# NGO SHIPBREAKING PLATFORM

What a difference a flag makes

Why ship owners' responsibility
to ensure sustainable ship recycling
needs to go beyond flag state jurisdiction
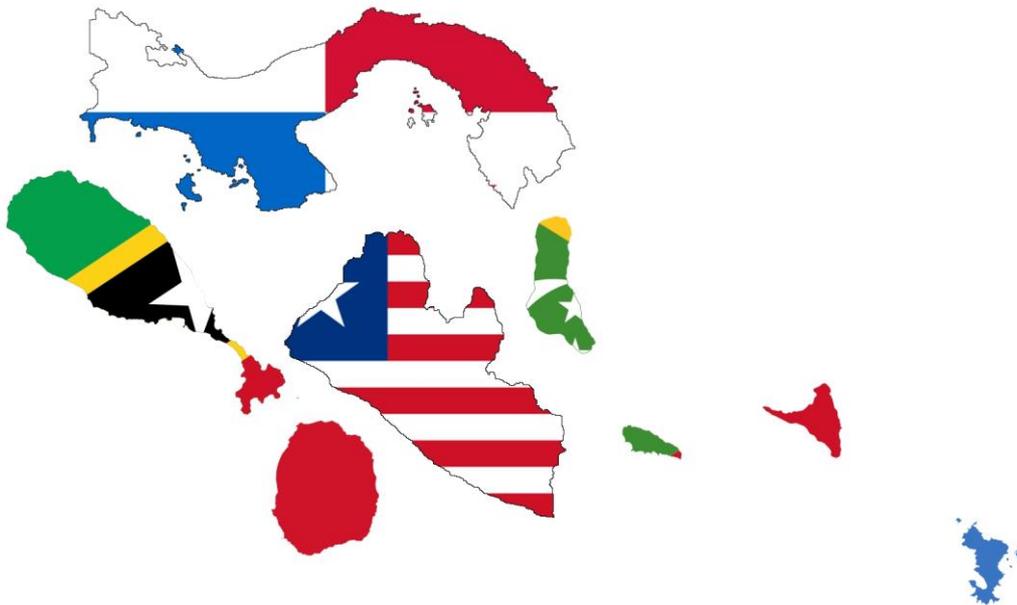
The NGO Shipbreaking Platform is a global coalition of environmental, human and labour rights organisations working together in order to reverse the environmental and human rights abuses of current shipbreaking practices and to ensure the safe and environmentally sound dismantling of end-of-life vessels world-wide.

Table of Contents

Key findings at a glance

- Every year, more than 1000 large ocean-going vessels such as tankers, container, cargo and passenger ships are sold for dismantling. More than **70% of end-of-life vessels end up in a beaching yard in India, Bangladesh or Pakistan** for hazardous breaking operations. The remaining part is mainly dismantled in China and Turkey, where proper infrastructure and procedures can allow for cleaner and safer practices if applied correctly. However, only very few ship owners ensure fully clean and safe operations and monitor their end-of-life fleets' recycling.

- EU ship owners control around 40% of the world's merchant fleet. **EU owners account for around one third of the end-of-life tonnage beached** in substandard yards in South Asia. Thus, the **EU is the single largest market sending end-of-life ships for dirty and dangerous shipbreaking** and has **a particular responsibility to regulate ship recycling**.

- Proposed regulatory measures both at the international and European Union level mainly based on flag state jurisdiction, that is, law enforcement via the flag state, will fail to improve current shipbreaking practices and will not ensure the polluter pays principle as ship owners can simply **flag out to a non-party or a non-compliant flag to avoid these laws**.

- According to UNCTAD, **almost 73% of the world fleet is flagged in a country other than that of the vessels beneficial ownership**. This means, there is a huge discrepancy between the states in which the beneficial owners of a ship are based and the flag states which exercise regulatory control over the world fleet.

- Nearly **40% of all end-of-life ships beached in South Asia were imported under flags of convenience which are grey- or black-listed by the Paris Memorandum of Understanding**, i.e. flags with a particularly weak record of enforcing international law. The most popular flags used for substandard shipbreaking are **St Kitts and Nevis, Comoros and Tuvalu**. These "end-of-life flags" are **hardly used during the operational life** of a ship and **offer special "discount rates" for last voyages** and quick and easy short-term registration without any nationality requirements.

- Also European ship owners use grey- and black-listed end-of-life flags. The analysis shows that while during operational life 22% of the global fleet uses a European flag, **less than 8% of the ships sold for breaking still fly a European flag – which means European flag state jurisdiction only covers a very small amount of end-of-life vessels.**

- **Without legal, policy and financial instruments, which go beyond flag state jurisdiction, it will be impossible to implement the polluter pays principle for ship owners.** FOCs, in particular end-of-life flags with weak law enforcement offer legal loopholes to ship owners and cash buyers.

Introduction

This briefing paper raises concerns regarding new legislation meant to regulate ship recycling practices, in particular the International Maritime Organisation's Hong Kong Convention[1] and the European Union Ship Recycling Regulation[2], and argues that legislation mainly based on flag state jurisdiction will neither be able to solve the problems of substandard shipbreaking nor enforce the

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[1] The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships was adopted 15 May 2009. It will enter into force 24 months after ratification by 15 States, representing 40 per cent of world merchant shipping by gross tonnage and a combined maximum annual ship recycling volume not less than 3 per cent of their combined tonnage. This means that next to flag states representing 40 % of the world's commercial ships, at least two major shipbreaking countries, such as China and India, have to ratify the convention for it to enter into force.

[2] The EU Ship Recycling Regulation (EC 1257/2013) entered into force on 30 December 2013. It will become applicable 6 months after the date that the combined maximum annual ship recycling output of the ship recycling facilities included in the European List constitutes not less than 2.5 million light displacement tons (LDT), or latest on 31 December 2018.

polluter pays principle on ship owners. The analysis of the link between flags of convenience (FOCs), in particular "end-of-life flags" and substandard shipbreaking practices shows that FOCs are likely to undermine the implementation of the polluter pays principle by making it easy for ship owners to circumvent legislation by flagging-out to a non-party or a non-compliant flag. In conclusion, the briefing paper asserts that solutions urgently needed to ensure sustainable ship recycling must go beyond flag state jurisdiction in order to close the loopholes created by the FOC system.

Currently, most ship owners circumvent existing legislation meant to protect in particular developing countries from hazardous wastes present within the structure of end-of-life vessels, and are therefore not held accountable for polluting and dangerous shipbreaking practices. Only a small number of ship-owning companies have taken voluntary measures to ensure the clean and safe recycling of their obsolete vessels. For the sake of higher profits, most ship owners sell their end-of-life vessels with the help of a cash buyer to a shipbreaking yard that lacks proper infrastructure and safe working conditions. It is a choice of profits at the cost of people and the environment.

The European Union has a particular responsibility to provide solutions to the shipbreaking problem as around 40% of the worlds' commercial fleet is owned by European companies and more than one third of the tonnage broken every year in substandard yards in South Asia was sold by European companies. The EU is thus the single largest market sending end-of-life ships for dirty and dangerous shipbreaking. Hazardous waste usually follows the path of least resistance – and backed by non-compliant FOCs, ship owners will be able to continue choosing profits at the cost of people and the environment unless other incentives are introduced to promote clean and safe recycling.

Figure 1a: Beneficial owners based in Europe selling ships to beaching yards (counted in gross tonnage of vessels sold in 2014)
Source: NGO Shipbreaking Platform

■ Rest of EU   ■ Italy   ■ Greece   ■ Germany   ■ Cyprus   ■   □ Non-EU
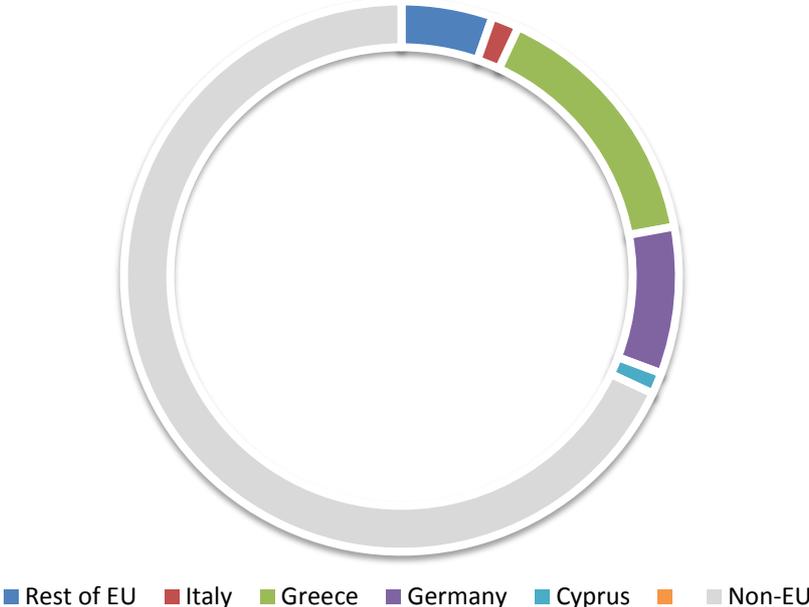
Figure 1a shows that a large proportion of the end-of-life vessels beached in substandard South Asian shipbreaking yards are sold by owners based in the EU, in particular Greece and Germany – 32% of all beached vessels in 2014. These vessels have a clear link to the EU via their beneficial ownership and are currently not covered by the European attempts to regulate ship recycling based on flag state jurisdiction as most do not sail under a European flag. The figure takes into account Norwegian-owned vessels as Norway usually harmonises its domestic law with European environmental law.

Figure 1b: The top 10 countries of beneficial owners selling ships to beaching yards (counted in gross tonnage for vessels sold in 2014)
Source: NGO Shipbreaking Platform
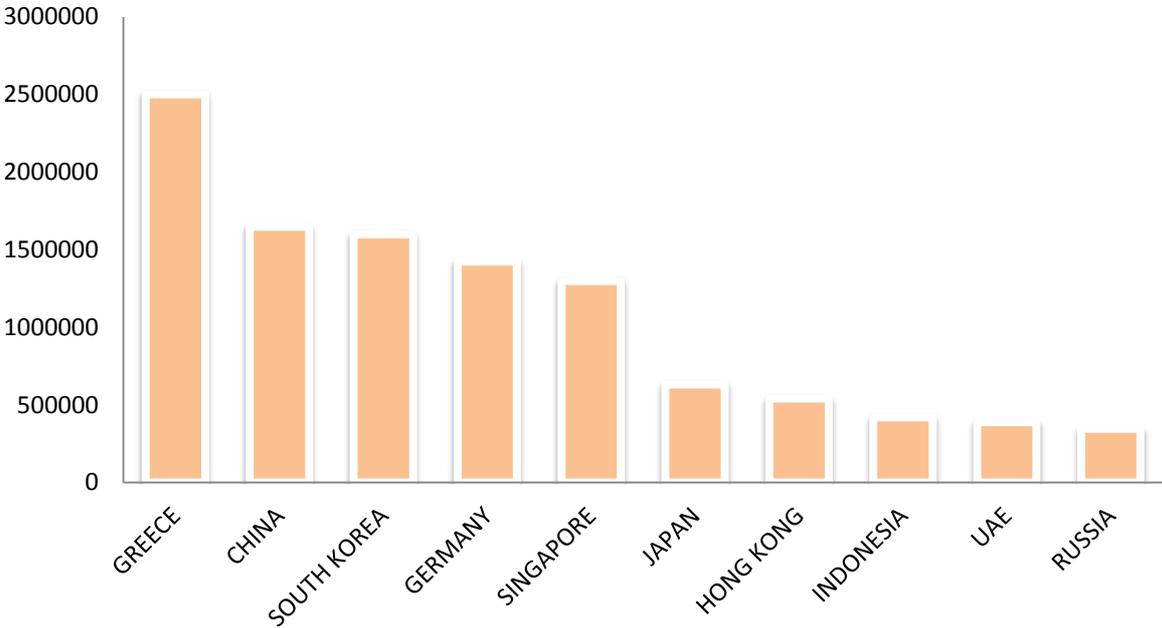
Figure 1b shows that Greece and Germany are amongst the countries sending most end-of-life vessels to substandard shipbreaking yards. However, also the East Asian shipping nations China (with Hong Kong), South Korea, Singapore and Japan sell a lot of end-of-life vessels and these countries equally need to find solutions to ensure that their ship owners demand clean and safe ship recycling.

1 CURRENT PRACTICES & LAWS

1.1 The global shipbreaking crisis

Every year, around 1000 large ocean-going vessels such as oil tankers, cargo and container ships are sold for dismantling. More than 70% of these end-of-life vessels are not recycled properly but are run ashore on tidal beaches in South Asia[3] where they are scrapped by a largely unprotected and unskilled workforce and ravage the coastal eco-system.[4] Only a small number of ship owners take full responsibility for the clean and safe recycling of their end-of-life fleet by choosing modern yards such as those operating in the EU, China and Turkey, by ensuring third party certification and strict supervision of the recycling process.[5]

Shipbreaking in South Asia has been identified as one of the most dangerous jobs in the world by the International Labour Organisation:[6] workers do not only fall victim to severe and fatal accidents, but are also exposed to hazardous materials such as asbestos and toxic fumes. Their life expectancy is alarmingly low. Especially in Bangladesh, worst forms of child labour in the shipbreaking yards remains a serious concern.[7] The beaching method currently used in the South Asian yards does not allow for the full containment of pollutants and coastal areas in India, Bangladesh and Pakistan are contaminated. Livelihoods of local fishermen have been destroyed. Toxics from end-of-life vessels, one of the largest sources of hazardous waste exported to developing countries,[8] are not properly managed: in Pakistan and Bangladesh the shipbreaking industry is void of any hazardous waste management system and wastes are dumped carelessly or re-sold on the second-hand market. In India, asbestos-containing materials can be re-sold without restriction, recent satellite images show oil spills around beached vessels,[9] and PCBs cannot be destroyed properly due to the lack of an adequate waste destruction facility. Moreover, in Bangladesh mangrove forests protecting the coast have been illegally cut in order to make space for more shipbreaking yards.

The large majority of ship owners do not feel responsible for the end-of-life management of their vessels and circumvent existing legislation regulating the trade of toxic end-of-life vessels. Also recent legislation based on flag state jurisdiction will continue to offer easy circumvention of the law.

1.2 How ship owners circumvent existing waste laws

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal entered into force in 1992. It seeks to control and reduce the transboundary movement of hazardous wastes, in particular from developed to developing countries. The Basel Ban Amendment

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[3] In 2014, 1026 vessels were broken globally – 641 of these vessels, representing 74 percent of the gross tonnage dismantled, ended up on the beaches of India, Bangladesh and Pakistan.

[4] See www.shipbreakingplatform.org/problems-and-solutions

[5] A list of responsible ship owners can be found at:
http://www.shipbreakingplatform.org/shipbrea_wp2011/wp-content/uploads/2015/01/List-of-responsible-ship-owners.pdf.

[6] See ILO (2004) *Safety and Health in Shipbreaking. Guidelines for Asian Countries and Turkey*.

[7] See FIDH and YPSA (2008) *Childbreaking Yards. Child Labour in the Ship Recycling Industry in Bangladesh*. The NGO Shipbreaking Platform has found through recent research in 2014 that although very young boys are now found less in the yards, a large number of adolescent workers are still employed in shipbreaking in Bangladesh despite the fact that no worker under 18 is allowed to work in hazardous industries according to the Bangladesh Labour Act. The Platform as well as the media documented the child labour situation in various case studies and reports in 2014.

[8] See *Impact Assessment for an EU Strategy on better Ship Dismantling*. European Commission: 2008.

[9] See Google Earth images of Alang, India, 2015.

fully prohibits the export of hazardous waste from Annex VII countries (that is, OECD countries) to developing countries.[10] End-of-life ships which contain hazardous materials in their structure – such as asbestos, heavy metals, PCBs, residue oils – are covered by the Basel Convention.[11] Whenever a ship owner intends to sell a ship for recycling and the ship contains hazardous materials (which is almost always the case), the ship becomes waste under international environmental law.

The responsibility for the implementation of the Basel Convention is put on the "exporting state", the "transit state" and the "importing state". Regardless of the ship's flag and ownership, the port state from where a ship destined for breaking departs is considered the exporting state. Under the pretext of sustained operational use, ship owners keep circumventing the Basel Convention by simply not revealing their intent to dispose their ship to the authorities where their ship is in port. As a consequence, port states seldom have the chance to enforce the Basel Convention, and illegal exports to substandard breaking yards have remained without legal consequences for the ship owners. Similarly at the European level – where the Basel Convention and the Ban Amendment are incorporated into the European Union (EU) Waste Shipment Regulation (WSR)[12] – EU Member States have only in few cases been able to halt the illegal traffic of hazardous end-of-life ships.[13]

No attempts to enforce the Basel Convention or EU WSR on end-of-life ships have been made on the basis of a ship's flag or ownership country: under current environmental legislation, a German-flagged and German-owned end-of-life vessel which is sold for breaking to a yard in a developing country will not be stopped on the basis of its German flag or the fact that its owner is based in Germany – this despite that the export of hazardous waste from Germany to a developing country is strictly prohibited.

When the Basel Convention State Parties started discussing alternative and more appropriate interpretations of "exporting state" for ships – such as the flag state or the state where the beneficial owner of the ship is located – the International Maritime Organisation (IMO) decided to start working on a new legally binding convention specifically on ship recycling to be based on enforcement by both the flag state and recycling state. As closing the Basel Convention loopholes for ships took a sidestep to the negotiations for a new convention at the IMO, so did the prospect of seeing beneficial owners of ships held responsible for sustainable ship recycling.

The maritime industry has so far failed to accept that end-of-life vessels are hazardous wastes whose handling needs special precautions in order not to harm workers, local communities and the environment and in order not to externalise costs to countries with poor law enforcement and inadequate infrastructure.

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[10] The Ban Amendment is not yet in force at the international level; however, it is fully implemented into European law by the Waste Shipment Regulation (WSR) which prohibits the export of hazardous waste from the EU to non-OECD countries.

[11] See Decision VII/26 of the 7th meeting of the Conference of the Parties to the Basel Convention.

[12] Regulation (EC) No 1013/2006 of the European Parliament and the Council of 14 June 2006 on shipments of waste.

[13] When alerted, Member States have detained end-of-life vessels regardless of their flag and ownership which were about to be exported for illegal breaking in a developing country. End-of-life vessels can only be exported to an OECD destination from the EU according to the WSR. The most recent cases include the "Northern Vitality" in the German port of Wilhelmshaven (2012) and the "Global Spirit" (2014) in the Belgian port of Antwerp. Both vessels were arrested by the relevant authorities and were consequently not exported to India for breaking as originally intended by the ship owners – the Northern Vitality is still in operational use as of March 2015 and the Global Spirit was broken in Turkey. Cases like these remain rare as there is no transparency on the ship owners' intent to dispose of their vessels.

1.3 New legislation - new loopholes

The Hong Kong Convention
The IMO's Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships (HKC) was adopted in 2009 and has not yet entered into force due to the lack of ratification by both ship recycling states and flag states needed to fulfil the entry-into-force criteria. The HKC is based on obligations for flag states, which enforce the requirements on ship owners registered under their flag, and for recycling states, which implement requirements for ship recycling facilities. Flag states are responsible for ensuring that that ship owners compile an inventory of hazardous materials (IHM) present within the structure of their ships and have a responsibility to ensure that a recycling plan in line with the HKC's requirements is prepared. Flag states need to further ensure that the dismantling of its end-of-life ships is only conducted in recycling facilities that meet the requirements of the HKC.

The EU Ship Recycling Regulation
Due to the lack of progress and slow ratification of the HKC at the international level and the continuing problem of European ship owners selling their old vessels to substandard yards, the EU adopted a new Regulation on Ship Recycling (SRR), which entered into force in December 2013.[14] The SRR requires EU Member States to make sure that end-of-life vessels flying their flag will only be dismantled in ship recycling facilities compliant with the SRR's requirements. Ship recycling facilities outside the EU must be approved by the European Commission and have to allow for independent audits. The SRR prescribes the use of modern ship recycling facilities, its environmental and safety requirements are thus difficult to meet by breaking facilities operating on tidal beaches as practiced in South Asia. The standards set are higher than those set by the IMO's convention. Contrary to the HKC, the SRR does not stop at the gate of the recycling facility, but seeks to regulate waste treatment and disposal outside the ship recycling facilities.

Easy circumvention: flagging out to avoid new laws
Whilst the NGO Shipbreaking Platform has criticised the HKC for setting low standards for clean and safe ship recycling and thus risks rubberstamping current substandard practices,[15] it has welcomed that the SRR sets higher standards and also regulates the downstream management of hazardous wastes generated by ship recycling activities. However, both the HKC and the SRR are easy to circumvent by the use of FOCs. Already extensively used during the operational life of a ship and disproportionately popular with end-of-life ships, FOCs make it possible for ship owners to fall under the jurisdiction of a flag state which has not ratified or is not effectively implementing international maritime law. The requirements of the SRR can be circumvented by simply flagging out to a non-EU flag – a completely legal and already widespread practice.[16]

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[14] The EU Ship Recycling Regulation (EC 1257/2013) entered into force on 30 December 2013. It will become applicable 6 months after the date that the combined maximum annual ship recycling output of the ship recycling facilities included in the European List constitutes not less than 2.5 million light displacement tons (LDT), or latest on 31 December 2018.

[15] The NGO Shipbreaking Platform has criticised the HKC for failing to uphold the principle of the international hazardous waste trade law, by permitting companies to export toxic end-of-life ships to developing countries without first pre-cleaning them of toxic materials and without setting clear standards for downstream waste management, legitimising the fatally flawed beaching method of scrapping toxic ships on ocean beaches, a practice that is not allowed in developed countries, without providing a clear understanding of the adequate methods available for clean and safe recycling, neglecting provisions to substitute hazardous materials used in shipbuilding with safer existing alternatives, and rejecting funding mechanisms, such as a mandatory ship owners' fund, to internalize costs with the polluters and to support safer and cleaner operations. See: www.shipbreakingplatform.org/shipbrea_wp2011/wp-content/uploads/2011/11/IMOSpeechRIZWANA_HASAN.pdf

[16] Whilst circumvention of the Basel Convention and EU WSR involve the illegal practice of not disclosing the

Opponents of the SRR, in particular several ship owners' associations, have argued that regional legislation based on EU flag state jurisdiction cannot be effective as most European ship owners do not use European flags. They have stated that only an international instrument – the HKC – can provide a solution. However, in case the HKC entered into force, the FOC system will equally allow ship owners to use non-party or non-compliant flags: certain flag states will either not ratify the Convention and thereby offer a loophole to ship owners and cash buyers, or they will not effectively implement the Convention, which will be difficult to control as the IMO does not prescribe a mandatory audit for ship registries. Moreover, the HKC does not provide an enforcement mechanism such as country reviews and does not require independent third party certification for ship recycling facilities. This means that its enforcement will depend on weak governance countries such as Bangladesh, which are already unable to enforce a whole range of international requirements, and FOC states, in particular the popular end-of-life flag states, which are equally known for their weak enforcement of international maritime law.

The following chapters will give a closer look at the question why instruments based on flag state responsibility will fail to alter current substandard shipbreaking practices and hold ship owners responsible, and why FOCs pose a serious threat to the effective implementation of the EU SRR. FOCs are a root cause for a number of negative impacts caused by the shipping industry and the system will make it impossible to effectively implement the polluter pays principle for end-of-life ships. Without further instruments that go beyond flag state responsibility, ship owners will not have a strong incentive to choose clean and safe recycling.

2 THE WEAKNESS OF FLAG STATE RESPONSIBILITY

The United Nations Convention on the Law of the Sea (UNCLOS) provides for the primary responsibility for ships to rest with the flag state, in particular where a vessel is operating on the high seas. Thus, every merchant vessel needs to be registered under the flag of a particular state under whose regulatory control it consequently falls. The flag state is, for instance, responsible for the inspection of the vessel and its seaworthiness, ensures safety and pollution prevention, and certifies the crew. As rights and obligations under international law are mainly imposed on to vessels via the flag states, they are a crucial factor in determining the enforceability of international standards.

2.1 Flags of Convenience – the missing "genuine link"

A flag state is free to determine the conditions for the registration of vessels flying its flag, and traditionally, flag states had strict nationality rules for the vessels registered under their flag. Whilst merchant vessels have been using flags other than the country of their origin at least since Roman times – especially during wars or to avoid trade restrictions including slave trade prohibitions – today's wide-spread use of open registries, so-called "flags of convenience" (FOC),[17] is a modern phenomenon which has increasingly grown since the 1950s. The first FOCs as we know them today date back to 1915 when ship owners based in the US started to use the flags of Honduras and

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intent to dispose a ship to relevant authorities and can be criminally sanctioned, circumvention of the HKC and EU SRR is completely legal as it involves the legitimate business of changing the flag of a ship, also known as 'flag-hopping'.

[17] The term FOC is generally understood as the practice of registering a merchant vessel in a sovereign state different from the state where the beneficial owner of a ship is located. The Maritime Transport Committee of the OECD defined it as "the flag of such countries whose law allows – and indeed makes it easy – for ships owned by foreign nationals or companies to fly those flags in contrast to the practice in the maritime countries where the right to fly the national flag is subject to stringent conditions and involves far reaching obligations". See OECD (1958) "Study of the Expansion of the Flags of Convenience and of Various Aspects Thereof".

Panama for their ships in order to avoid new laws guaranteeing seafarers' rights and to reduce raising labour costs[18], as well as allowing for the circumvention of prohibition laws.

The 1958 Geneva Convention on the High Seas requires a "genuine link" between a ship's owner[19] and its flag state and demands that "the state must effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag". Whilst traditional flag states have strict nationality rules for the vessels registered under their flag, some states allow for the registration of a vessel under their flag without strict criteria and provide for the establishment of a "genuine link" via one-ship post box companies. These flags are called flags of convenience, or "open registries", as referred to by the shipping industry.

A FOC usually displays the following characteristics:
- ownership and/or control of a ship registered under its flag accessible to non-citizens,
- unrestricted transfer from one registry to the other,
- only low local taxes on income,
- flag state economies often depend on registration and annual tonnage fees,
- crewing by non-nationals permitted under the flag state's more permissive labour laws,
- weak administrative power to effectively enforce international regulations or to control the shipping companies, and
- advice on the cheapest, quickest and most anonymous ways of incorporating in the country by setting up a post box company or buying shell companies provided to ship owners.

In an attempt to restrict the use of FOCs, the principle of a "genuine link" is repeated in Article 91 of the 1982 United Nations Convention on the Law of the Sea (UNCLOS). In 1986, the United Nations Conference on Trade and Development (UNCTAD) further sought to solidify the definition of the "genuine link" with the United Nations Convention for Registration of Ships. This Convention requires that a flag state must be linked to its ships either by having an economic stake in the ownership or by providing seafarers to crew the ships. Due to the lack of ratification, the Convention for Registration of Ships has never entered into force. A one-ship post box company thus remains the only "genuine link" to the flag under which a large proportion of the world's fleet is registered. According to UNCTAD, almost 73% of the world fleet is flagged in a country other than that of the vessels beneficial ownership.[20] Therefore, there is a huge discrepancy between the states in which ship owners are based and the flag states that exercise regulatory control over the world fleet.

FOCs compete for ship registration with policies that promise lower costs by keeping taxes, fees, and regulatory burdens light. Despite having ratified several IMO and ILO conventions, FOCs often lack the resources or the will to enforce international law effectively. Ship owners choose FOCs for their vessels in order to avoid the associated costs involved with regulatory compliance and thus determine themselves the operating standards of their ships. Ship owners can easily and quickly change the flag of their ship and the practice of recurrently changing the flag of a ship to reduce costs and avoid laws is also referred to as "flag hopping". It has led to increased competition amongst registries for less regulation and lower costs, with traditional flags states being unable to

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[18] The Seamen's Act of 1915 had strengthened sailors' rights such as regulated working hours, adequate payment and requirements for shipboard food.

[19] The ownership structure of ships is usually described in terms of a *beneficial owner*, a *commercial operator,* and a *registered owner*. The beneficial owner is deemed to be the ultimate owning entity and is often identical with the commercial operator responsible for the commercial direction of the ship. The registered owner is the company or individual to whom the ship's legal title of ownership has been registered. This often involves FOCs and post-box companies. Unfortunately, both certain flags states and the maritime industry interpret the requirement of a "genuine link" between the owner of a ship and its flag as fulfilled by a post-box company in the flag state, rather than by a substantial "genuine link" as defined by Convention for Registration of Ships.

[20] UNCTAD (2014), *Maritime Transport Review*, p.38.

compete with popular FOCs such as Panama and Liberia. As a consequence, also European flag states have drastically reduced taxes for the shipping industry, for instance by replacing corporate tax by a flat-rate tonnage tax system and creating second international or off-shore registries[21] to incentivise ship owners to maintain European flags.

FIGURE 2a: The five largest flag states during operational use (based on gross tonnage). Source: UNCTAD data 2014[22]
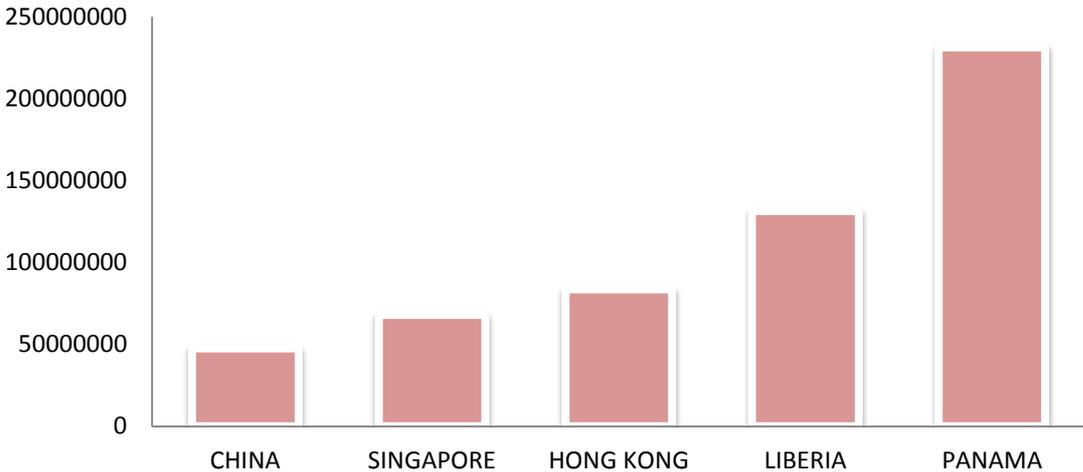
Figure 2b: The five largest ship-owning countries in the world (in DWT) Source: ICS/UNCTAD data 2012[23]
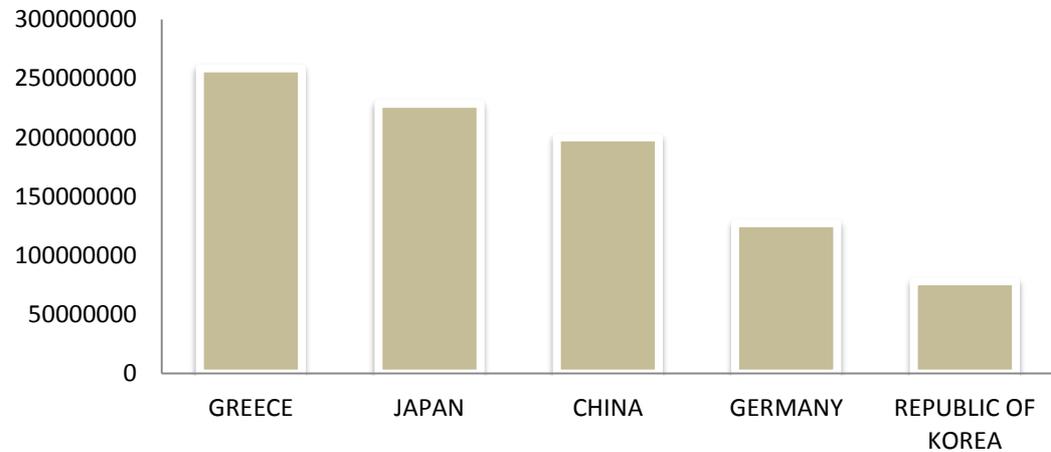
Figure 2a and 2b show the distribution of the largest flag states as well as the states where the majority of the beneficial owners of the global merchant fleet are located. The largest flag states by far are Panama and Liberia, under whose flags nearly one third of the worlds' merchant fleet is registered. Most of the ships are however owned by EU Member States (in particular Greece and Germany) and East Asian countries (mainly Japan, China and South Korea). The comparison of the largest flag states and the most important ship-owning states makes it obvious that there is a total discrepancy between states in which ship owners are based and states that exercise regulatory control over these ships.

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[21] Several EU Member States have established second registries. With the aim of preventing vessels from flagging out to an open registry and of attracting others back, manning costs, for example, are reduced to a competitive level. The result is a two-tier system with either a strict or a highly flexible employment regime.
[22] See http://unctadstat.unctad.org.
[23] See www.ics-shipping.org/shipping-facts/shipping-and-world-trade/largest-beneficial-ownership-countries.

2.2 Making money or exercising control? FOCs and substandard shipping

Despite exercising a public function, the FOC registries are in most cases not government agencies, but private companies situated outside the actual flag state or operating from different branch offices run by agents. Typically, the profits are shared between the company and the state of registration.[24] For the Panama flag, the most widely used FOC, the Panama Maritime Authority does not provide any information on its website: the flag can be obtained from various consultants who offer registration under several FOCs.[25] The registries of Liberia and Marshall Islands, the second and third largest FOCs, are based in the US. They were initially created as low-cost solutions for American ship owners. Providing flags to foreign ships has become a profitable business for FOC states.

The faultiness of this practice can be seen as follows: a state which allows for the registration of a foreign ship, knowing that it may deprive another state's legitimate interest to exercise the right to enforce laws onto it, abuses the right to define the "genuine link" under its national law and effectively breaches the principle of good faith vis-à-vis other states. In the case of FOCs, flag state jurisdiction allows ship owners to circumvent laws and/or avoid fees and taxes and deprives the state of beneficial ownership of its right to enforce its law on the ships. FOCs are further problematic in the context of international maritime law making. It is flag states that negotiate, adopt and enforce international maritime law and states representing significant amounts of tonnage, in particular large FOCs such as Panama and Liberia, have little incentives to make regulation stricter for their clients, the ship owners. Still, the drafting, adoption and entry-into-force of IMO conventions, which regulate the shipping industry, strongly depend on the approval and ratification by major FOC states. Moreover, even if conventions are in force and FOCs have ratified them, the IMO does not have strong mechanisms to ensure the actual enforcement in case of non-compliant flags.[26]

FOC states typically do not have enough surveyors for all the ships on their register and their general maritime legal and administrative infrastructure is not sufficient to effectively monitor and enforce compliance. They are often unwilling or incapable of investing in law enforcement – either because it is economically convenient to ignore these laws so that vessels are not dissuaded from flying their flag or because enforcing the law is costly. Last but not least, when the beneficial owner of a ship is located outside its jurisdiction, it is difficult, if not impossible, for the FOC state to exercise effective control, for instance through fines or other penalties.

Especially the following problems have been attributed to the use of FOCs:

- **Concealed ownership:** The 2003 OECD report "Ownership and Control of Ships" found that corporate structures in the maritime industry are multi-layered, spread across numerous jurisdictions, and make the beneficial owner almost impenetrable to law enforcement and taxation. The report said that "it is very easy, and comparatively cheap, to establish a complex web of corporate entities to provide very effective cover to the identities of beneficial owners who do not want to be known."[27] It pointed out that FOCs play a crucial role in providing ship owners with opportunities to conceal a ship's ownership structure.

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[24] Global Witness and International Transport Workers Federation (ITF) (2011) *Taylor-made: The Pivotal Role of Liberia's Forests and Flag of Convenience in Regional Conflict*, p. 32.

[25] For instance, "Panama Ship Registry" (www.panamashipregistry.net).

[26] The IMO has no enforcement and compliance monitoring powers. There is a voluntary IMO Member State audit scheme intended to provide a Member State with an assessment of how effectively it administers and implements the mandatory IMO instruments covered by the scheme. Information on which states have undergone a voluntary audit is distributed by an internal IMO Circular, which is not publicly available. States may decide to make the audit report public, but there is no requirement to do so.

[27] See OECD "Ownership and Control of Ships", March 2013, p. 3.

- **Undermining labour rights:** The International Transport Workers Federation (ITF) has been denouncing the practice of FOCs for several decades. It argues that ship owners use FOCs in order to take advantage not only of cheap registration fees and low taxes, but also of minimal regulation regarding labour rights and the freedom to employ cheap labour. For workers, this practice often means low wages, poor working conditions, inadequate food or drinking water, and long periods of work without proper rest leading to excessive fatigue and accidents. The ITF says that FOCs "make it more difficult for unions, industry stakeholders and the public to hold ship owners to account" and thus legally liable.[28] The ITF's Fair Practice Committee looks into flag state practices with a particular focus on seafarers' rights and sets up a list of problematic FOCs: the largest flag states Panama, Liberia and Marshall Islands are amongst those listed.[29] Several European international registries feature on this list as well, showing that also the EU needs to protect seafarers' rights. The ITF consequently continues to campaign for the establishment of a meaningful "genuine link" between the flag and the ship owner to better protect seafarers.

- **Environmental pollution:** FOCs have been involved in severe accidents and subsequent pollution, including major oil spills – the flag of Malta for *Erika*, Bahamas for *Prestige*, Marshall Islands for *Deepwater Horizon*, and Liberia for *Torrey Canyon*, *Amoco Cadiz* and *Sea Empress*. In the case of *Erika,* the flag state had not made sure the ship was fully seaworthy. When the oil tanker sank close to the coast of Brittany and released 30,000 tonnes of oil into the sea, the spill polluted 400 km of coast and killed tens of thousands of animals. The classification society Rina, oil giant Total, who had chartered the vessel, and an Italian company identified as one of the owners, were condemned to pay several million euros in fines in 2008. During the investigations, 12 shell companies were found linked to the beneficial owner, most of them brass plate companies based in Malta and Monrovia. The flag state of Malta, which had overall responsibility for the vessel's seaworthiness, pleaded diplomatic immunity after the Malta Maritime Authority was charged by the French courts for reckless endangerment, carelessness and breach of the law when inspecting and issuing flag state certificates to *Erika*. The French Criminal Supreme Court finally had to withdraw the charges as it held that the issuing of a seaworthiness certificate is a sovereign act of a flag state, i.e. even though it was clear that the Maltese authorities had given a certificate to a ship whose condition was not sufficiently safe, the French courts could not hold the flag state liable for the harm caused along its coasts. In the case of *Deepwater Horizon*, the Joint Investigation Committee found that the flag state – Marshall Islands – was responsible for "abdicating its safety inspection responsibilities".[30]

- **Illegal fishing:** FOCs play an important role in illegal, unreported and unregulated (IUU) fishing.[31] In this context, FOCs are also referred to as "flags of non-compliance" (FONC), that is, flags that do not fulfil their obligation to enforce fishing regulations on their fishing vessels. European companies have been found using these FOCs to fish illegally around the world. The "Stop Illegal Fishing Campaign" argues: "FONC are notoriously easy, quick and cheap to acquire, obtainable over the Internet for just a few hundred dollars. IUU vessels can therefore re-flag and change names several times in a season to confuse management and surveillance authorities, a practice known as 'flag hopping'. Backed by shell companies, joint-ventures and hidden owners, FONC

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[28] See http://www.itfglobal.org/en/transport-sectors/seafarers/in-focus/flags-of-convenience-campaign/

[29] The complete list includes Antigua and Barbuda, Bahamas, Barbados, Belize, Bermuda (UK), Bolivia, Burma, Cambodia, Cayman Islands, Comoros, Cyprus, Equatorial Guinea, Faroe Islands (FAS), French International Ship Register (FIS), German International Ship Register (GIS), Georgia, Gibraltar (UK), Honduras, Jamaica, Lebanon, Liberia, Malta, Marshall Islands (USA), Mauritius, Moldova, Mongolia, Netherlands Antilles, North Korea, Panama, Sao Tome and Príncipe, St Vincent, Sri Lanka, Tonga, and Vanuatu.

[30] See http://content.usatoday.com/communities/sciencefair/post/2011/08/marshall-islands-issues-deepwater-horizon-oil-spill-report/1#.VM-SxbN0wZ4

[31] See http://www.wwf.org.au/?2301/Pirate-fishing-thrives-under-flags-of-convenience-warns-report.

severely constrain efforts to combat IUU fishing, as they make it extremely difficult to locate and penalise the real owners of vessels that fish illegally".[32] Large FOCs such as Panama have been found to be flags of non-compliance in the context of IUU.

Other examples of deplorable practices linked to FOCs include the circumvention of sanctions against the South African apartheid regime and organised crime such as drug trade and human trafficking.

2.3 Attempts to regulate FOCs

As already mentioned, the United Nations Convention for Registration of Ships, which attempts to introduce a stricter interpretation of the "genuine link" required between a ship and its flag, has not yet entered into force almost 30 years after its adoption. Concerns regarding the poor implementation of international maritime law by FOCs have also been raised within the IMO: "With 167 Governments as Members, IMO has plenty of teeth but some of them don't bite. The result is that serious casualty rates - probably the best way of seeing how effective Governments are at implementing legislation - vary enormously from flag to flag. The worst fleets have casualty rates that are a hundred times worse than those of the best."[33] The IMO consequently seeks to assist flag states who "lack the expertise, experience and resources" necessary to properly enforce maritime laws[34] and has created an audit scheme to help these flag states. The use of this auditing scheme remains voluntary and its results confidential if requested by the audited Party. So far, Member States to the IMO have been unwilling to question the fact that developing countries are responsible for enforcing laws on the global merchant fleet whose owners are primarily based in Europe, East Asia and North America – a close to total divergence of the nationality of owners and the jurisdictions under which their ships fall.

At the European Union level, incentives for ship owners to return to EU registries and to increase the competitiveness of EU Member States' flags have been put in place. At a national level, several Member States have adopted arrangements for aiding maritime transport. In 2004, the European Commission issued Guidelines on State Aid in Maritime Transport. The general objective of this soft-law instrument is to increase transparency of state aid schemes and encourage the flagging or re-flagging to Member States' registers. According to the Guidelines, Member States can offer substantial tax reductions to ship owners by introducing a tonnage tax. In general, ship owners can benefit from this tax scheme if they keep at least 60% of their tonnage under an EU flag and comply with certain requirements related to crewing, safety and environmental performance. Benefitting from the tonnage tax system thus initially meant the wider use of EU flags – nonetheless, aid can be "exceptionally granted to fleets which also comprise vessels flying other flags", including FOCs, and Member States in reality only need to ensure that beneficiaries "commit themselves to increasing or at least maintaining under the flag of one of the Member States the share of tonnage that they will be operating under such flags".[35] The tonnage tax system has thus not been very successful in substantially reversing the trend amongst European ship owners of using FOCs.

The failure to reduce the use of FOCs has led to the development of port state control as an additional enforcement mechanism to strengthen weak law enforcement practices by certain FOCs: "The most important IMO conventions contain provisions for Governments to inspect foreign ships that visit their ports to ensure that they meet IMO standards. If they do not, they can be detained until repairs are carried out. Experience has shown that this works best if countries join together to

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[32] See http://www.stopillegalfishing.com/sifnews_article.php?ID=29.

[33] See http://www.imo.org/blast/mainframe.asp?topic_id=156

[34] Ibid.

[35] See http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2004:013:0003:0012:EN:PDF.

form regional port State control organizations."[36] Port state control authorities cooperate with rules defined in regional Memorandums of Understanding (MOU). The Paris MOU, covering most of Europe and the North Atlantic, draws up a performance list of flags. Flag states, which do not exercise proper regulatory control over their ships, are grey and black listed and are subject to trading restrictions or reinforced controls. [37]

Whilst port state control may be successful in reducing some substandard practices of the shipping industry and dissuade some ship owners from using the worst FOCs, when a vessel reaches its end-of-life and commences its last voyage towards the shipbreaking yard, there is no scope and incentive for a port state to intervene. The following section argues why FOCs are of particular concern to effective implementation of legislation on ship recycling based on flag state jurisdiction.

3 FLAGS OF CONVENIENCE AND SHIPBREAKING

For end-of-life vessels, the discrepancies between the countries of beneficial ownership and the ships' flags are even higher than during operational use. In particular grey- and black-listed FOCs are popular for ships sold to substandard shipbreaking facilities. We will see that the use of cash buyers to sell an end-of-life vessel combined with last-voyage discount packages offered by particular FOCs enhance the risk of poor flag state enforcement of laws meant to ensure safe and environmentally sound ship recycling. FOCs offer a system which allows the use of non-party or non-compliant flags. Hazardous waste usually follows the path of least resistance – and backed by FOCs, ship owners will be able to continue choosing profits at the cost of people and the environment.

3.1 Substandard shipbreaking and grey- and black-listed flags

Not only are end-of-life ships usually registered under a FOC, but there are particular "end-of-life flags of convenience". These FOCs are hardly used during the operational life of ships, but are particularly popular for the last voyages to the scrap yards. They are primarily used for ships beached in substandard breaking yards in South Asia, rather than for ship recycling facilities elsewhere.

Over several years, the NGO Shipbreaking Platform has been analysing flag preferences at end-of-life and has found that the flags of St Kitts and Nevis, Comoros and Tuvalu, and to a lesser extent Togo, Tanzania, St Vincent and the Grenadines, and Sierra Leone, which are less favoured flags during the operational life of the ships, are excessively popular flags for the end-of-life vessels broken in substandard beaching facilities. These flags are all grey- or black-listed by the Paris MOU, that is, these are flags with very low performance in implementing international standards.[38]

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[36] See http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2004:013:0003:0012:EN:PDF.
[37] See the latest list at https://www.parismou.org/sites/default/files/WGB%202011-2013.pdf
[38] See https://www.parismou.org/publications-category/performance-list.
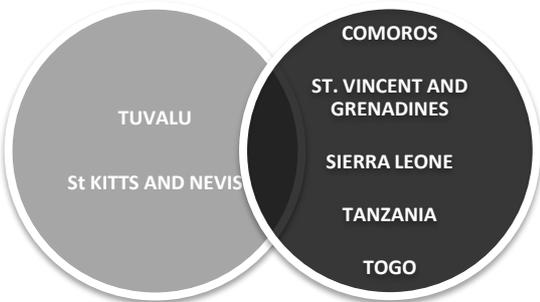
Not all of these flags were swapped at end of life; however, these FOCs are particularly popular for last voyages and are over-represented at end-of-life when compared to operational use.

FIGURE 3a: The top flags for ships sold to substandard beaching facilities (calculated in gross tonnage for 2014)
Source: NGO Shipbreaking Platform[39]
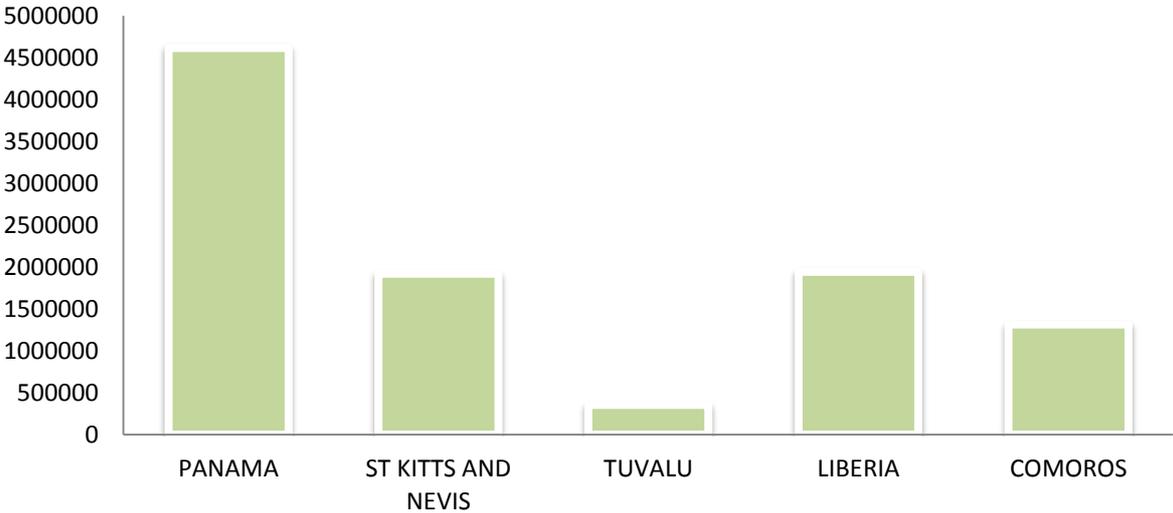
FIGURE 3b: The top flags for ships sold to substandard beaching facilities (calculated in number of ships for 2014, at least 17 ships sold)
Source: NGO Shipbreaking Platform
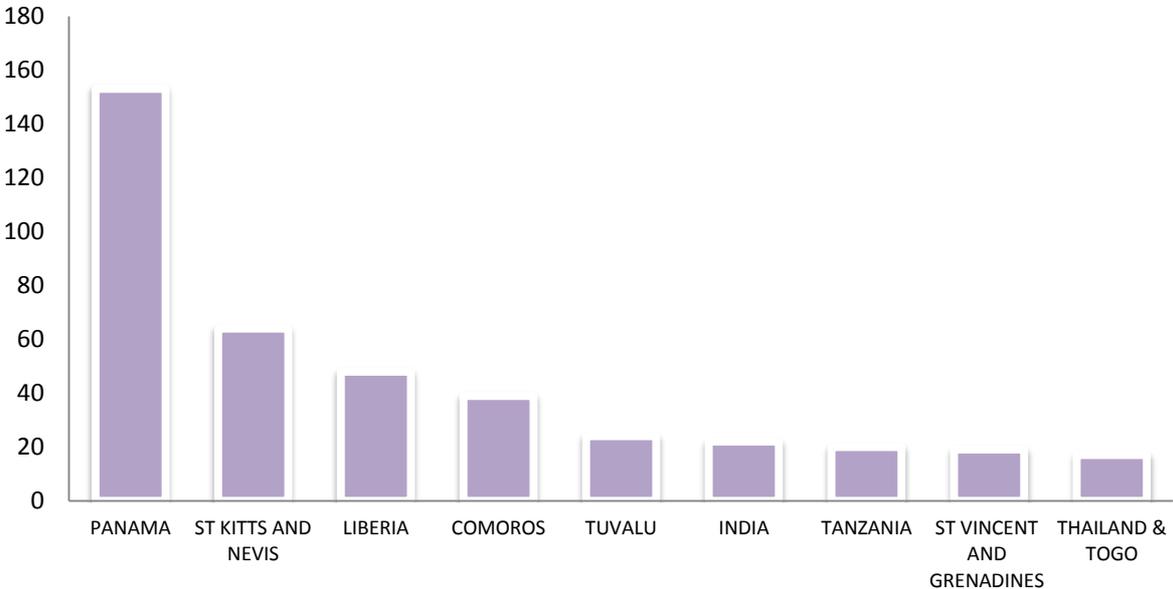
Unsurprisingly, Panama and Liberia, the world's largest FOCs, still rank high on the list for all ships scrapped on beaches. Two flags appearing on the list have clear nationality links: nearly all of the Indian flagged vessels broken on the beaches were Indian-owned, thus broken in their country of

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[39] In 2014, the Platform documented 1026 ships dismantled worldwide. 641 end-of-life ships were beached in substandard yards in South Asia, the remaining part was mainly dismantled in China and Turkey.

origin. Most of the Thai-flagged ships were also Thai owned. All other flags appreaing on this list of most popular flags at end-of-life – St Kitts and Nevis, Comoros, Tuvalu, Tanzania, St Vincent and the Grenadines, Tanzania and Togo – are grey- and black-listed flags of convenience with no link to the nationality of the owners and/or cash buyers of the end-of-life vessels. These flags are especially popular at end-of-life– also for ships whose last benefical owner was based in the EU.

In 2014, the NGO Shipbreaking Platform counted 641 end-of-life vessels beached in South Asia. Close to one third of all beached vessels, 202 ships, were under regulatory control of these particularly popular end-of-life flags hardly used during operational use. Altogether, 252 beached vessels arrived under a grey- or black-listed flag,[40] nearly 40% of all vessels scrapped in South Asia.

By contrast, when looking at the most popular flags used for end-of-life ships going to modern ship recycling facilitis in China, Turkey, and the EU in 2014, the end-of-life flags popular for substandard shipbreaking hardly appear in the list.

FIGURE 3c: Top flags for ships sold to ship recycling facilities in Turkey, China and the EU (calculated in gross tonnage for ships sold in 2014)
Source: NGO Shipbreaking Platform

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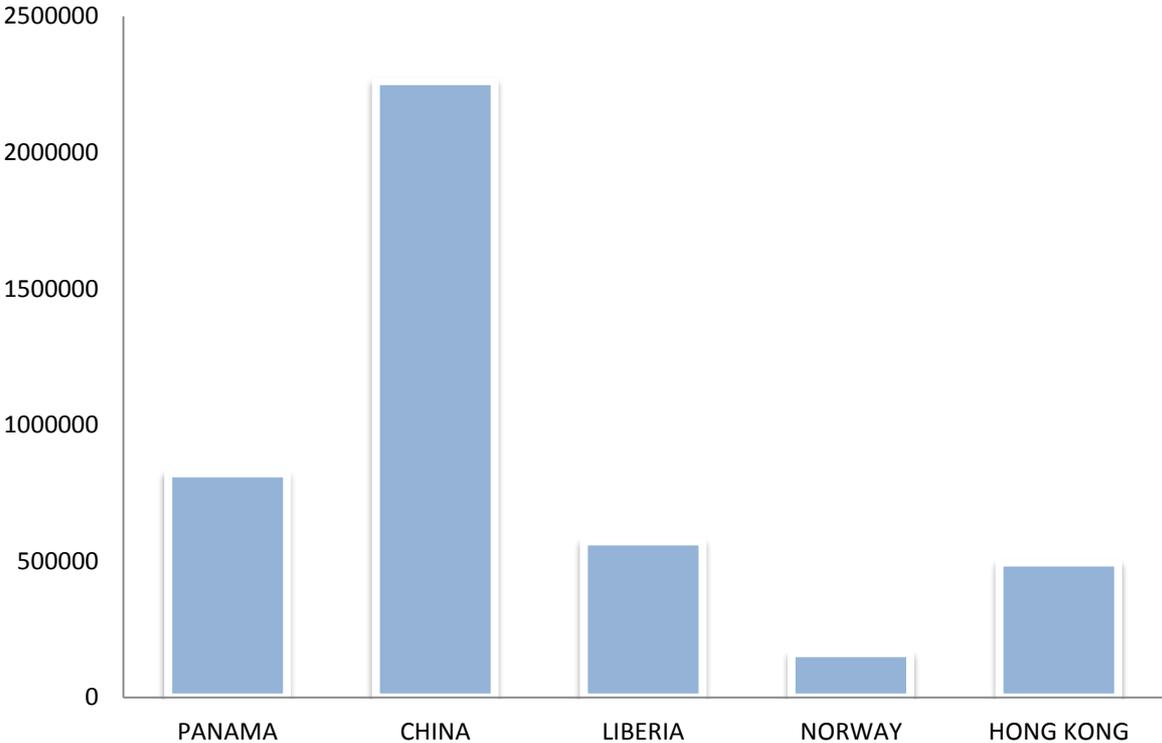
[40] The list grey- or black-listed under the Paris MOU comprise: St. Kitts & Nevis: 64, Comoros: 39, Tuvalu: 24, India: 22, Tanzania: 20, St. Vincent & Grenadines: 19, Togo: 17, Sierra Leone: 11, Belize: 9, Cambodia: 8, Dominica: 5, Vanuatu: 4, Malaysia: 3, Moldova: 3, Cook Islands: 2, Curacao: 1, Honduras: 1.

FIGURE 3d: Top flags for ships sold to ship recycling facilities in Turkey, China and the EU (calculated in number of ships sold in 2014)
Source: NGO Shipbreaking Platform
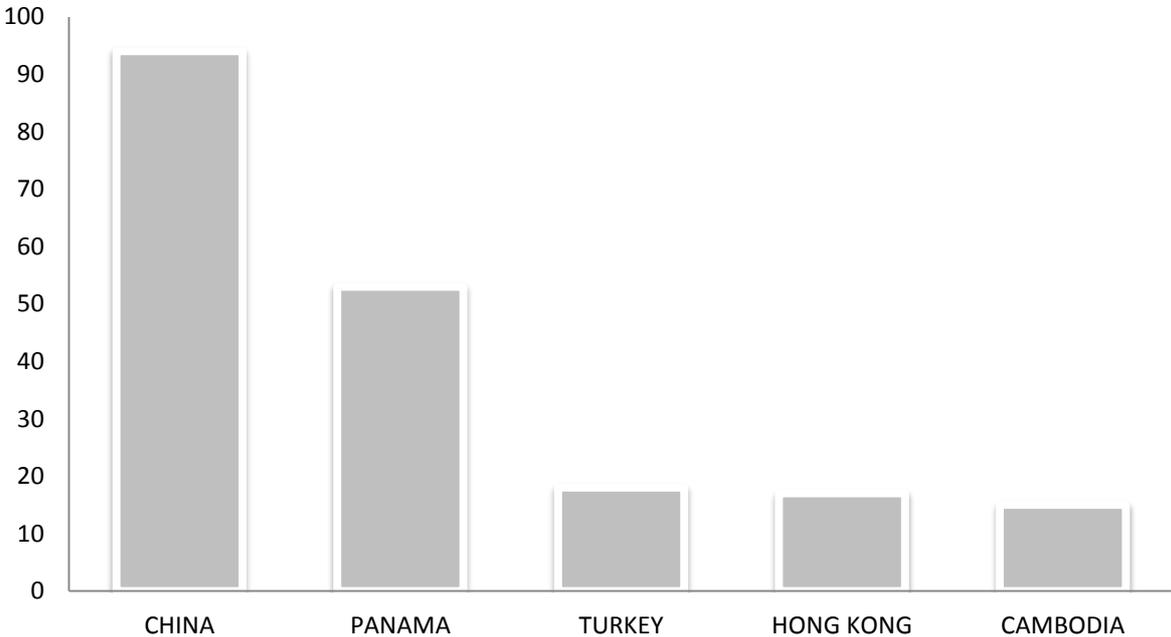
With the exception of Panama, the flags which are most popular for end-of-life vessels broken in substandard beaching facilities do not feature on the list of flags used for ships broken in non-South Asian facilities. China, one of the leading shipping nations in the world, tops the list on flags used for ships broken off the beach. Having introduced a subsidy for Chinese ship owners using the Chinese flag that recycle their ships domestically, China is so far the only leading shipping nation worldwide which aims at being self-sufficient in ship recycling. Also the Hong Kong flagged vessels were mainly scrapped in China. Thus, specific end-of-life flags are not used widely for demolition in China, Turkey and other destinations with modern ship recycling facilities, but are used for ships broken in South Asia where cash buyers usually become the owners of the vessels for a short time and tend to register the ships under one of the popular end-of-life flags.

3.2 "Last voyage packages"

End-of-life registries such as St Kitts and Nevis, Comoros and Tuvalu compete with each other by offering low-cost "last voyage" packages and expressly state that no nationality requirements need to be fulfilled in order to register under their flags – not even the setting up of a shell company. According to information on their public web-sites, St Kitts and Nevis, Tuvalu, Comoros and St Vincent and the Grenadines all have special arrangements in place for the registration of vessels explicitly intended for scrapping. Typically, this includes fast-track registration procedures, valid only for a very limited period of time, at a special lower price. The registry of St Vincent and the Grenadines, for instance, offers short term registration for 0.15 USD per GT instead of 0.60 USD per GT for normal registration. Also Tanzania, declared the worst flag by the Paris MOU, offers short-term registration which automatically expires after three months.

Most of these flags can be obtained from private agencies all around the world. The Mongolian register, a very popular end-of-life flag in previous years, has its main office in Singapore, one of the world's largest shipping hubs. It offers one-month registration if the vessel does not transport cargo – ideal for a last voyage. The popularity of certain end-of-life flags also varies over the years, with new end-of-life flags popping up every now and then.

Typical for end-of-life flags popular for substandard breaking is that these flags are 'over-represented' at end-of-life when compared with the size of their operational fleet – in particular the three leading end-of-life flags St Kitts and Nevis, Comoros and Tuvalu. Based on the number of vessels in their respective fleets, these three flags each have less than 0.5% of all ships in the global merchant fleet registered under their flag, yet they represent between 4% and 10% of the total number of vessels scrapped on beaches.

Whilst FOCs such as Panama and Liberia, which are also broadly used during the operational life of a ship, have an approximate two percent share of their merchant fleet dismantled yearly, typical end-of-life flags such as St Kitts and Nevis, Comoros and Tuvalu have a much higher percentage of their ships registered as broken, clearly indicating that these flags attract above average age vessels. Counting the number of ships in 2014:

- the Saint Kitts and Nevis registry included 272 ships - 69 (25%) were dismantled;
- the Comoros registry included 153 ships - 43 (28%) were dismantled; and
- the Tuvalu registry included 168 ships - 24 (14%) were dismantled.

The figures are even more telling when looking at gross tonnage rather than number of ships. About two percent of the world fleet was sold for breaking in 2014, and whilst also Panama and Liberia annually dismantle about two percent of their fleets counted in gross tonnage, end-of-life ships registered under Tuvalu went from 14 percent in number of ships to 25 percent calculated in gross tonnage. Two more grey- and black-listed flags dramatically increased their tonnage at end-of-life:

- the register of St Kitts and Nevis increased by 82%, and
- the register of Comoros increased 110%.

Equally telling is the fact that St Kitts and Nevis, Comoros and Tuvalu are flags used for the sole pupose of end-of-life. The increase in gross tonnage mentioned above is due to the fact that most vessels registered under these flags actually changed flag to either St Kitts and Nevis, Comoros or Tuvalu just weeks before reaching the breaking yards.[41] In 2014 this was the case for:

- 50 out of the 69 St Kitts and Nevis flagged ships broken on the beaches,
- 34 out of the 43 Comoros flagged ships broken on the beaches, and
- 14 out of the 24 Tuvalu flagged ships broken on the beaches.

To further underline that these flags are typical flags for *substandard* breaking, in 2014 the following number of Tuvalu, St Kitts and Nevis and Comoros flagged vessels ended up on a beach in South Asia:

- all 24 Tuvalu flagged vessels,
- 64 of 69 St. Kitts and Nevis flagged vessels - representing 99% of gross tonnage, and
- 39 of 43 Comoros flagged vessels - also representing 99% of gross tonnage.

It is further important to note that the number of end-of-life ships registered under these flags used for substandard breaking is most likely even higher as not all changes of flag are reported instantaneously and thus not made available in accessible shipping data bases real time.

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[41] When a change of flag occurs just weeks before a ship is dismantled, it may take time before shipping data bases register the change, the change may also be registered too late in order to include the vessel in statistics related to operational fleet, such as those presented by UNCTAD and EQUASIS. This explains the increase in gross tonnage recorded at end-of-life compared to the fleets' operational gross tonnage as identified in shipping data bases.

St Kitts and Nevis
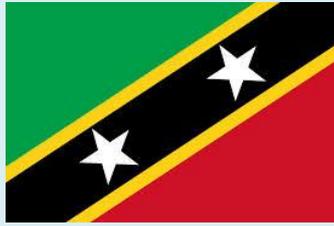
Grey-listed by the Paris MOU (black-listed 2010-2012)

No nationality requirements – not even a shell company

"Simplified and speedier" registration for scrap vessels

The flag of St Kitts and Nevis has become the most popular end-of-life FOC. In a 2003 Greenpeace report on shipbreaking practices, the flag does not yet figure amongst the top 15 favourite end-of-life flags.[42] Meanwhile, around 10% of all old ships beached in South Asia come in under the flag of the miniscule Caribbean state. Obviously, St Kitts and Nevis has positioned itself well as an end-of-life flag amongst cash buyers and other intermediaries. It acts, for instance, as an official sponsor to the most important annual conference on ship recycling, which mainly brings together cash buyers, brokers and shipbreakers. The flag of St Kitts and Nevis is available to foreign corporations and there are no nationality requirements: the ship owner or cash buyer using the flag does not even have to set up a shell company.

The flag can be obtained from the St Kitts and Nevis International Ship Registry, but also from various agencies around the world. "Shiplink International Registries" is the Singapore-based agent offering the flag as well as other end-of-life FOCs such as St Vincent and the Grenadines, Tuvalu and Sierra Leone.[43] "Inmarine" in London registers under St Kitts and Nevis and promotes its services to ship owners: "Flying under a FOC provides the ship owner with many advantages, such as simplified procedures of arranging mortgages, lower tax rates, more flexibility in ship manning, low registration fees and short term options for both registration and any other operations within the register".[44] Also "International Shipping Bureau" with offices in China and Panama City offers the flag of St Kitts and Nevis.[45]

St Kitts and Nevis offers a "special purpose registration" for scrap voyages including a special registration form under which ships are registered for only 3 months. Applications can be handed in online. According to the registry, the registration procedure is "simplified and speedier" and "most such registrations can be completed in one working day." A reduced rate of fees applies to these special purpose registrations.[46]

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[42] Greenpeace (2003) *Playing Hide and Seek. How the shipping industry, protected by flags of convenience, dumps toxic wastes on shipbreaking beaches*.

[43] See http://www.weblog-a1.com/shiplink/our_services.html.

[44] See http://www.inmarine.com/en/shipreg.html.

[45] See http://www.isbship.com/php/serviceMore.php?s_id=3.

[46] See http://www.stkittsnevisregistry.net/.

Comoros

Black-listed by the Paris MOU

No nationality requirements – not even a forged "genuine link"

Available at agencies all around the world

The flag of Comoros does not have any nationality requirements for a ship to be registered. The owner or cash buyer using the flag does not even have to set up a shell company to forge a "genuine link"; a ship is eligible irrespective of nationality or place of incorporation of the registered or actual owner.

The flag can be obtained from the National Transport Authority of Comoros. However, there is a wide spectrum of agencies around the world offering the flag. An agency called "Ukrainian Marine Lawyers" also registering vessels under other FOCs such as Kiribati and Tuvalu offers "registration of vessels and yachts in few hours as we are the official representative, instead of the intermediary" as well as setting up offshore companies.[47] A Bulgarian contact offers the flag,[48] a firm based in Dubai,[49] a Spanish company offering all different flags of convenience,[50] and "International Ship Registration Services", a company with a Slovenian phone number also providing the set up of offshore companies.[51] The Bangladesh-based company "Unirose" arranges for registration under the flag of Comoros, next to the flags of Bangladesh, Jamaica, Panama and Togo. The company is based in Chittagong, the second largest shipbreaking area in South Asia. Also the "Comoros Shipping Services" based in Mumbai, India, registers ships under the Comoros flag.[52]

The registration form can be downloaded online. Other important documents can be handed in as copies. Only if registration should be permanent must original documents be presented after three months. The registration form for the flag also contains a provision for "scrap registration". The fees are not made public – ship owners can ask for a quote.

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[47] See http://www.olvi.biz/arhiv/flagadmin.com/page.html.

[48] See http://www.bihlyumov.com/.

[49] See http://www.uae-shipping.net/union-of-comoros-maritime-administration-4948.html.

[50] See http://www.galeon.com/internationalships/.

[51] See http://www.flagadmin.com/index-en.html.

[52] See http://www.comorosshipping.com/.
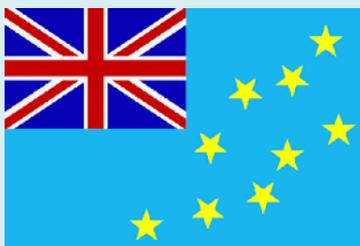
TUVALU

Grey-listed by the Paris MOU

No nationality requirements

Special "single delivery voyages" for scrap ships

Any ship owner can register a ship under the flag of Tuvalu, not even a forged "genuine link" is required. Ship owners using the flag during operational use get a tax refund if they incorporate in Tuvalu. The registry offers: "We are able to provide incorporation services for Tuvalu offshore companies if required." Tuvalu has a dedicated website for setting up offshore companies.[53]

The website of the Tuvalu registry does not mention any contract details in Tuvalu, only the registry's address in Singapore, which seems to be the headquarter, as well as their IMO representative based in London. Also other agencies hand out the flag. The "International Ship Register" based in Spain, which offers all different kinds of flag of convenience, also registers ships under the flag of Tuvalu,[54] and so does "Shiplink" in Singapore.[55] Tuvalu offers a special registration for "single deliver voyages".

3.3 Hiding behind cash buyers and intermediaries

Once a vessel reaches the end of its service life, ship owners – with the exception of responsible companies that directly engage with modern recycling facilities – sell their ship to a so called cash buyer who brings the vessel to its final destination. The majority of ship owners do not deal with ship recycling facilities themselves. Most, if not all, sales of end-of-life vessels to substandard South Asian shipbreaking yards are conducted with the help of cash buyers. They are specialised in end-of-life ships and act as a middlemen between ship owners and shipbreaking yards by either buying the ship 'as is, where is' from the ship owner, or by simply arranging for the sale to the breaking yard. Their service may include moving and crewing the ship on its last voyage and dealing with the required paper work and authorities at the breaking destinations. Cash buyers are called so because they pay ship owners up-front before the ship reaches its final destination and is dismantled. By using cash buyers, ship owners seek to avoid legal, financial and other risks related to selling a ship for breaking – they can also claim not to be responsible for the demolition of the ship if criticised for substandard practices, pollution or accidents.[56]

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[53] See http://www.tvoffshorecompanies.com/

[54] See http://www.internationalshipsregister.org.

[55] See http://www.weblog-a1.com/shiplink/our_services.html.

[56] The last beneficial owner of a particular ship should be held responsible for end-of-life management. In many cases where ship owners have been caught red-handed selling ships for substandard breaking the first excuse

The most well-known cash buyers are Global Marketing Systems (GMS), operating form Dubai and various other locations, and Singapore-based Wirana; however, many other smaller cash buyers, middlemen, brokers and intermediaries seek to get their share of end-of-life sales. Almost all sales conducted by cash buyers go to substandard shipbreaking yards in South Asia. In most cases the sale of an end-of-life vessel to a cash buyer involves a brief change in ownership and consequently a new registration of the ship and even changing the ship's name – these may be imposed upon the cash buyer by the ship owner in an attempt to conceal their tie to the ship. When changing ownership, end-of-life registries such as St Kitts and Nevis, Tuvalu and Comoros are preferred by cash buyers due to their advantageous "end-of-life packages". Cash buyers register the ships with the sole purpose of owning them for the short period of the last voyage. There is no transparency regarding the brass plate companies, the cash buyer, and all the other intermediaries involved in the sale. These companies are unknown to maritime databases and have concealed their corporate structures. Also the ship owners rarely share information about a cash buyer they have used to sell their vessels.

SeaFrance Renoir and SeaFrance Cézanne: an example of the fraudulent practices of ship owners, cash buyers, end-of-life flags and post box companies

In autumn 2011, two old ferries, previously known as *SeaFrance Renoir* and *SeaFrance Cézanne*, left the port of Dunkirk in Northern France under the flag of Belize and headed straight for the beach-breaking yards in Alang, India. The ships had been laid up in the port of Dunkirk for more than two years. They were part of the fleet of SeaFrance, a subsidiary of Government-owned SNCF. The ferries were thus owned by the French Government, they flew the French flag and had spent most of their operational life serving the Calais-Dover ferry route across the Channel. When both vessels were sold in summer 2011, the parent company SNCF was involved in the sale as part of a restructuring plan for SeaFrance. The Board of Directors of SNCF, which comprises Government representatives, discussed the vessels' fate as an integral part of the plan to save SeaFrance from bankruptcy.

Only a few weeks after the ships left Dunkirk the ferries were beached in India – and France later became subject to an infringement procedure by the European Commission. The export of the vessels from France to India was a particularly grave breach of the EU Waste Shipment Regulation, as the French state itself owned the vessels and the Government had been warned twice of the illegal export to South Asia: already in August 2010 by the French NGO Robin des Bois and again shortly after the ships had left Dunkirk. What happened is a perfect example of how ship owners – including Governments – with the help of fake companies and cash buyers circumvent the law to gain maximum profits.

While the ferries were laid up in France, SeaFrance was already in economic difficulties and was looking to sell parts of its fleet. The *Renoir* and the *Cézanne* were not in demand any more. The company's only option was to sell the vessels for dismantling. After having failed to find a buyer willing to continue to operate the vessels, SeaFrance started to ask for quotes for Inventories of Hazardous Materials and advice on ship recycling in accordance with international and European law.

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used is that they sold the ship to a cash buyer without knowing that the ship would end up on a beach for breaking. This is of course not the case as the price paid by the cash buyer is indicative of the quality – or rather lack of quality breaking.

Despite being aware of a proper procedure to dismantle the ferries, SeaFrance finally sold the vessels with the pretext of "further operational use" to an obscure German company named Condor Maritime. According to maritime databases, Condor Maritime had never owned any other ship and was very obviously not a ferry operator. Just before the sale, the post box companies Emily Shipping Inc and Kimiya Shipping Inc were registered in Panama: they were set up with the sole purpose of becoming the registered owners of the *Cézanne* and *Renoir* for their last voyage to India. After the sales contracts were signed between SeaFrance and the Panama based brass plate companies on 9 May 2011, the vessels changed names to *Eastern Light* and *Western Light* and were reflagged to Belize. As a later judgement given by the Mumbai High Court on unsettled payments revealed, cash buyer GMS had acted as the "agent" of both Kimiya and Emily Shipping. It must have been obvious for the management of both SeaFrance and SNCF that Condor Maritime would not repair two old passenger ferries and operate them again in Dubai as was promised in the sales contract. France had been warned of similar scams pretending further operational use in the cases of the *Beni Ansar* and *Onyx*. Still, despite the dubious record of Condor Maritime and the Panama post box companies being linked to one of the largest cash buyers specialised in sales of end-of-life vessels to substandard yards, the French Government later maintained that they had thought the ships were sold for further operational use.

The SeaFrance case shows how cash buyers assist shipping companies in circumventing laws which regulate ship recycling. GMS, which had already been fined by the US EPA for the illegal export of the *SS Independence* from Seattle in 2008, and Condor Maritime ensured that post box companies were set up to become the new registered owners of the SeaFrance vessels for their last voyage, provided fake information about further operational use and a flag of convenience. That France so far has failed to criminally pursue Condor Maritime and the associated registered owners of the vessels, Emily and Kimiya Shipping, for having lied about their intentions only goes to suppose that French authorities were complicit in the illegal export.

The availability of fake companies and end-of-life flags, even more accessible with the support of cash buyers, will persist in the future and will equally undermine new laws based on flag state jurisdiction rather than an "exporting state": in the SeaFrance case, the ferries could have sailed legally to the Indian beach-breaking yards under the flag of Belize despite the link to France, which could not have been any stronger than in the case of two government-owned vessels, flying the French flag throughout their operational lives and exclusively used between French and British ports.

3.4 Focus on European end-of-life ships

Already during operational life, many European ship owners choose to register their ships under FOCs – the most commonly used are Panama and Liberia. Consequently, only 22% of the world fleet are registered under an EU flag during operational use even though shipping companies based in the EU own around 41% of the world fleet.

FIGURE 3e: Percentage of EU-owned commercial vessels worldwide (calculated in gross tonnage)
Source: NGO Shipbreaking Platform[57]
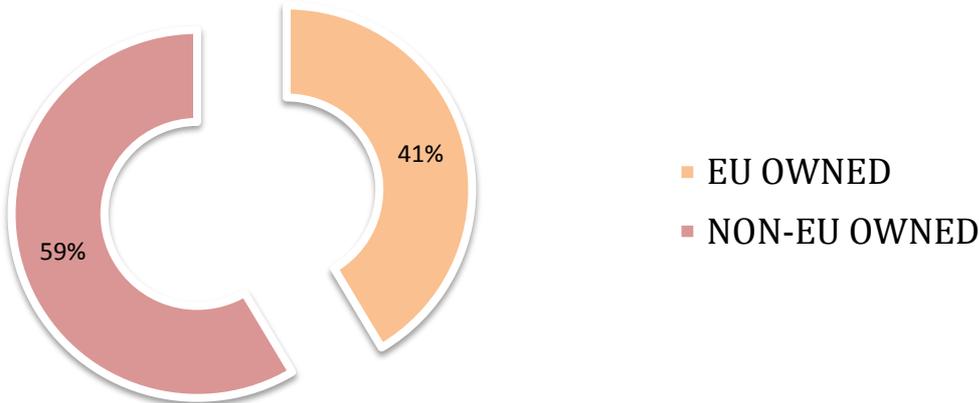
FIGURE 3f: Percentage of EU-flagged commercial vessels worldwide (calculated in gross tonnage)
Source: NGO Shipbreaking Platform[58]
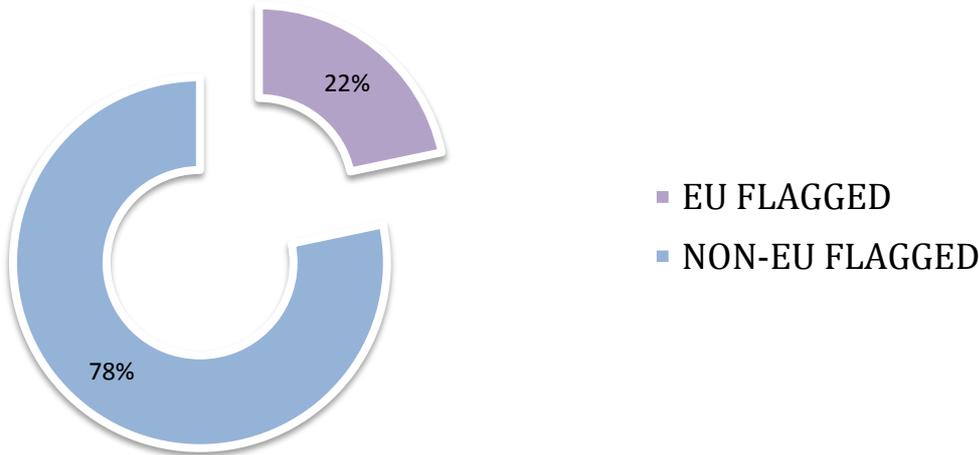
Figure 3e and 3f show the proportion of EU-owned and EU-flagged vessels as part of the global merchant fleet. While European ship owners hold 41% of market shares of global shipping, only 22% of vessels fly the flag of an EU member state.

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[57] For detailed figures see Annex II and IV.
[58] Ibid.

TABLE 3g: Comparative of EU-owned and EU-flagged operational and end-of-life fleet (percentage calculated on gross tonnage in 2014)
Source: NGO Shipbreaking Platform[59]

COUNTRY	OPERATIONAL FLEET		END-OF-LIFE FLEET					
	OWNERSHIP	FLAG	OWNERSHIP			FLAG		
				% TO SOUTH ASIA	SHARE SOUTH ASIA		% TO SOUTH ASIA	SHARE SOUTH ASIA
GREECE	15,00	4,01	11,73	93,93	14,98	1,13	66,91	1,02
GERMANY	9,02	1,35	6,58	95,33	8,52	0,00	0,00	0,00
NORWAY	4,51	1,56	1,54	39,05	0,81	0,82	12,62	0,14
ITALY	3,68	1,66	1,37	85,30	1,59	1,01	49,67	0,68
DENMARK	3,50	1,14	0,16	36,80	0,08	0,03	0,00	0,00
UK	2,30	2,93	0,86	85,74	1,00	1,83	89,87	2,23
NETHERLANDS	0,90	0,73	0,29	84,59	0,33	0,04	0,00	0,00
FRANCE	0,90	0,59	0,06	70,15	0,06	0,00	0,00	0,00
BELGIUM	0,73	0,40	0,00	0,00	0,00	0,00	0,00	0,00
SWEDEN	0,55	0,29	0,37	24,89	0,13	0,00	0,00	0,00
CYPRUS	0,27	1,93	0,97	95,03	1,25	1,06	95,38	1,37
FINLAND	0,18	0,15	0,06	100,00	0,08	0,00	0,00	0,00
SPAIN	0,01	0,24	0,48	61,33	0,40	0,09	0,00	0,00
POLAND	0,01	0,01	0,80	91,03	0,99	0,01	0,00	0,00
CROATIA	0,01	0,13	0,04	100,00	0,05	0,00	0,00	0,00
MALTA	<0,01	4,30	0,72	100,00	0,98	1,78	90,90	2,20
AUSTRIA	<0,01	0,00	0,00	0,00	0,00	0,00	0,00	0,00
BULGARIA	<0,01	0,02	0,05	0,00	0,00	0,03	0,00	0,00
ESTONIA	<0,01	0,03	0,01	0,00	0,00	0,00	0,00	0,00
HUNGARY	<0,01	0,00	0,00	0,00	0,00	0,00	0,00	0,00
IRELAND	<0,01	0,02	0,00	0,00	0,00	0,00	0,00	0,00
LITHUANIA	<0,01	0,03	0,00	0,00	0,00	0,00	0,00	0,00
LUXEMBOURG	<0,01	0,20	0,00	0,00	0,00	0,00	0,00	0,00
PORTUGAL	<0,01	0,11	0,08	100,00	0,11	0,00	0,00	0,00
CZECH REPUBLIC	<0,01	0,00	0,01	0,00	0,00	0,00	0,00	0,00
LATVIA	<0,01	0,02	0,11	25,88	0,04	0,00	0,00	0,00
ROMANIA	<0,01	0,01	0,24	59,37	0,19	0,04	0,00	0,00
SLOVAKIA	<0,01	0,00	0,00	0,00	0,00	0,00	0,00	0,00
SLOVENIA	<0,01	0,00	0,00	0,00	0,00	0,00	0,00	0,00
EU + NORWAY	**41,56**	**21,89**	**26,53**	**86,53**	**31,59**	**7,86**	**71,62**	**7,66**

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[59] Fo more detailed figures, see Annex IV.

Both European ownership and registration further decreases with the age of a ship, and the trend of flagging out from European registries is accentuated at end-of-life. In 2014, only 7,8% of all ships dismantled globally were still registered under an EU flag, although 26% were still under EU ownership. If looking only at end-of-life vessels destined for substandard beaching facilities, EU owners accounted for 32% of the total gross tonnage broken. Again, only 7,7% of these vessels still flew a European flag. In general, the change of flag at end-of-life is thus much more frequent than a change in ownership: whilst the percentage vessels whose last beneficial owner was based in the EU and which were broken in substandard facilities is not much lower than the percentage of EU-owned ships during operational use, it is clear that the EU flag is favoured for younger and operational ships rather than for last voyages.[60]

Counted both in number of ships and gross tonnage, all EU registries have a below average percentage of end-of-life vessels, some registries such as France, Belgium and Sweden did not break any ships in 2014. Although most European owners are less represented at end-of-life than during the operational life of ships, Greek and German owners only slightly decreased their percentage of the total tonnage at end-of-life compared to operational life, especially when looking at their share of ships broken in substandard yards. Owners from countries such as Cyprus, Poland and Malta however increased their representativeness at end-of-life and sold almost exclusively to substandard yards. In contrast, owners from Sweden, Norway and Denmark opted for breaking destinations outside South Asia.

FIGURE 3h: EU-owned ships broken by destination and percentage of EU flag per destination (Calculated in number of ships sold in 2014)
Source: NGO Shipbreaking Platform[61]

DESTINATION	EU beneficial owner	EU flag	% of EU flag
EU	39	28	71,8
China	6	3	50
Turkey	55	34	34,5
South Asia	182	41	22,5

The EU ship registries are primarily favoured by European owners for ships that are broken in modern ship recycling facilities off the beach. Out of the 182 EU owned ships sold to South Asia in 2014, 22,5 percent were still flying a European flag when they reached their final breaking destination. For ships broken in the EU, almost three quarters of the European owned ships were registered under an EU flag. And whilst there were no changes of flag on ships owned by European shipping companies that were destined for breaking in the EU and China, and only one flagging-out from an EU register before breaking in Turkey, at least 15 ships left an EU registry just weeks before hitting a South Asian beach.

EU flags used for end-of-life vessels that were sold to a substandard beaching facility included:

- 17 under the flag of Malta
- 8 under the flag of the UK
- 8 under the flag of Cyprus

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[60] An additional 205 ships broken on the beaches of South Asia in 2014 and that were not owned by an EU based shipping company, nor EU flagged, at end-of-life had been registered under an EU flag during their operational life – 64 of these were EU flagged during more than half of their operational life.
[61] In 2014, the Platform documented 1026 ships dismantled worldwide. 641 end-of-life ships were beached in substandard yards in South Asia, the remaining part was mainly dismantled in China and Turkey. For further details, see Annex III.

- 4 under the flag of Greece
- 3 under the flag of Italy
- 1 under the flag of Norway

15 additional EU flags were swapped to end-of-life flags just weeks before the ships were beached:

- 6 changed from Italy to St Kitts and Nevis (4), Comoros (1) and Palau (1)
- 4 changed from Malta to St Kitts and Nevis (2), Comoros (1) and Tuvalu (1)
- 2 changed from Greece to St Kitts and Nevis
- 1 changed from Germany to Liberia
- 1 changed from the Netherlands to Tuvalu
- 1 changed from Madeira (Portugal) to St Kitts and Nevis

Most of the ships still sailing under an EU flag when they hit the beach were larger vessels owned by German, Greek or Maltese owners, all of which sell almost exclusively to substandard yards. There is a strong risk that these owners will opt for the circumvention of the EU SRR by maintaining FOCs already during operational use, flagging out to an end-of-life FOC, or selling the ship to a cash buyer who would do the same.

The EU SRR may thus – once applicable – only cover smaller EU-owned vessels and a handful of larger ships belonging to the few responsible ship owners who already do not sell their old ships to substandard yards. In large, the EU SRR could be reduced to an exercise of simply rubberstamping already legitimate ship recycling of smaller vessels in the EU and Turkey, and legalising the recycling of a few vessels in China. Unless policies directly target ship owners both by introducing obligations and creating incentives, easy circumvention of the law will allow for continued substandard practices by EU owners that opt for maximum profits in substandard yards.

4 CONCLUSION AND RECOMMENDATIONS: BEYOND FLAG STATE JURISDICTION

Whereas around three quarters of all ship owners from around the world already register under FOCs during operational use of their ships, more ships flag out from responsible registries, including European registries, with age and in particular for the last voyage. Backed by a system of cash buyers opting for end-of-life FOCs offering last voyage discounts, end-of-life ships are overrepresented amongst grey- and black-listed flag registries that have a track-record of poorly implementing international legislation. Attempts to regulate ship recycling practices without obligations for ship owners beyond flag state jurisdiction and other incentives for clean and safe recycling will fail as re-flagging to a non-party or non-compliant end-of-life flag, or selling the vessel to a cash buyer, who can do the same, remains an attractive solution for ship owners seeking to avoid stricter rules.

The EU has a particular responsibility to find effective solutions to ensure sustainable ship recycling as it is home to many ship owners who prefer 'green dollars to green recycling', i.e. who choose higher profits by selling to substandard yards. Whereas ship owners from the industrialised countries make a profit of several million dollars with every vessel beached, the true costs of clean and safe ship recycling are externalised to poorer communities in breach of both environmental justice and the polluter pays principle. If done properly, ship recycling is a sustainable practice as it helps to recover valuable resources. Clean and safe ship recycling is technically and financially feasible and is already available in the EU, North America, China and Turkey and more capacity may develop in other localities. More than ten years ago, the Parties to the Basel Convention identified the need to

upgrade the substandard facilities in South Asia in order to allow for a transition towards safer methods off the beach.[62]

This analysis has shown that:

- ship owners worldwide use flags of convenience to reduce costs and avoid legislation related to workers rights and environmental protection;
- most ship owners do not adhere to the 'polluter pays principles', but follow a 'polluter profits' strategy by selling off old ships to developing countries;
- in particular grey- and black-listed FOCs are used by cash buyers selling end-of-life vessels to substandard scrap yards as these FOCs offer cheap short time registration without any nationality requirements;
- these flags have a track record of poor law enforcement and are unlikely to become the driving force for a change towards clean and safe ship recycling, but are rather likely to offer easy circumvention of laws to ship owners and cash buyers.

Ensuring a genuine link between the owner of a ship and the flag state based on a real economic stake in the ownership of the ship or by providing mariners to crew the ships has been identified to put an end to substandard shipping practices by several UN bodies and other stakeholders working to protect seafarers rights and a sustainable management of our oceans. With most ships still sailing under a flag other than that of their beneficial ownership, Port State Control is meant to prompt certain flag states to improve their performance. At end-of-life, Port State Control will not play an equally important role in ensuring a level-playing field. Both international and European regulation for clean and safe ship recycling based on flag state jurisdiction is very likely to be circumvented by the use of non-party or non-compliant flags. By choosing non-European flags, European ship owners can easily, and legally, circumvent the SRR. Also the IMO's HKC, if it should enter into force, can be avoided by using non-party or non-compliant flags, so that ship owners can easily free themselves of any responsibility to ensure sustainable ship recycling. Regulation trying to improve ship recycling practices needs to look beyond flag state jurisdiction.

The lack of political will at the international level to directly hold ship owners accountable or impose obligations on the states where ship owners are located has so far hindered any effective legislative solution to the shipbreaking problem, in particular the implementation of the polluter pays principle for ship owners. With the main obligation on flag states and shipbreaking countries with weak law enforcement, the HKC has not been able to create the incentives needed for substantial change.

At the European level, the establishment of an economic incentive which goes beyond flag state jurisdiction and covers all ships calling at European ports could direct more end-of-life vessels towards modern ship recycling facilities and thus provide the necessary incitement for investments in safer and cleaner ship recycling methods world-wide. In the interest of protecting human health and the environment and having regard to the 'polluter pays' principle, Article 29 of the SRR asks the European Commission to explore possible financial incentives that should "generate resources that would facilitate the environmentally sound recycling and treatment of ships without creating an incentive to out-flag"[63]. By targeting all vessels, regardless of flag, that enter European waters, the SRR would considerably enlarge its scope. Already the Regulation requires an Inventory of Hazardous Materials for all ships calling at EU ports. Conservative estimations say that this will cover 30.000

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[62] See *Technical guidelines for the environmentally sound management of the full and partial dismantling of ships*, Secretariat of the Basel Convention, 2003.

[63] EU SRR 1257/2013 Article 29: "The Commission shall, by 31 December 2016, submit to the European Parliament and to the Council a report on the feasibility of a financial instrument that would facilitate safe and sound ship recycling and shall, if appropriate, accompany it by a legislative proposal." See also preamble 19 of EU SRR 1257/2013.

ships above 500 GT – i.e. 60 percent of world fleet. Prompting such a high number of ships to opt for sustainable ship recycling with the help of a financial incentive that would cover all ships visiting EU ports becomes extremely attractive: the EU would then indeed be setting a global standard and could expect a successful implementation of the SRR.

The encouraging outlook of the possible positive effects of the SRR strongly speaks in favour of the EU adding a financial incentive to the Regulation, especially when compared to the small number of ships that would be covered by the SRR only based on flag state jurisdiction – an estimated 4,1 percent of the global end-of-life fleet, most of which anyways already opt for legitimate destinations under the EU WSR in ship recycling facilities in Europe and Turkey, plus the few EU-flagged ships that go to China.

Recalling that EU owners control 41 percent of the global fleet, the EU will rid itself from its responsibility if it does not add an instrument beyond flag state jurisdiction. The EU is in need of such new policies which will have a positive effect in changing the current unacceptable conditions under which large ocean-going vessels are broken. With legislation only based on flag state responsibility, the FOC system not only allows ship owners to avoid EU law, but also weakens the power of the EU to achieve its own legislative objectives and the institution itself.[64]

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[64] Including strengthening the EU fleet and more specifically with regards to ship recycling "*to reduce disparities between operators in the Union, in OECD countries and in relevant third countries in terms of health and safety at the workplace and environmental standards and to direct ships flying the flag of a Member State to ship recycling facilities that practice safe and environmentally sound methods of dismantling ships instead of directing them to substandard sites as is currently the practice.*" (preamble 7 of EU SRR 1257/2013)

Annex I: Comparative table of non-EU flagged and owned ships 2014

COUNTRY	FLAG							BO		
	# ships	%WF	# EOL	% EOL/WF	# SA	% SA	% SA 2014	# EOL	# SA	% SA
CHINA	3266	6,3	95	2,9	1	1,1	0,2	183	60	32,8
COMOROS	153	0,3	43	28,1	39	90,7	6,1	0	0	0,0
HONG KONG	2287	4,4	24	1,0	7	29,2	1,1	40	26	65,0
JAPAN	1623	3,1	1	0,1	0	0,0	0,0	12	10	83,3
LIBERIA	3770	7,3	55	1,5	48	87,3	7,5	0	0	0,0
PALAU	76	0,1	6	7,9	5	83,3	0,8	0	0	0,0
PANAMA	8103	15,6	206	2,5	153	74,3	23,9	3	0	0,0
RUSSIA	3408	6,6	21	0,6	12	57,1	1,9	47	30	63,8
SIERRA LEONE	392	0,8	17	4,3	11	64,7	1,7	0	0	0,0
SINGAPORE	3701	7,1	10	0,3	9	90,0	1,4	37	36	97,3
SOUTH KOREA	1426	2,7	9	0,6	6	66,7	0,9	34	30	88,2
ST KITTS AND NEVIS	272	0,5	69	25,4	64	92,8	10,0	1	1	100,0
ST VINCENT AND GRENADINES	843	1,6	28	3,3	19	67,9	3,0	0	0	0,0
TANZANIA	194	0,4	28	14,4	20	71,4	3,1	0	0	0,0
TOGO	238	0,5	27	11,3	16	59,3	2,5	0	0	0,0
TURKEY	742	1,4	23	3,1	5	21,7	0,8	46	18	39,1
TUVALU	168	0,3	24	14,3	24	100,0	3,7	0	0	0,0
UAE	374	0,7	0	0,0	0	0,0	0,0	28	28	100,0

Annex II: Comparative table of non-EU flagged and owned ships counted in gross tonnage 2014

COUNTRY	FLAG								BO				
	GT	% WF GT	GT EOL	% EOL GT 2014	%EOL/GT	GT SA	% SA/GT EOL	% GT SA 2014	GT EOL	% of total EOL GT	GT SA	% SA/EOL	% GT SA 2014
CHINA	47524000	4,4	2275412	10,0	4,8	1504	0,1	0,0	2663219	11,7	1647276	61,9	15,9
COMOROS	632000	0,1	1328586	5,9	210,2	1315838	99,0	7,9	0	0,0	0	0,0	0,0
HONG KONG	83605000	7,7	825654	3,6	1,0	330335	40,0	2,0	1097958	4,8	539939	49,2	6,6
JAPAN	16018000	1,5	1355	0,0	0,0	0	0,0	0,0	681210	3,0	632355	92,8	4,1
LIBERIA	131335000	12,1	2514979	11,1	1,9	1941992	77,2	11,6	0	0,0	0	0,0	0,0
PALAU	N/A	N/A	98922	0,4	N/A	98115	99,2	0,6	0	0,0	0	0,0	0,0
PANAMA	231302000	21,3	5440860	24,0	2,4	4612697	84,8	27,6	29830	0,1	0	0,0	0,2
RUSSIA	6144000	0,6	96133	0,4	1,6	66791	69,5	0,4	421071	1,9	344593	81,8	2,5
SIERRA LEONE	1104000	0,1	324766	1,4	29,4	263509	81,1	1,6	0	0,0	0	0,0	0,0
SINGAPORE	67905000	6,3	246744	1,1	0,4	196063	79,5	1,2	1311599	5,8	1296957	98,9	7,9
SOUTH KOREA	10903000	1,0	344558	1,5	3,2	287870	83,5	1,7	1657095	7,3	1597638	96,4	9,9
ST KITTS AND NEVIS	1062000	0,1	1933013	8,5	182,0	1919200	99,3	11,5	22519	0,1	22519	100,0	0,1
ST VINCENT AND GRENADINES	3223000	0,3	351128	1,5	10,9	280780	80,0	1,7	0	0,0	0	0,0	0,0
TANZANIA	6288000	0,6	246286	1,1	3,9	214606	87,1	1,3	0	0,0	0	0,0	0,0
TOGO	647000	0,1	270131	1,2	41,8	220797	81,7	1,3	0	0,0	0	0,0	0,0
TURKEY	6291000	0,6	157595	0,7	2,5	109584	69,5	0,7	395940	1,7	311306	78,6	2,4
TUVALU	1385000	0,1	355536	1,6	25,7	355536	100,0	2,1	0	0,0	0	0,0	0,0
UAE	807000	0,1	0	0,0	0,0	0	0,0	0,0	388813	1,7	388813	100,0	2,3

Annex III: Comparative table of EU flagged and owned ships 2014

COUNTRY	FLAG							BO		
	# ships	% WF	# EOL	% EOL/WF	# SA	% SA	% SA 2014	# EOL	# SA	% SA
GREECE	969	1,9	11	1,1	4	36,4	0,6	92	70	76,1
GERMANY	450	0,9	1	0,2	0	0,0	0,0	47	41	87,2
NORWAY	1435	2,8	10	0,7	1	10,0	0,2	24	7	29,2
ITALY	832	1,6	5	0,6	3	60,0	0,5	11	8	72,7
DENMARK	579	1,1	3	0,5	0	0,0	0,0	9	3	33,3
UK	811	1,6	12	1,5	8	66,7	1,2	15	6	40,0
NETHERLANDS	1233	2,4	3	0,2	0	0,0	0,0	5	3	60,0
FRANCE	342	0,7	0	0,0	0	0,0	0,0	2	1	50,0
BELGIUM	186	0,4	0	0,0	0	0,0	0,0	0	0	0,0
SWEDEN	176	0,3	0	0,0	0	0,0	0,0	4	2	50,0
CYPRUS	1029	2,0	9	0,9	8	88,9	1,2	12	11	91,7
FINLAND	141	0,3	0	0,0	0	0,0	0,0	1	1	100,0
SPAIN	368	0,7	3	0,8	0	0,0	0,0	11	2	18,2
POLAND	87	0,2	1	1,1	0	0,0	0,0	7	4	57,1
CROATIA	84	0,2	0	0,0	0	0,0	0,0	1	1	100,0
MALTA	1944	3,7	25	1,3	17	68,0	2,7	3	3	100,0
AUSTRIA	1	0,0	0	0,0	0	0,0	0,0	0	0	0,0
BULGARIA	31	0,1	1	3,2	0	0,0	0,0	2	0	0,0
ESTONIA	51	0,1	0	0,0	0	0,0	0,0	1	0	0,0
HUNGARY	0	0,0	0	0,0	0	0,0	0,0	0	0	0,0
IRELAND	66	0,1	0	0,0	0	0,0	0,0	1	0	0,0
LITHUANIA	71	0,1	0	0,0	0	0,0	0,0	0	0	0,0
LUXEMBOURG	180	0,3	0	0,0	0	0,0	0,0	0	0	0,0
PORTUGAL	85	0,2	0	0,0	0	0,0	0,0	2	2	100,0
CZECH REPUBLIC	0	0,0	0	0,0	0	0,0	0,0	1	0	0,0
LATVIA	62	0,1	0	0,0	0	0,0	0,0	6	1	16,7

ROMANIA	92	0,2	2	2,2	0	0,0	0,0	8	2	25,0
SLOVAKIA	2	0,0	0	0,0	0	0,0	0,0	0	0	0,0
SLOVENIA	1	0,0	0	0,0	0	0,0	0,0	0	0	0,0
SWITZERLAND	52	0,1	0	0,0	0	0,0	0,0	8	7	87,5

Annex IV: Comparative table of EU flagged and owned ships counted in gross tonnage 2014

COUNTRY	FLAG								BO						
	GT WF	% WF	GT EOL	% EOL GT 2014	%EOL/ GT	GT SA	% SA	% beached tonnage	GT WF (mil)	% WF	GT EOL	% EOL GT 2014	GT SA	% SA/ EOL	% beached tonnage
GREECE	43559000	4,0	255556	1,1	0,6	170985	66,9	1,0	163	15,0	2663318	11,7	2501626	93,9	14,98
GERMANY	14652000	1,3	561	0,0	0,0	0	0,0	0,0	98	9,0	1492785	6,6	1423039	95,3	8,52
NORWAY	16962000	1,6	185458	0,8	1,1	23409	12,6	0,1	49	4,5	348537	1,5	136094	39,0	0,81
ITALY	18016000	1,7	229763	1,0	1,3	114114	49,7	0,7	40	3,7	310799	1,4	265103	85,3	1,59
DENMARK	12370000	1,1	6090	0,0	0,0	0	0,00	0,0	38	3,5	35996	0,2	13248	36,8	0,08
UK	31867000	2,9	415162	1,8	1,3	373102	89,9	2,2	25	2,3	195040	0,9	167226	85,7	1,00
NETHERLANDS	7895000	0,7	8591	0,0	0,1	0	0,0	0,0	10	0,9	65602	0,3	55493	84,6	0,33
FRANCE	6396000	0,6	0	0,0	0,0	0	0,0	0,0	10	0,9	13684	0,1	9600	70,2	0,06
BELGIUM	4385000	0,4	0	0,0	0,0	0	0,0	0,0	8	0,7	0	0,0	0	0,0	0,00
SWEDEN	3185000	0,3	0	0,0	0,0	0	0,0	0,0	6	0,6	84628	0,4	21068	24,9	0,13
CYPRUS	21002000	1,9	240176	1,1	1,1	229090	95,4	1,4	3	0,3	219922	1,0	208997	95,0	1,25
FINLAND	1670000	0,2	0	0,0	0,0	0	0,0	0,0	2	0,2	13867	0,1	13867	100,0	0,08
SPAIN	2583000	0,2	20752	0,1	0,8	0	0,0	0,0	1	0,0	108991	0,5	66843	61,3	0,40
POLAND	106000	0,0	1575	0,0	1,5	0	0,0	0,0	1	0,0	181190	0,8	164932	91,0	0,99
CROATIA	1407000	0,1	0	0,0	0,0	0	0,0	0,0	1	0,0	8639	0,0	8639	100,0	0,05
MALTA	46738000	4,3	404714	1,8	0,9	367881	90,9	2,2	N/A	N/A	164166	0,7	164166	100,0	0,98
AUSTRIA	373	0,0	0	0,0	0,0	0	0,0	0,0	N/A	N/A	0	0,0	0	0,0	0,00
BULGARIA	223000	0,0	7455	0,0	3,3	0	0,0	0,0	N/A	N/A	11338	0,0	0	0,0	0,00
ESTONIA	293000	0,0	0	0,0	0,0	0	0,0	0,0	N/A	N/A	2844	0,0	0	0,0	0,00
HUNGARY	0	0,0	0	0,0	0,0	0	0,0	0,0	N/A	N/A	0	0,0	0	0,0	0,00
IRELAND	207000	0,0	0	0,0	0,0	0	0,0	0,0	N/A	N/A	1089	0,0	0	0,0	0,00
LITHUANIA	377000	0,0	0	0,0	0,0	0	0,0	0,0	N/A	N/A	0	0,0	0	0,0	0,00
LUXEMBOURG	2200000	0,2	0	0,0	0,0	0	0,0	0,0	N/A	N/A	0	0,0	0	0,0	0,00
PORTUGAL	1230000	0,1	0	0,0	0,0	0	0,0	0,0	N/A	N/A	18359	0,1	18359	100,0	0,11
CZECH REPUBLIC	0	0,0	0	0,0	0	0	0,0	0,0	N/A	N/A	2882	0,0	0	0,0	0,00

LATVIA	194000	0,0	0	0,0	0,0	0	0,0	0,0	N/A	N/A	25131	0,1	6504	25,9	0,04
ROMANIA	132000	0,0	9358	0,0	7,1	0	0,0	0,0	N/A	N/A	53414	0,2	31710	59,4	0,19
SLOVAKIA	22000	0,0	0	0,0	0,0	0	0,0	0,0	N/A	N/A	0	0,0	0	0,0	0,00
SLOVENIA	2000	0,0	0	0,0	0,0	0	0,0	0,0	N/A	N/A	0	0,0	0	0,0	0,00
SWITZERLAND	769000	0,1	0	0,0	0,0	0	0,0	0,0	N/A	N/A	350319	1,5	237780	67,9	1,42