finally, the IMO secretariat implements and promotes technical co-operation projects.

Initially, the IMO's sole task was to foster maritime safety and efficiency of navigation. In practice, however, right after its foundation in 1959, it became the secretariat of the International Convention for the Prevention of Pollution of the Sea by Oil[6] (OILPOL). This convention was the first global instrument regulating ship-based marine environmental pollution. Its low effectiveness can largely be attributed to its enforcement design: Only the big shipping nations were entitled to enforce it. Large shipping nations that provide registers, or "flags", are called flag states. Shipowners often register their ships in countries with low standards to avoid additional costs. Therefore a flag state has no incentive to enforce strict regulations, so OILPOL did not have any environmental impact (Mitchell 1993: 202-203).

The IMO was responsible for advancing the development of OILPOL, as a consequence, the Subcommittee for Oil Pollution was installed (M'Gonigle and Zacher 1979: 99). During the run-up to the 1973 International Conference on Marine Pollution that eventually led to the adoption of the International Convention for the Prevention of Pollution of the Sea (MARPOL 73/78[7]), the Subcommittee's name was changed into Marine Environment Protection Committee (MEPC). This was done to reflect the fact that MEPC did not exclusively deal with oil anymore. Instead, MARPOL also covers accidental and operational oil pollution as well as pollution by chemicals, goods in packaged form, sewage, garbage, and air pollution[8].

2 Analyzing the organization's effectiveness

This study does not aim for an assessment of the impacts the IMO's activities have on the environment. It is very contested if IMO regulations and conventions have any environmental impact at all. This is due to either lack of or unreliable data. For example, this applies for efforts to measure the total amount of oil entering the sea. Estimates usually build on the assumption that MARPOL 73/78 is implemented to some degree, and then some assumed additional illegal discharges are added. But no judgment about MARPOL's effectiveness can be made "if that conclusion is based on the assumption that MARPOL 73/78 is effective" (Peet 1994: 44). Other studies suggest that operational discharge has been reduced (Höfer and Metz 2003: 113). While the actual environmental impact is very contested this study concentrates on possible effects on the behavior of other actors, or on the outcome, that can be attributed to activity of the IMO and the IMO's secretariat.

Cognitive Effects

Technical knowledge, scientific findings

One of IMO's major tasks is to pool information about technical details concerning ship construction and nautical engineering. Through its membership in the international advisory board GESAMP it has also influenced the knowledge base on marine pollution as will be shown in the following.

The IMO has a rather weak record in using information provided by member states effectively. Although it received national reports, no proper reporting system was established by the secretariat so that databases

[6] International Convention for the Prevention of Pollution of the Sea by Oil, BGBI, pp.379 ff; signed in 1954.

[7] International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, entered into force 2 October 1983.

[8] See Annexes I to VI

were then created by industry (Mitchell 1993: 129-30; Mitchell 1994: 231) [9]. Nevertheless, some change can be observed in that the IMO has recently intensified its efforts in data base management. One staff member even reports that his job predominantly is to "put the facts on the table", and that a growing demand for reliable data by institutions such as, for example, the European Union can be recognized.[10] Within its *Global Ballast Water Management Programme (GloBallast)*, for example, the IMO implemented a clearing house on new technologies, i.e. the Ballast Water Treatment R&D Directory, where information for over 70 projects can be found.[11]

In addition, the IMO also provides information on legal issues. Recently, IMO commissioned a review on existing international obligations and national regulatory approaches with regards to ballast water management, which has been prepared by the *GloBallast Legislative Review Project*[12]. The assessment gives information on problems and possible solutions for national regulations and served as input both for the draft convention and the further development of respective national legislation. The GloBallast Programme is an IMO activity that goes beyond its "more usual role" (McConnell 2003: 90). While IMO typically serves as a purely technical organization, in this case it has taken a very proactive stance on the development of alternative technologies (Ibid.).

The secretariat also maintains a web site that is fairly well elaborated and user-friendly. Nevertheless, apart from public relations material, access to original IMO documents is restricted via a password protected section for IMO members. Most important for the IMO secretariat's outreach is a large publications department which produces an impressive number of books and manuals on IMO regulations and codes. All publications are translated into several UN languages. Profit from book sales is used to finance technical co-operation activities through the IMO Printing Fund.[13] The demand for IMO manuals and guidelines grows steadily, as sales increase show.[14]

Apart from collecting technical information about ships, the IMO secretariat itself does not undertake any scientific research, but is member of the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP). Founded in 1967 by a number of UN organizations[15] and physically based at the IMO secretariat, the groups meets annually to issue advice related to scientific aspects of environmental marine protection. The group is rather small: every sponsoring organization sends one technical officer to GESAMP. The group also prepares periodic assessments of the state of the marine environment. It publishes both reports (until 2002, 99 in total, or 87%) and scholarly journal articles (15, or 13%) (Cordes 2004). The most important publications series is *GESAMP Reports and Studies*. Many of the reports reappear in shorter versions in peer-reviewed journals. In total, there are 1436 citations of GESAMP papers, of which two thirds refer to grey literature and one third to journal articles or books, as a citation analysis of GESAMP papers shows (Cordes 2004: 57). In their thematic field (Environment/Ecology), two reports are even classified as "most cited papers" by ISI Web of Science (Cordes 2004: 66). Only one third of the citations can be associated with members of GESAMP's sponsoring agencies which allows for the conclusion that publications have spread widely beyond IMO. Through

[9] The International Chamber of Shipping (ICS) and the shipowners' association INTERTANKO published reports on reception facilities (Mitchell 1994 :129-130.)

[10] Source: Interview with IMO official, June 2003.

[11] See http://globallast.imo.org/index.asp?page=bwprojects.htm&menu=true, 28 October 2004.

[12] McConnell, M. L. (2002). "GloBallast Legislative Review. Final Report." GloBallast Monograph Series, IMO London(No. 1).

[13] IMO Doc. TC54/3/ANNEX and IMO Doc. and A 22/Res. 906.

[14] Source: Interview with IMO official, June 2003.

[15] Current members are IMO, FAO, UNESCO-IOC, WMO, WHO, IAEA, UN, UNEP. (See http://gesamp.imo.org/gesamp.htm, 21 April 2005)

GESAMP the IMO secretariat has influenced the knowledge base on marine pollution, although the extent of this influence remains unclear since only one technical officer has contributed to GESAMP.

In sum the IMO provides a pool of information on technical issues related to shipping, and legal aspects of possible regulations. It is not a particular strength of the IMO to effectively use compliance data and national reports. Through its membership in GESAMP, the IMO has contributed to a better scientific understanding of marine pollution, though no hard claims can be made about the direct influence of IMO staff.

Targeted by the environmental discourse

The IMO's most important output is to facilitate negotiations among its members. This is strongly reflected in its staff perceiving themselves as "brokers" for their members. While the IMO puts strong efforts in furthering compromise[16], it rarely introduces new topics to negotiations. Usually it is the member states that set new issues on the agenda.[17] Moreover, the secretariat seems rather reluctant to push the public discourse into one direction because it fears that IMO member states could loose confidence in the secretariat's work.

Staff members acknowledge a growing public consensus about the importance of a vital marine life, and a growing environmental consciousness in general. Nevertheless, none of the interviewees saw any connection between IMO activity in marine pollution prevention and a changing general discourse. The IMO was rather itself influenced by the Rio Declaration that has formally been addressed in IMO's work program. With regard to air pollution from ships, the IMO refrained from any action for several years and commissioned a study on greenhouse gas emissions in 1999 only.[18] The IMO intensified its discussions when requested from the UNFCCC secretariat only, but it did not initiate any action on its own (Oberthür 2003: 195).In addition, the public discourse on marine pollution has always been influenced by tanker accidents, such as, most prominently, the Torrey Canyon, Amoco Cadiz, Exxon Valdez and Erika disasters (Birnie 1999, Own Interviews). Within the broader public, nevertheless, the IMO has increasingly been perceived as an "international lobbyist for maritime shipping" (Höfer and Metz 2003: 113).

While the IMO is rather reactive in the environmental discourse, one could make the counterfactual argument that nobody ever questioned shipping to be the appropriate form of transportation at a global level. On the contrary, former IMO secretary-general William O'Neill emphasized that "the existence of a strong transport and communication infrastructures is essential to sustainable development" (McConnell 2003: 71). To sum up, the IMO rather responds to than shapes environmental discourses.

Executive Effects

Capacity building- fostering compliance through technical co-operation

While the facilitation of negotiations has been the focus of IMO's work for a long time, technical co-operation is now perceived as essential for compliance and enforcement of IMO regulations. The IMO secretariat develops and implements projects that aim to improve the enforcement of IMO conventions by port states and the compliance by flag states.

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[16] The former IMO secretary-general has pushed the negotiations on the 1995 STCW Code, that specifies the requirements of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 (STCW) Dirks 2001

[17] Source: Interview with IMO official, June 2003.

[18] IMO Doc. MEPC 43/10/2. For a review on air pollution from ship s see also Michaelowa and Karsten 2000

The IMO has increased its efforts in capacity building in recent years. The Integrated Co-operation Programme (ITCP) is responsible for capacity building and has focused on policy formulation support and on building institutional capacity[19]. The Technical Co-operation Division (TC) works closely with the other departments. It helps countries to implement their legal commitments. Recently, the ITCP was reorganized and now uses integrated financial data to strengthen the operative management. ITCP activities include the deployment of advisory missions, the provision of model legislation and national and regional courses, and the coaching of trainees to foster compliance. Enforcement of IMO regulations is enhanced trough the training of port authority members. Recently, the IMO tried to boost flag state implementation through an initiative in the shipping sector in developing countries. This led to an increase in problem awareness in developing countries (Fakhry 2003: 95). The TC division works closely with the specialist departments (maritime safety, marine environment) both with regards to the development and the implementation of projects (Own Interviews). Broken down to the different departments, roughly 29% of all activities relate to the Marine Environment Division, while 61% are implemented through the Maritime Safety Division.[20] The funds for technical co-operation are voluntary contributions, and equal less than 2% of the annual budget of the IMO which amounted to USD 797,261,047, or £46,194,900 in 2003. Almost 50% of the funds stem from the Technical Co-operation Fund which is financed through the IMO's Printing Fund that administers the production and sale of publications.[21] The GEF accounts for another third of the funds, followed by UNEP (8%), Norway (7%) and the European Union (4%). In the biennarium 2002-2003 roughly half of the ITCP budget was used for global projects, while the other half was spent for regional programs with a focus on the Asia-Pacific region.[22] Recently, the fourth regional office was opened in the Philippines.

To train professionals three institutions have been founded under the auspices of the IMO. The World Maritime University, established in 1983 and based in Malmö, Sweden, currently provides post-graduate education for about 200 students. In addition, in 1990, the International Maritime Law Institute (IMLI) was founded in Malta where about 200 lawyers participate in graduate classes. Finally, the International Maritime Academy (IMA), founded in 1989 and based in Trieste, Italy, trains professionals and government officials in short term courses. The IMO sporadically evaluates the performance of officers trained by IMO and comes to positive conclusions (Own Interviews).

The IMO indirectly contributed to the spread of "green technologies". MARPOL 73/78 requires ships to be equipped with Crude Oil Washing systems (COW) and Segregated Ballast Tanks (SBT). Although the shipping industry strongly opposed any regulation on equipment standards, it finally supported them due to the imminent threat of unilateral action by the US (Mitchell 1994: 110). In the first place, MARPOL was not very effective because it relied in part on the availability of reception facilities to be installed in the 70ies/80ies. Reception facilities for oily residues were not installed in important oil-exporting countries (e.g. OAPEC). This was due to their lack of interest in environmental policy, and the fact that Arab oil exporting countries were not part of MARPOL (Höfer and Metz 2003: 111). In addition, discharge standards that specify the maximum amount of oil in water were ineffective because violation could not be detected (Höfer and Metz 2003: 111). Also, the fact that MARPOL requirements apply for newly built ships – not for old ones – is a disincentive for innovation (Höfer and Metz 2003: 112).

The level of compliance of the tanker industry has varied greatly and has mainly depended on the type of the regulation. As Mitchell et. al. show, discharge standards have not altered the behavior of the tanker

[19] IMO Doc. TC 54/3/ANNEX, p.3-4.

[20] IMO Doc. TC 54/3/ANNEX, p.7.

[21] IMO Doc. TC54/3/ANNEX and IMO Doc. and A 22/Res. 906.

[22] IMO Doc. TC 54/3.

industry. On the contrary, equipment standards have indeed induced changes in the behavior of the shipping operators (Mitchell, McConnell et al. 1999). Still, governments have largely failed to provide their ports with necessary reception facilities, and if so, this can be traced back to local lobbying rather than to the international instrument or organization (Mitchell 1994).

In sum, capacity building efforts by the IMO have been strengthened. Staff members acknowledge that helping developing countries to implement the current conventions should be a focus of IMO's work. As one IMO officer estimates, only 40-60% of all IMO member states are able to follow the current developments, and at most a third of them are able to actually implement them (Own Interviews). To sum up, the IMO secretariat has intensified its capacity building efforts, but data about its effects is still scarce.

Normative effects

Providing a forum for negotiations

To foster international cooperation with regards to the regulation of shipping is a central task of IMO. By providing an arena for negotiations, preparing and circulating documents, the IMO facilitates discussions among its members and is often called a "broker" (own interviews). IMO secretariat staff report that most of their work is dedicated to preparing meetings, collecting documents and drafting agendas. In addition, the IMO issues codes that eventually may obtain the status of customary law. Also, it develops guidelines on the implementation of conventions negotiated within IMO. Both kinds of documents are published by the IMO secretariat which disposes of a large publications division.

Generally, different regulations in different jurisdictions make the adherence to standards complicated and costly, and thus inhibit an effective environmental policy (Kim 2003). Especially the shipping industry has a strong interest in clear regulation and standards, because usually international standards represent the lowest common denominator (Own Interviews). Strict unilateral regulation endangers the effectiveness of international regimes and imposes high costs on the shipping industry (Ilg 2001: 31). Also, a mosaic of different regimes and regulations might constrain the freedom of merchant shipping (Ilg 2001: 99).

This happened, for example, in the case of the international oil pollution liability regime. After the Exxon Valdez incident in 1989, the US stepped out of the regime. Through its Oil Pollution Act of 1990 (OPA)[23] it adopted much stricter regulations than the provisions of the international regime[24], thereby calling for practically unlimited liability (Kim 2003: 271). However, no insurance carrier offered coverage. The effectiveness of OPA was therefore put into question, while, at the same, the regulations led to a fragmented liability regime (Herber 1994; Kim 2002). In the first place, no compromise among the parties could be reached despite the efforts by IMO to augment the limits of liability. On the other hand, US (and partly also EU) pressure on IMO for stricter environmental regulation advanced the development of an international liability regime (Mason 2003: 10). After lengthy negotiations, a civil liability regime could finally be established within IMO. States representing 93.44 % of the world merchant shipping fleet (in GRT) are part of the CLC Protocol 1992 that replaces the Civil Liability Convention (CLC 1969). Second, the FUND convention, replaced by the FUND 1992 protocol for those who have ratified the latter, establishes a funding mechanism that provides compensation when the damage cannot be covered through

[23] Oil Pollution Act, Pub. L. No. 101-380, 104 Stat. 484 (1990).

[24] The international regime basically consists of two conventions: The 1992 Protocol to the International Convention on Civil Liability for Oil Pollution Damage (CLC), 1992, entered into force 1 November 2003 and replaces the International Convention on Civil Liability for Oil Pollution Damage (CLC), 1969, adopted 29 November 1969, entered into force 19 June 1975; and the 1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (Fund Convention), adopted October 16, 1978.

CLC. The Fund Protocol 1992 has been ratified by states representing roughly 88.39% of the world merchant shipping fleet. However, these effects can be attributed to the IMO as a member organization, while no data was found on the influence f the IMO secretariat.

In the case of the MARPOL negotiations, a compromise was possible because the shipping industry finally supported international regulation in order to avoid the worst case scenario of unilateral action by environmental leaders (Carlin 2002: 335). With its 1972 Ports and Waterways Safety Act the US Coast Guard *could* have required Segregated Ballast Water Tanks (SBT) although no international convention was signed yet. Unilateral action could thus be prevented through negotiations within MEPC when the parties finally agreed on the ambitious US target that required SBTs for new tankers above 70,000 deadweight tons (Hartje 1995: 387). The IMO as a member organization has supported negotiations on MARPOL at least in the early phases. Nevertheless, this influenced cannot be traced back to the bureaucracy of the IMO, but rather to the forum function of the IMO as a member organization (Mitchell 1993: 225).

Managing compromise – banning harmful anti-fouling systems

We will now direct our attention towards the way the very IMO bureaucracy influences negotiations. To assess the direct influence of IMO staff is a difficult endeavor for which very detailed research on negotiations documents and interviews is needed. The secretariat's tasks are, among others, to prepare meetings, to distribute the submissions among the participants, to write minutes and to brief the chairperson. To what extent IMO staff influences the actual agenda or outcome of the negotiations was difficult to assess. All interviewees stressed that they only serve the member states and do not push towards one direction. Nevertheless, one may illustrate the fact that staff indeed did have an influence with the example of the negotiations on the Convention to Control Harmful Antifouling Systems on Ships (AFS Convention).

Tributyltin (TBT) is one of the most toxic substances ever deliberately introduced into the marine environment (Goldberg 1986; Stewart 1996) and is used in coatings to prevent aquatic organisms from attaching to a ship's hull. The so-called fouling causes a higher flow resistance which increases fuel consumption. Organotins have harmful effects on the environment inasmuch as they dissociate slowly, and high concentrations have been found in marine animals and the sediment. Through the consumption of seafood it can enter the food chain (Krautter and Maack 2000).

Deformations in oysters' shells off the French Atlantic coast and reductions in oyster stocks were first discovered in the early seventies. In 1982, the French government released a temporary ban for coatings containing TBT for small ships that pass near oyster cultures. In the following years, similar forms of legislation were issued in the UK, the US and the EU. The use of TBT in anti-fouling coatings was first discussed in an international arena at the meeting of the parties to PARCOM[25] in 1987, but a total ban of TBT did not seem feasible for economic reasons. While PARCOM deals with land-based pollution, ship-based marine pollution falls under the responsibility of IMO, which is why the issue was referred to the latter.[26]

Discussions within the Marine Environment Protection Committee (MEPC) started in 1990, and the IMO secretariat provided general support and distributed information among the delegates. Its reputation for developing global standards for ship design and operations was reflected in the request for standards for measurement and processing of TBTs and a prototype registration for anti-foulings. The secretariat re-

[25] Convention of Marine Pollution from Landbased-Sources (13 ILM 1974,), entry into force 6 May 1978. PARCOM was replaced by the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR) (32ILM1069) that entered into force 25 March 1998.

[26] PARCOM Recommendation 88/1; IMO Doc. MEPC 26/24/4, p4.

ported on a recommendation for the parties to Barcelona Convention[27] issued by UNEP and on the International Organotin Symposium in Monaco.[28] The US delegation was asked to draft a resolution which was then adopted by MEPC.[29] Among other things, IMO members accepted the scientific evidence of harmful effects of TBT coatings and called for a total ban of TBT coatings for vessels below a length of 25m.

In the early 90s research on alternative technologies took off. Studies by the chemicals industry association European Chemicals Industry Council (CEFIC) questioned the harmful effects of TBTs and pointed to decreasing organotin concentrations in coastal areas.[30] On the other hand, it was argued that without the perspective of tight regulation industry would not start to invest in R&D on alternative technologies. Imminent legislation by powerful states worked as a "shadow of hierarchy" (Scharpf 1991) and triggered further action. In 1995, a group of North Sea riparian countries proposed to establish a correspondence group to break the deadlock. This initiative is most likely related to rumors on a EU directive on TBT coatings. This could have resulted in a comparative disadvantage for EU states if there was no global regulation on the use of TBTs.[31] In this phase of the negotiations, the IMO secretariat fulfilled service functions (Breitmeier 1997: 108) and provided information on measurement methods and commissioned a study on those methods (Campe 2003: 48). The correspondence group led by the Dutch delegation started to work on a first draft.

In the next MEPC meeting, several member states put the scientific evidence into question and rejected the incorporation of the precautionary principle.[32] Others, especially the Netherlands, the US and the non-governmental organization WWF and Friends of the Earth International pushed for a total ban of TBT coatings, and for an application of the precautionary principle. The IMO secretariat took a more proactive stance in this phase: it suggested to draft a review on the state of the art of alternative technologies. In addition, the secretariat suggested to collect information on different coatings and the removal of TBT coating to support developing countries. [33]

Such a review was then presented in the 1990 MEPC meeting.[34] In addition, the secretariat reported on a communication from the chairman of the *Joint Meeting of the Chemicals Group and Management Committee* of the OECD in which he supported IMO's work on the issue. For that reason, the OECD itself saw no need for further action.[35] The IMO secretariat submitted a report on the work taking place at the International Organization for Standardization (ISO).[36] At the end of this meeting, a draft resolution that called for a total ban of TBT coatings by 2008 was submitted to the IMO assembly, where it was then adopted.[37]

While it had been discussed to include anti-foulings into MARPOL through a new annex, the Dutch delegation suggested to draft a new convention.[38] New optional MARPOL annexes take very long to enter into force, so a new convention would speed up the process (own Interviews). The US delegation submit-

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[27] Convention for the Protection of the Mediterranean Sea against Pollution, Barcelona, entry into force 12.February 1978, 15 I.L.M. 290 (1976).

[28] IMO Doc. MEPC 30/INF.15 and IMO Doc. MEPC 30 INF.15.

[29] IMO Doc. Resolution MEPC.46(30) "Measures to control potential adverse impacts associated with use of tributyltin compounds in antifouling paints".

[30] IMO Doc. MEPC 38/14/1.

[31] „EU plan could be death blow for shiprepairers: Draft European Directive proposes", Lloyd's List, 21 February 1995.

[32] The third largest flag state Greece and the industry association CEFIC disavowed the scientific findings.

[33] IMO Doc. MEPC41/10.

[34] IMO Doc. MEPC 42/5.

[35] IMO Doc. MECP 42/WP.10.

[36] IMO Doc. MECP 42/INF.6

[37] IMO Doc. Res. A.895 (21)" Anti-fouling systems used on Ships", London, 25 November 1999.

[38] IMO Doc. MEPC 43/3.

ted a draft convention which was then used as a base for discussions.[39] The convention was modeled after SOLAS and MARPOL in that only harmful substances are listed, but no positive list is included.

In the following MEPC meetings and during the final diplomatic conference, three issues stood at the center of the debate: First, the incorporation of the precautionary principle was discussed. Several EU members strongly supported its anchorage[40], but it was finally included in the convention's preamble only.[41]

Second, the entry into force provisions were discussed. There are three typical ways IMO conventions enter into force: First, a specific number of states should ratify the instrument. A second approach requires the ratification of states representing a specific share of the world fleet in gross registered tons (GRT). Finally, a mixture of both requirements can be chosen. In general, the big flag states benefit from regulations referring to a share of the world fleet, while provisions relating to a specific number of ratifications require the support of virtually all small flag states.[42] In the end, a compromise that required the ratification of 25 states representing 25% of the world merchant shipping fleet could be reached, which had been proposed by a group of major flag states.[43]

Third, provisions that specify the criteria for amendments to the convention were controversially debated. A group of EU member countries again unsuccessfully tried to incorporate the precautionary principle. Nevertheless, they achieved that a lack of scientific evidence on the harmfulness of substances would not prevent it from being *evaluated* in the technical group.[44] The chemicals industry, represented through CEFIC, accomplished that economic implications of the inclusions of further substances would be considered in the evaluation.[45]

Finally, further research on alternative technologies was discussed. Brazil wanted the IMO to certify laboratories for the development of alternative anti-foulings. This was rejected by MEPC because this task is not part of IMO's mandate. On the contrary, it was agreed that the market would be the best mechanism to foster efficiency. [46] Nevertheless, parties asked the IMO to provide information on alternative coatings.[47]

The IMO provided the forum for negotiations and organized the final conference. Several IMO conventions served as models for the convention. The IMO secretariat provided information on research on alternative technologies and legal advice with regards to the entry into force of the convention. In the final round of negotiations, the IMO secretariat actively influenced the negotiation outcomes. It submitted a resolution on technical co-operation that was then – slightly modified – adopted by the diplomatic conference.

The prevalent supportive function of the IMO can also be illustrated for the case of the discussions on the accelerated phase-out of single hull tankers. Besides the official session reports, the IMO secretariat did not submit any official documents to the negotiations (IMO 2005: 2-9). In sum, promoting negotiations is a core task of the IMO and the results are fair. It can fulfill this function well because of its perceived

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[39] IMO Doc. MEPC 43/3/2.

[40] E.g. Sweden and Denmark (IMO Doc. MEPC 46/5/8) and Italy (IMO Doc. MEPC 46/5/4).

[41] IMO Doc. AFS/CONF/7.

[42] In 2000 the five largest flag states represented 45% of the world's merchant shipping fleet, while the 26 smallest flag states represent 25 % of the world fleet. See Lloyd's 2000 .

[43] IMO Doc. AFS/CONF/CW/WP.12.

[44] IMO Doc. AFS(CONF/CW/WP.7.

[45] IMO Doc. AFS/CONF/17.

[46] IMO Doc. MEPC/46/5/13.

[47] IMO Doc. AFS/CONF/12.

neutrality. By providing an arena for discussions, it avoids a mosaic of unilateral regulations that would be most costly option for most members. The IMO secretariat primarily fulfills supportive functions, although in a proactive manner. It commissioned reports on alternative technologies and reported about the work of other intergovernmental organizations. In case of the negotiations of the AFS Convention, the secretariat submitted a draft resolution on technical co-operation and thereby deliberately influenced the negotiation. This seems to be in line with recently intensified efforts to foster compliance with IMO regulations through technical co-operation.

3 Independent variables

Polity

Formal Autonomy

Paradox at first sight, the secretariat's lack of autonomy allows for some influence on negotiations. Perceived as neutral broker loyal to its member states without the ability to act against the will of its principals, the secretariat is trusted by the member states and its submissions are regarded as a good basis for negotiations.

The IMO has the status of a specialized agency of the United Nations and is largely independent from the UN family. The UN General Assembly and ECOSOC can submit recommendations to IMO. Every year an external financial auditing according to UN standards takes place. It only relates the adequacy of accounting systems and does not include a review of the work program.[48] While largely independent from the UN system, on the other hand, it has low autonomy with regards to its member states, that ultimately failed "to provide IMO actor status" (Carlin 2002: 352). The financial resources of the IMO are scarce, although the agency disposes of a relatively stable budget derived from membership fees that are calculated from the size of a members state's fleet (in gross tonnage, or GRT) and its UN contributions. The three largest contributors are developing countries (see table 1), a fact that led to temporary cash shortages in the past (Own Interviews). Therefore, the IMO set up a "Working Capital Fund" to bridgeover liquidity squeezes[49]. So far, member states have not suspended their payments for disapproval of IMO's work and no major conflicts with member states were experienced (Own Interviews). The IMO has not - like many other UN agencies - undergone any nominal budget cuts; this has been interpreted as general approval of IMO's work by the member states (Own Interviews). On the other hand, staff complains that "states are not willing to pay for the service they get" (Own Interviews). Due to the tight budget, vacancies can often not be filled. Practically every cent of the budget is allocated through the council, and due to rather strict terms of reference the IMO secretariat cannot reallocate money on its own. Activities that go beyond the IMO's mandate are rare (Own Interviews). In a somewhat counterintuitive way this very lack of autonomy contributes to the fact that IMO secretariat is quite successful in promoting negotiations. Staff is perceived a neutral broker, say "without an own identity". It does not favor any interests and do not push the negotiations into one direction. Our hypothesis that the more competencies, the more influence a bureaucracy has, is therefore contested at this point.

[48] See, for example the report by the External Auditor to the 92nd Council session, IMO Doc. C92/17(b)/Add.2.

[49] See Work Programme and Budget for the Twenty-Second Period, Financial Period 2002-2003, IMO Doc. A22/Res.906.

Table 1:
Important contributors in 2003

Country	Absolute contributions in £	Share of total budget in %
Panama	3,715,464	19.12
Liberia	1,534,505	7.89
Bahamas	1,009,345	5.19
Greece	863,545	4.44
Malta	812,212	4.18
Japan	799,865	4.11
United Kingdom	739,266	3.80
United States	700,096	3.60
Cyprus	685,278	3.52
Norway	680,728	3.50

The dominance of shipping interests over environmental concerns is also reflected in the voting procedures within the IMO as a member organization. The IMO has seven organs. The assembly is the highest and all members are part of it. Usually the assembly meets biennially, decides on the work program and the budget, elects the council and approves the secretary-general. Changes in the IMO's constitution are adopted by a two third majority. All decisions within IMO require a simple majority of the votes, but the vast majority of decisions are taken by consensus (Ilg 2001: 24). The council is the executive organ of the IMO. Its 40 members represent the ten largest shipping nations[50], the ten largest seaborne trading nations[51] and 20 countries with a maritime interest that at the same time represent all mayor world regions [52] (Article 17, IMO Convention). Due to this allocation mechanism coastal states that are most vulnerable to marine pollution are underrepresented (Biermann 1994: 192), while the large flag states possess a de facto veto. Flag states play a major role within IMO. They provide large parts of its budget, and dispose of great influence on the decision-making process within IMO. This can be seen in the entry-into-force provisions of the conventions negotiated within IMO: International agreements often enter into force when a number of countries that represent a certain percentage of the world fleet have ratified the convention.[53]

The IMO has proven to be an adequate forum for negotiations. This has been promoted by tacit acceptance, a procedure that allows for speedy amendment of technical annexes. The IMO received many criticisms for being too slow to provide effective problem solutions. Since technology changes rapidly, technical specifications included in annexes to the conventions continuously need to be adapted (Lang 1992). International legally binding agreements usually include terms on how to change both the convention and its annexes. Parties to an agreement typically reserve the right to amend a convention, requiring an explicit consent of all parties. This procedure has proven to be very slow and inadequate. In light of the Torrey Canyon disaster in 1967, several approaches to speed up amendments to technical annexes of conventions were discussed within IMO. The legal department compiled a review of amendment procedures of other

[50] Current members of that group are China, Greece, Italy, Japan, Norway, Panama, Republic of Korea, Russian Federation, United Kingdom, and the United States.

[51] Current members of that group are Argentina, Bangladesh, Brazil, Canada, France, Germany, India, Netherlands, Spain, and Sweden.

[52] Current members of that group are Algeria, Australia, Bahamas, Chile, Cyprus, Denmark, Egypt, Ghana, Indonesia, Malta, Mexico, Nigeria, the Philippines, Poland, Portugal, Saudi Arabia, Singapore, South Africa, Turkey, and Venezuela.

[53] The recently adopted International Convention on the Control of Harmful Anti-Fouls Systems on Ships, 2001, will enter into force " twelve months after the date on which not less than twenty-five States, the combined merchant fleets of which constitute not less than twenty-five percent of the gross tonnage of the world's merchant shipping" have ratified the convention (AFS 2001, art. 18).

intergovernmental organizations.[54] Today, technical changes can be made through tacit acceptance. According to that procedure, technical amendments automatically enter into force unless a third of the member state objects within a period of twelve months. If the latter is not the case, the amendments enter into force for all parties except those that explicitly objected before. Therefore, the IMO can easily put proposals through. Technical innovations and new scientific findings often require amendments to environmental agreements. Since tacit acceptance allows technical changes to be made very efficiently, it has been judged a major advancement in combating marine pollution (Ilg 2001: 37ff). Tacit acceptance de facto increases the secretariat's ability to influence conventions, thereby augmenting the secretariat's autonomy. While the secretariat has substantive leverage in technical issues, the overall autonomy remains low. This is not inconsistent with its general low autonomy, it rather confirms the claim that both IMO as a member organization and the secretariat staff are very good in providing technical expertise and negotiating technical details. With regards to our hypothesis that high autonomy improving the influence of a bureaucracy, for this case one needs to differentiate: Because new regulations might entail new costs, here the secretariat's formal autonomy is low. With regards to technical details, IMO officers are perceived as experts and more leverage is granted.

To sum up, the IMO secretariat disposes of a rather low level of autonomy vis-à-vis its member states, at least in constitutive issues. It has little autonomy over its budget, and decisions are usually taken by consensus. Tacit acceptance allows for timely amendments, but it grants the IMO secretariat further autonomy only with regards to technical matters. The IMO secretariat's low profile explains its considerable influence on negotiations.

Scope of the IMO

Fighting marine pollution is one of the two tasks of IMO, the other one – arguably the more important one – being the promotion of safety at sea. The combination of those two issues can be grasped as a typical multiple-principal problem. While maritime safety is under the responsibility of either the transport, shipping or economic ministries, the agency concerned with marine pollution is usually the environment ministry. This has led to incoherent policies (de La Fayette 2001: 144) and to conflicts the respective ministries could, for example, be observed in Germany in poorly coordinated statements on some policy issues.[55]

The IMO secretariat is well suited to have cognitive effects. It provides data on technical issues, while it is rather reactive to the environmental discourse. This can be explained by its close contacts to business and industry. "Ninety percent of my work is talking to external people" illustrates a technical officer.[56] Most important for their work is the expertise of the classification societies. Classification societies assess the state of repair of ships and issue classifications which then determine what kind of policy shipowners are offered by the insurance carriers. The International Association of Classification Societies (IACS) is especially influential: With the highly technical issues being dealt with within IMO, staff reports that the expertise of classification societies is crucial for judging the technical feasibility of new solutions (Own Interviews). A representative of the American Bureau of Shipping describes the classifications societies as "technical advisor" to IMO (Somerville 2004: 5). In addition, the international associations of shipowners are very active at MEPC meetings and often submit documents to meetings. Although the secretariat has

[54] These were ICAO, ITU, WMO; IMO-Doc.A VII/12 "Amendment Procedures in Conventions for which IMCO is Depositary, cited in Ilg 2001: 31.

[55] Source: Interview with IMO official, June 2003.

[56] Source: Interview with IMO official, June 2003.

co-operated with environmental NGOs, there is a bias in favor of the shipping industry which is reflected in the network in which IMO officers act.

To look at how IMO co-operates with other environmental international organizations adds on this point. The IMO is one of the three main UN organizations responsible for ocean management, the others UNESCO/IOC and UNEP. Although some co-operation exists, there seems to be no real policy coordination at work at the global level (Hinds 2003: 351). The World .Commission on the Oceans judges this co-ordination sometimes more symbolic than operational (1998: 147-152). In the field of marine environmental protection, the IMO is chiefly responsible for the prevention of vessel-sourced marine pollution at a global scale, while UNEP is the organization dealing with land-based marine pollution and regional co-operation. UNEP administers the Regional Seas Programme which was initiated in 1974. UNEP's task is to link "assessments of the marine environment and the causes of its deterioration, with response actions for management and development of the marine and coastal environment" (Akiwumi and Melvasalo 1998: 230). Through the *Global Programme for Action for the Protection of the Marine Environment from Landbased Sources* (GPA), UNEP attempts to support regional authorities in developing countries in preventing ship-based marine pollution. The GPA was initiated in 1995 and revitalized UNEP's activities under the Regional Seas Programme. Although the IMO is listed among the nine key players of the pollution monitoring and assessment program (MEDPOL) of the Mediterranean Action Plan, it was apparently not part of any of the eleven implemented projects.[57] Also, the Commission for Sustainable Development (CSD) in 1996 called for better co-operation between IMO and UNEP (Birnie 1999: 369-370). Recently, efforts to further regional cooperation have been intensified. The UNEP governing council called for a closer co-operation between the regional programs and IMO (Adler 2003: 14). This shows that IMO's co-operation with UNEP has apparently been rather limited.

Related to the adoption of the International Convention for the Control and Management of Ships Ballast Water and Sediments, funded by the GEF and through UNDP, the IMO founded the *Global Ballast Water Management Programme (GloBallast)*. To administer this initiative, a Programme Co-ordination Unit has been created within IMO. The program aims to foster exchange between representatives from industry, NGOs, governments and international organizations.

Overall, the IMO is well connected to the outside world with a bias for the shipping industry. This explains why the secretariat predominantly has effects on technical matters of shipbuilding and construction, while the influence on environmental issues is smaller. Especially close contacts are maintained to the classification societies. In terms of co-operating with other international environmental organizations, however, the record is rather weak. Nevertheless, there is a trend towards increased co-operation that seems to be inline with recent efforts to promote compliance of developing countries.

Material resources and incentives

The lack of sanction mechanisms can only partly explain the IMO's performance. While the IMO does not dispose of any formal sanction mechanisms, it did not even make the best use of the means at hand. The IMO secretariat has a weak record in collecting national reports and monitoring compliance (Mitchell 1994: 140). While another organization in our sample, the OECD, publishes data to shame governments by blaming them for not meeting their goals (Busch, this volume), the IMO secretariat did not even synthesize available data (Mitchell 1993: 231) Although it received reports on OILPOL and MARPOL enforcement by governments, the IMO secretariat did not issue any overview or synthesis reports until 1984 when it published a two-page document claiming that there are no general trends available. It also failed to

[57] See the website of the UNEP Regional Seas Programme http://www.unep.ch/seas/main/partners/hpart.html, 31.07.2004

issue a standardized reporting form until 1985 (Mitchell 1994: 140). Using the same data available to IMO, other authors came to some conclusions about the level of compliance. A much better record in terms of enforcement data shows, for example, the reporting system developed by the Paris Memorandum of Understanding (MOU) of Port State Control.[58] Similar regional agreements exist in the Asia-Pacific region, the Latin American region, the Indian Ocean, the Mediterranean region, and in the Black Sea.[59] In addition, discharge standards have failed to induce compliance, while equipment standards –especially the Segregated Ballast Tanks (SBT) triggered enforcement which has partly been triggered by the Paris MOU reporting system (Mitchell 1994: 185-188). Recently, the IMO established the Voluntary Member Audit Scheme which can be interpreted as major effort to foster the implementation of IMO conventions. In sum, the IMO disposes of no formal sanctioning mechanism at all. Despite data on enforcement, no monitoring took place within IMO. Nevertheless, the explanatory value of this finding is limited, since softer sanction mechanisms such as the publishing of enforcement data have not been used to full capacity.

Peoples and procedures

Shipping experts do not break waves

The professional backgrounds of IMO staff reflect the fact that marine environment protection is the issue of less importance within IMO. Overall, members of both the marine environment and the maritime safety division have mostly seafaring backgrounds. Those in the technical co-operation division have been trained in international relations or related fields. The lack of environmental experts was perceived as a disadvantage. Staff usually enters the IMO at an advanced level of their career, many members have worked for national administrations before. IMO members come from very diverse cultural backgrounds. All interviewees reported that they are highly motivated, wanted to join the UN family while reporting about others who came as political appointees with little attachment to maritime issues, and about others coming to the IMO to receive benefits of a UN pension plan. In addition, salaries are not competitive with industry salaries although more attractive than those paid in government. The secretary-general hires IMO secretariat staff (Art.47, IMO Convention), while technical officers are often appointed for political reasons, and not exclusively for their expertise.[60]

Staff reports clearly defined responsibilities combined with a high degree of formalization of decision-making procedures. Several members claim that the communication structures predate modern communication technologies and are not adequate anymore. Also, day-to-day decisions are taken in a very hierarchical way that was perceived as inadequate. Staff members even report on "small kings" within IMO. The IMO has a precise mandate that includes furthering maritime safety and marine pollution prevention. Nevertheless, some interviewees said that technical cooperation has become more important than the drafting of new conventions, and that IMO is moderately equipped for that. Our hypothesis that the more open for change a bureaucracy is and the more clearly responsibilities are defined, the more influential will be, can be confirmed for the IMO. Hierarchies are perceived to be too strong and communication struc-

[58] The Memorandum of Understanding on Port State Control in Implementing Agreements on Maritime Safety and Protection of the Marine Environment (21 I.L.M. 1(1982)), was adopted 26 January 1982 by fourteen European member states to foster port state control by facilitating quick exchange of information about detention to make inspections more effective.

[59] Those are the Memorandum of Understanding on Port State Control in the Asia-Pacific Region, entered into force 1 December 1993; the Viña del Mar Agreement - Latin American Agreement on Port State Control of Vessels, adopted 5 November1992; the Memorandum of Understanding on Port State Control for the Indian Region, adopted 1st April, 1999; the Mediterranean ###; and the Memorandum of Understanding on Port State Control in the Black Sea Region, adopted 1 April 2000.

[60] Source: Interview with IMO official, June 2003.

tures are not up to date. This explains why the IMO secretariat is rather adverse to change, and does not make any efforts to influence the environmental discourse.

Organizational culture – shipped without ideology

IMO staff perceives itself as a broker for negotiations among its member states, and staff shows remarkable successes in this capacity. Neutrality has been named as the most important feature of the IMO secretariat (Own Interviews). Moreover, the IMO presents its policies as purely pragmatic and technical solutions (Birnie 1999: 366). In the past, the IMO has rather resisted demands for restructuring. In light of the UNCED process, the IMO has been asked to incorporate the precautionary principle into the work of all IMO bodies. Instead of mainstreaming environmental concerns, the IMO basically argued for the status quo and against major organizational reform. In the 1990s, IMO officers referred to two rather outdated resolutions that regulate the work program for the 1980s to avoid structural change (Birnie 1999: 372-373).[61] In addition, no internal staff workshops take place, and there are no formal learning mechanism (Own Interviews). Although the IMO undergoes an external audit, this only considers financial issue such as accounting (Own Interviews). Also, technical co-operations projects are evaluated sporadically only. The overall learning aptitude of the IMO secretariat is rather low. In terms of values, the organizational culture of the bureaucracy seems to favor efficient shipping over sustainable development goals. The dominating professional culture of seafarers at least promotes this culture. In sum, IMO officers try to be as "neutral" as possible and advocate for purely technical solutions with a pragmatic reasoning. Strong hierarchies and outdated communication channels hamper innovation. The specific institutional design impeded the mainstreaming of the precautionary principle, while economic efficiency concerns dominate.

Problem structure – excellent sea charts, weak navigation

Two exogenous shocks and the constellation of interests influence the overall IMO performance. Tanker accidents and rising oil prices contributed to a better problem solution. The fact that the interests of different actors differ strongly is rather hindering. The IMO deals with transport issues that - at least in the case of the large shipping nations – touch vital interests that governments want to keep under control.

Since the IMO is a multi-issue organization it can be expected that conflicts, especially with regards to multiple-principal problems will arise. The IMO generally deals with problems in two very different and often conflicting issue areas, i.e. transport as part of the economic sector and marine environmental protection. Shipowners, traders, and oil companies strive for most efficient and low cost shipping, while environmental NGOs, tourism, fisheries, and inhabitants of coastal areas call for and depend on clean oceans and coasts. The problem of oil pollution has been evaluated as truly malign, as preferences of different actors diverge strongly and costs of regulation are high (Carlin 2002: 331-335). In addition, intentional oil pollution belongs to the group of "pollution externality imposed on a global commons by a relatively concentrated industry in which actors are susceptible to regulation by both domestic and foreign authorities" (Mitchell 1994: 23).

In international ocean governance there are three different types of state actors that play a role in enforcing compliance with international treaties. The United Nations Convention on the Law of the Sea that entered into force in 1994 regulates jurisdictional issues and enhanced the competencies of states that are affected by marine pollution. Under traditional maritime law as well as under UNCLOS, the flag state is

[61] IMO Doc. A 500 "Objectives of the Organization in the 1980s"; IMO Doc. A 777 "Work methods and organization of work in committees and their subsidiary bodies".

responsible for enforcing international law obligations on ships registered under its flag. In turn the coastal state can enter ships for physical inspection within its territorial sea, and, under specific circumstances, within its Exclusive Economic Zone (EEZ). Third, the port state, defined as the state in whose port a ship is voluntarily located, may inspect ships with regard to discharge standards, because inspection maneuvers during passage are riskier than in a port. Generally, all parties to UNCLOS may enforce generally accepted rules, that is, among others, IMO conventions on all vessels – even if the state whose flag the ship flies is not party to the respective convention. IMO conventions belong to this group of regulations (Kimball 2003).

A second group of actors rather hamper strict environmental standards: Transport is a big business, and shipowners, of course, try to maximize their profits. They often try to reduce personnel costs and costs resulting from safety and pollution prevention measures (Alderton and Winchester 2002). The restrictions of many big shipping countries (e.g. the US, Norway and Greece) are very tight, therefore many shipowners decide to register their ships in other countries, the open registers (open for ships from different countries), often called "flags of convenience". When there is no "genuine link" between the shipowner and the ship's flag, and when the country of the register and the shipowner's nationality are different, a register is called "open register". Traditional shipping nations created systems of so-called second registers, that exempt ship owners from strict labor and safety standards. Roughly 54% of the world fleet tonnage is registered in open registers (Llácer 2003). According to the Flag State Conformance Index (FLASCI), second registers such as those established by e.g. Norway, the UK, Denmark, the Netherlands, and Germany, rank much higher than newly consolidated open register such as, for example, Cambodia, Equatorial Guinea, and Belize. Recently, some of the large flags of convenience such as Liberia, Panama, and the Bahamas have improved their efforts to collaborate with other IMO members (Ilg 2001: 120; Höfer and Metz 2003: 115). Nevertheless, the discrepancy between the traditional shipping nations and the flags of convenience is not as clear-cut as they have been two decades ago (Alderton and Winchester 2002: 42).

Tanker accidents like the sinking of the *Torrey Canyon* in 1967 worked as exogenous shocks and influenced the development of the liability and oil-spill response. They did not directly trigger an international regime, but led the US into its frontrunner position pushing for international regulation (Carlin 2002: 342). Even the then-IMO secretary-general Sir Colin Goad called the Torrey Canyon incident a "stroke of luck" for the organization, because it fueled the importance of environmental matters within the organization (Ilg 2001: 12).

Several external factors influenced the adoption and implementation of MARPOL: The ship-building industry boomed in the early 1970s due to the opening of the US oil market in 1973. Because the OAPEC boycott of the US and the Netherlands, trade in oil decreased by 8% until 1975. At the same time, the tanker fleet had grown by 25% which led to free capacities (Höfer and Metz 2003: 109). Both the rising oil prices and the shipping industry's over-capacities boosted the adoption of segregated ballast tanks (SBT): On the one hand, oil became too expensive to be wasted through discharge and, on the other hand, SBTs could reduce the global tanker capacity. Finally, new shipping routes and the overall decrease in transport volume reduced the number of accidents (Höfer and Metz 2003: 109).

In sum, the problem structure of ship-based marine pollution is rather malign. The costs of regulation are high and the preferences vary greatly. While flag states opt for weak regulations, coastal states call for strict laws. On the other hand, two factors have worked in the opposite direction. Rising oil prices minimized oil discharges and tanker accidents boosted political actions.

4 Conclusions

The IMO has a strong cognitive effects, mainly related to technical matters of ship construction. This ability has been confirmed by a growing demand for reliable data voiced by other organizations as, for example, the EU. Cognitive influences can be explained by the ability of IMO staff to pool technical knowledge. Excellent contacts to the shipping industry add to this. Our hypothesis that the higher the ability to process knowledge and new findings the higher the influence of a bureaucracy will be, can therefore be confirmed. Through its co-sponsoring of the scientific advisory body GESAMP IMO staff contributed to furthering scientific findings about marine environment protection, although the extent of this influence remains unclear. Also, this task is of lower priority than the provision of technical knowledge. The scope of the organization explains this: Contacts to the shipping industry are closer than those to environmental NGOs, and co-operation with other environmental intergovernmental organizations such as, for example, UNEP has been rather limited, although this has improved recently. In addition, the IMO as an international bureaucracy has not been very active in the environmental discourse. On the contrary, it has been targeted by the international debate on sustainable development. With regard to the hypothesis that the more closely designed for the structure of a problem the more influence they will have, the findings for the case of the IMO are twofold: First, the IMO is well designed to craft technical standards of ship construction, while, second, it is less well designed to work on environmental problems. Also, internal features such as strong hierarchies and an aversion to change account for the little influence on environmental discourses.

Capacity building is of increasing importance, and although no hard data could be found, there seems to be a positive trend. The flag state implementation initiative achieved to improve environmental awareness in developing countries. The three research and training institutes associated with IMO receive good evaluations, and sporadic assessments of the impact of workshops organized by the technical co-operation division show positive results. That capacity building has not a been a major focus of the bureaucracy's work in the past can be explained by the scope of the IMO. Co-operation with other environmental organizations has such as UNEP has only recently improved. In addition, internal features account for increasing efforts to promote capacity building: The internal restructuring of development assistance that led to a mainstreaming through the Integrated Technical Co-operation Programme accounts for the rather positive outlook.

The IMO as a member organization provides an excellent forum for negotiations. In most cases, the IMO managed to keep all parties at the table, thereby avoiding a costly mosaic of different regulations. Eventually, the IMO secretariat staff influences the course of the negotiations. This could be confirmed for the case of negotiations of the AFS convention. The secretariat introduced a resolution on technical co-operation which was than adopted. Also, the IMO issues codes and guidelines that may obtain the status of customary law. Somewhat counterintuitive, its significant influence on international co-operation can be explained with reference to the little autonomy of the IMO secretariat. Exactly this feature shapes its character of an honest, neutral broker, that enjoys its member states' trust. Therefore our hypothesis that the more formal autonomy a bureaucracy has, the more influence it will have, is contested. Its little autonomy can be explained with reference to the problem structure: The IMO's main objective is to promote safe and efficient shipping, while environmental standards often increase shipping costs. Our hypothesis that the higher the costs of regulation the smaller the influence of the international bureaucracy can be confirmed. Interestingly, its autonomy with regard to technical amendments of IMO convention annexes has been increased through the tacit acceptance procedure. This confirms that the IMO secretariat is perceived as a technical expert capable of pooling technical knowledge on the global business of shipping.

5 References

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