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WORLD MARITIME UNIVERSITY
Shanghai, China

PLACES OF REFUGE IN THE 21ST CENTURY:
Ten years on – Review & Recommendations for amendment of the IMO
Guidelines on Places of Refuge, 2003

By
CHRISTOPH SCHULTE
Germany

A research paper submitted to the World Maritime University in partial
Fulfillment of the requirements for the award of the degree of

MASTER OF SCIENCE
INTERNATIONAL TRANSPORT & LOGISTICS

2014

DECLARATION

I certify that all the material in this dissertation that is not my own work has been identified, and that no material is included for which a degree has previously been conferred on me.

The contents of this dissertation reflect my own personal views, and are not necessarily endorsed by the University.

Christoph Schulte

Date: 5 July 2014

Supervised by:
Professor Xu Dazhen
Shanghai Maritime University

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ABSTRACT

Title of Research paper: Places of Refuge in the 21st Century: Ten years on – Review & Recommendations for amendment of the IMO Guidelines on Places of Refuge, 2003

Degree: MSc International Transport and Logistics

‘Let’s get real on ports of refuge’, ‘No refuge in Asia for distressed Hong Kong chemical tanker’, ‘*Maritime Maisie* could break up at sea’, ‘Governments urged to fulfill their obligations over ports of refuge’, ‘No hiding place from the refuge issue’. These are just a selection of gloomy headlines that can be read in today’s maritime industry newspapers. Traditionally, there exists a long practice of granting a vessel in difficulties a place of refuge. Yet, during the course of the 20th century and up to today this refuge-custom is gradually being undermined by a state practice of refusing refuge. Coastal state concerns center on the risk of significant pollution damages, but are not limited to that. Accordingly, the dilemma of what to do when a ship finds itself in serious difficulty or in need of assistance, without, however, presenting a risk to the safety of life involved onboard and ashore in a potential place of refuge, remains a practical and unresolved problem. Arguably it has even become more complex in the course of the 20/21st centuries and the underlying reasons will be examined here. Even moderate progress with implementation of the IMO Guidelines on places of refuge during the preceding ten years cannot hide the fact that there still appears to be a disconnect between what is talked about and the reality – something demonstrated by a number of recent high-profile vessel casualties which will be examined. Against this background the paper considers and critically assesses the salient provisions of the IMO guidelines. The finding is that there is room for improvement of the guidelines, particularly in the area of casualty assessment and clear and rapid decision-making. Recommendations for improvement will be presented accordingly.

KEYWORDS: Places of Refuge, Risk Assessment, Maritime Emergency Response, Response systems, Salvage, Incident Reports, Recent marine casualties

- Developments undermining the refuge custom in 21st century are examined
- Recent Place of Refuge casualties are considered: *Stolt Valor*, *MSC Flaminia*, *Maritime Maisie*
- Track record of the IMO Guidelines on Places of Refuge (2003) is surveyed
- Importance of unemotional risk assessment on technical grounds following a refuge request is highlighted
- Recommendations are presented how the IMO Guidelines and the current Places of Refuge regime can be improved

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ABBREVIATIONS

ALARP	As low as reasonably practicable
BIMCO	Baltic and International Maritime Council
BSU	Bundesstelle fuer Seeunfalluntersuchung (Germany)
EEZ	Exclusive Economic Zone
EMSA	European Maritime Safety Agency
HFO	Heavy Fuel Oil
ICS	International Chamber of Shipping
IMDG	International Maritime Dangerous Goods Code (IMO)
IMO	International Maritime Organization
INTERCARGO	International Association of Dry Cargo Shipowners
INTERTANKO	International Association of Independent Tanker Owners
IPTA	International Parcel Tankers Association
ISM CODE	International Safety Management Code (IMO)
ISU	International Salvage Union
IUMI	International Union of Marine Insurers
LOF	Lloyd's Open Form
LOSC	Law of the Sea Convention
MAS	Maritime Assistance Services (IMO Guideline)
MEPC	Marine Environment Protection Committee (IMO)
MSA	Maritime Safety Authority
MSC	Maritime Safety Committee (IMO)
P&I	Protection & Indemnity Club
POR	Place(s) of Refuge
SAR	Search and Rescue
SCU	Salvage Control Unit
SIGTTO	Society of International Gas Tanker and Terminal Operators
SOLAS	Safety of Life at Sea (IMO)

SOSREP	Secretary of State's Representative for Salvage and Intervention
STS	Ship to Ship Operations
ULCC	Ultra Large Crude Carrier
VLCC	Very Large Crude Carrier

CHAPTER I: INTRODUCTION

Background

The plight of the chemical tanker *Maritime Maisie* has brought the problem with places of refuge back into sharp focus. On December 29 2013 the 44,404 dwt chemical tanker was involved in a collision with a car carrier off Busan while navigating in the Korea Strait separating South Korea and Japan. Part of the ship's cargo tanks containing hazardous substances¹ ruptured triggering a chemical fire. Instead of heeding the requests of managers and salvors to provide a place of refuge where the chemical fire could be professionally fought, the ship stabilized and the cargo discharged with relative ease, authorities in South Korea and Japan requested the ship to remain at sea allegedly fearing health, environmental and economical risks should the vessel be brought into a place of refuge. The ship subsequently drifted into Japanese waters, complicating the search for a place of refuge as responsibility for the casualty could now be rather conveniently denied by either South Korea or Japan. Salvors attended to the casualty at sea, weather permitting. Absent a place of refuge they were however unable to undertake ship-to-ship (STS) operations of the cargo and remaining bunkers at open sea, arguably the measure which would have allayed coastal States fears significantly. It was only after more than four months that the vessel was allowed to proceed to a place of refuge (Ulsan, South Korea) to be dealt with adequately.

¹ At the time of the incident, three cargoes were carried onboard: Acrylonitrile, Paraxylene and Styrene and the total quantity was 29,337 mt. The collision occurred midships, well apart from the vessel's bunker tanks, rupturing the cargo tank containing the AN cargo. No pollution was caused during the incident as the burn rate was sufficient to account for the lost cargo. (well informed industry source)

Maritime Maisie is only the most recent case in a string of vessels which encountered problems at sea and where compliance with the IMO Guidelines on Places of Refuge for ships in need of assistance (2003) –addressing coastal States and owners/salvor’s obligations in place of refuge situations - seemed to be wanting and the duration until a place of refuge granted deemed excessive (International Union of Marine Insurance, 2014): on March 15 2012 the partly-laden 25,269 dwt parcel-chemical tanker *Stolt Valor* suffered an explosion and fire during tank-cleaning in the Middle-East Gulf, off the Saudi-Arabian coast. Salvors were engaged and after the fire was extinguished Owners/Salvors made place of refuge request to the closest littoral states, Saudi-Arabia, Qatar, Bahrain and Iran (Laruelle, 2013, p. 13). Calm waters were needed as the heavy mid-ship structural damages threatened the stability of the vessel. All requests were denied and no additional shore-side support offered (IMO, “Statement by Liberian Delegation”, pp. 211-213). In its fragile state, salvors managed to lighten cargo and bunkers at sea and the vessel was eventually permitted to proceed to Asry Shipyard, Bahrain, for scrapping (“Safety at sea remains key focus”, 2012). Just two months later, on July 14 2012 fully cellular 6,750 TEU containership *MSC Flaminia* suffered a cargo hold fire and explosion in the middle of the Atlantic with three fatal injuries (Bundesstelle fuer Seeunfalluntersuchung, 2014, p. 11). After salvors arrived on scene, fought the fire and gained control of the ship they chose the best course of action was to position her off the entrance of English Channel and to seek refuge from UK, Ireland, Spain, Portugal, France, Belgium, Netherlands, and Germany, the flag-state. A number of coastal States refused to accede to a request for a place of refuge – some on reasonable technical or safety grounds, others without even undertaking preceding considerations such as a through risk analysis (Bundesstelle fuer Seeunfalluntersuchung, 2014, pp. 166-169). The ship eventually arrived in its designated place of refuge, Jade-Weser Port, Wilhelmshaven, Germany, almost two months after the initial incident.

Just like *Maritime Maisie*, *Stolt Valor* and *MSC Flaminia*, since the beginning of shipping, ships occasionally run into distress situations which force them to abandon their

voyages to seek shelter in nearby calm waters, anchorages, roadsteads and ports where shore-based support can be brought to bear on the casualty and the vessel can be stabilized. Such a place is a so-called “place of refuge” (POR). This operation sounds straightforward and simple; however the decision-making and the transfer of a distressed vessel into places of refuge have arguably become complex and controversial during the 20th and 21st centuries. Legal, technical, social, environmental and economical changes worked in conjunction to gradually undermine a State’s willingness to offer refuge. Particularly the legal aspect is intricate. According to Noyes ‘the law concerning places of refuge, and more generally concerning ships in distress, is undoubtedly complex’ (Noyes, 2008, p. 137). Arguably this complexity arises partly from the fact that a distressed ship’s legal right to enter a place of refuge had never been formally codified but rather falls in the remit of customary law. The legal uncertainty is amplified by the many angles of law, international-, regional-, domestic-, and soft-law guidelines, which have something to say on the issue without however creating an assured legal framework that is accepted by all stakeholders. Aside from the legal component, the multitude of stakeholders involved in place of refuge situations certainly contributes to the complexity and difficulty in reaching amicable decisions. There are principally two “contenders” with possibly opposing interests: the shipping industry at large (composed of inter alia ship- and cargo owners shipmanages, salvors, marine insurers, flag-states) which seeks to rescue mariners, ship and cargo and the coastal State (composed of inter alia port authorities, environmental authorities, coastal communities), which beyond mariners, ship and cargo also has to take into consideration potential health-, environmental-, and economical- risks to coastal communities by admitting a distressed and possibly dangerous vessel into a place of refuge. However, by denying a vessel the opportunity to enter its waters to perform repairs in relative safety or by delaying a decision until no other options remain can actually increase a coastal State’s risk. This was clearly demonstrated in the widely-reported maritime casualties *M/T Erika* (1999), *M/T Castor* (2000) and *M/T Prestige* (2002) which involved tankers developing structural failures at

sea. An environmental catastrophe was narrowly avoided with the *Castor*, however the *Erika* and the *Prestige* both eventually broke apart and sank, causing wide-spread contamination of coastal States in Europe. All three incidents had in common that a request for provision of a place of refuge had been refused, ‘ultimately decisions that resulted in significant adverse environmental and economic consequences’ (US Guidelines for Places of Refuge Decision-making, p. 5). Following these incidents, in 2003 the IMO adopted resolutions A.949(23) *Guidelines for places of refuge for ships in need of assistance* (hereafter “Guidelines”), and A.950(23) *Maritime Assistance Services*. The Guidelines provide shipmasters, shipowners/managers, salvors on the one hand and coastal States on the other with a framework that allows them to respond effectively and complementary to a place of refuge situation. The purpose of the *MAR Resolution* is to establish a focal point of contact in coastal States which as an intermediary receives and channels communication between the casualty ship and coastal States authorities involved in the place of refuge decision-making. Notably, the Guidelines expressly recognize that a distressed vessel is often best helped when offered a place of refuge where its situation can be stabilized. This recognition is clearly with having the severe consequence of *Erika* and *Prestige* in mind. Although catastrophes on par with *Erika* and *Prestige* were avoided and especially no environmental pollution occurred, the recent incidents of *Maritime Maisie*, *Stolt Valor* and *MSC Flaminia* clearly point to flaws in the current system of dealing with ships in need of a place of refuge – and this despite the existence of Guidelines. From the particular location of these incidents it is also obvious that the flaws cannot be attributed to one particular region, but it indeed appears to be a global problem. In the author’s opinion further analysis of the current place of refuge system is therefore warranted and the specific research objective of this thesis is outlined hereunder.

Research Objective

Accepting the legal uncertainty attached to places of refuge and further assuming the improbability that a legal common-ground can be found due to the possibly opposing interests between the shipping industry and the coastal State, the author will instead of construing places of refuge as a legal problem look at it as a management issue. The Guidelines on places of refuge for ships in need of assistance are central to this approach since they provide a practical framework how to manage place of refuge casualties. Crucially, the Guidelines argue that there is presently no international requirement for a State to provide a place of refuge. To better understand this important departure from the refuge custom and coastal States concerns, the first objective is to systematically discuss the responsible developments that occurred in the 20th and 21st centuries and undermine(d) the refuge custom. This section will also demonstrate the safety, environmental and economical concerns of coastal States when giving refuge. In the author's opinion, more than ten years experience with the guidelines has revealed certain weaknesses in the guidelines themselves or pointed to areas where improvement is needed. Particular problems are discerned in casualty response systems, especially decision-making. Therefore, the second objective is to critically review the Guidelines in the context of older and recent place of refuge cases and to evaluate industry opinion which point to flaws in the present system. As a third objective, recommendations how place of refuge assessment and decision-making could be improved will be proposed. The author believes refinement of the guidelines is a practical solution because the guidelines explicitly provide for review and amendment when appropriate.

Limitation of the study:

The focus of this thesis rests on determining effective casualty response and how the places of refuge system in general and the Guidelines in particular can be improved. The author will not enter into the legal discussion whether or not a right to a place of refuge exists. This fundamental question is covered in depth elsewhere such as in the works of van Hooydonk (2004), Chircop & Linden (2006), Morrison (2011), and in WMU dissertations of Li Danhua (2005), Li Maofeng (2006) and Yang (2006). Places of refuge cases typically trigger a comprehensive response involving a multitude of stakeholders, resources and assets. For example salvage, oil-spill response, coastal State interventions, health and safety threats to coastal communities and environmental and economical damages in or in the vicinity of the place of refuge including the associated aspects of liability for such damages, compensation and insurance can all be factors in a place of refuge case. These issues are also closely related but cannot all be covered. Whilst the issues of salvage, coastal State response incl. effective risk assessment and decision-making will be addressed, environmental pollution, oil-spill response and environmental law aspects will not be covered. Also the issue of adequate compensation for damages ensuing from offering places of refuge including responses and solutions from the insurance industry will not be discussed. Several studies on these issues exist, for example Rosaeg & Ringbom (2004), Vanneuville (2005) and Donner (2006).

Methodology

The study involves both primary and secondary materials in a number of fields, especially industry publications and maritime newspapers such as Lloyd's List and Tradewinds, scientific literature such as ship casualty investigation reports published by Flag-States and Classification Societies and legal literature and cases. To properly

understand current international methods of dealing with the issue of places of refuge, review of primary resources has been conducted. This review includes the IMO Guidelines on 1) *places of refuge for ships in need of assistance* (2003), 2) *Maritime Assistance Services* (2003) and 3) *on the control of ships in an emergency* (2007), but also review of national place of refuge guidelines/contingency plans from a number of maritime States. Due to the relative scarcity² of existing data and information on the more recent maritime casualties *Stolt Valor*, *MSC Flaminia* and *Maritime Maisie*, direct contact has been established via email and skype telecommunication with shipmanagers, salvors, classification societies, government authorities and industry organizations in order to generate more reliable information and hear contemporaneous opinion from the industry. A few of these industry participants requested anonymity. Therefore no names and organizations will be mentioned at all. Anonymity and confidentiality are strictly adhered to and guaranteed in order to avoid any economic harm and other unforeseen consequences. Furthermore, any information which has been received from the participants will be used solely for this thesis.

Structure

Chapter II provides a brief overview of the refuge custom to show its long tradition and its development as an accompaniment of navigation. This is followed by a brief explanation of customary law as opposed to codified law. Changes in state practice can lead to a different perception of customary law and thus alter the custom over time. It is argued that this has and is happening to the refuge custom and that a transition is underway with a gradual departure from the refuge custom. The first section of Chapter

² At the time of writing the incident report of Hong Kong, the flagstate of *Maritime Maisie*, had not been released. The incident report of Liberia, flagstate of *Stolt Valor* has been released but is not publically accessible.

III supports this argument and examines the 20th and 21st century developments and changes which conjunctively have changed the perception of the refuge custom and effectively undermined it thus giving rise to an alternative approach – the state’s “absolute right of refusal”. The second section of Chapter III critically examines these developments and this alternative approach. Using the case of the *Prestige* it is shown that coastal States can actually increase their risks if they flatly refuse granting refuge in all situations. Chapter IV narrates the response at IMO, which following *Erika*, *Castor* and *Prestige* had discerned places of refuge as a topic requiring urgent action: the new compromise, the IMO Guidelines on Places of Refuge are introduced. Its character as a framework for balancing the interests of the coastal State and the shipping interests is explained and its salient provisions listed. The second section of Chapter IV critically assesses the Guidelines, shows its major shortcomings and introduces the UK’s *SOSREP* national response system as a model for sound decision-rationalization. The first section of Chapter V surveys the places of refuge regime after the adoption of the Guidelines. It is argued that whilst there has been some good progress with implementation of the Guidelines, there still appears to be a disconnect between what is talked about and reality. The reasons for this are considered. The second section of Chapter V covers what general and specific lessons can be drawn from the recent cases of *Stolt Valor*, *MSC Flaminia* and *Maritime Maisie* and how these are challenging the places of refuge regime. Finally Chapter VI proposes recommendations how the Guidelines in particular and the place of refuge system in general can be improved. A conclusion synthesizes the findings of the thesis.

CHAPTER II: THE REFUGE CUSTOM & CHANGING CUSTOMARY LAW

The Refuge Custom

No matter how uneventful the majority of merchant ships normally complete their voyages, situations arise when ships face problems. The cause of such problems can be various: storms, loss of propulsion, loss of steering, faulty navigation, collisions with other ships and objects, structural failures, lack of vital provisions, or similar situations whereby assistance or repairs are needed. Such problems are in no way isolated to the past, international shipping continues to be risky in the 21st century, as the incidents of *Stolt Valor*, *MSC Flaminia* and *Maritime Maisie* illustrate. Today and in historic times, common sense and good seamanship suggest that when such problems occur, a vessel is best advised to seek a nearby place of refuge (such as a port, sheltered waters, anchorage, roadstead) where the damage can be properly assessed and shore side support can be rendered if necessary to support the resources available onboard as opposed to remain on the high seas and deal with the problem there in isolation. Therefore there was, at least historically, nothing surprising or controversial about granting such vessels a place of refuge. As Chircop (2006) says, ‘the right of refuge was in a sense incidental to or an extension of the fundamental right of international navigation’ (p. 43). Accordingly, a

place of refuge can be characterized as a necessary accompaniment for international shipping. Historically, the distressed vessel could head directly towards the nearest port or sheltered waters, there were typically no procedural requirements which first had to be addressed and neither was the consent of the coastal State necessary: ‘the situation of necessity was justification in itself’ (Chircop, 2006, p. 43). The reason is obvious – an incident at sea can often deteriorate progressively and hence time is of the essence. Bureaucratic procedural requirements can hamper effective casualty response. Historically therefore, the granting of a place of refuge was not specifically regulated. In the absence of modern communication, regulation involving procedural requirements would have been difficult anyways. Once in the port/place of refuge, the distressed ship’s situation was also not exploited. To the contrary, it was treated with particular goodwill. Based on historical records, codes and treaties we know that at least from the ancient Greeks up until contemporaneous times it was the custom and practice to receive a distressed ship ‘with all kindness and humanity and to provide all friendly protection’ (Constantinou, “n.d.” p. 2). The distressed ship had involuntarily entered the port to seek refuge and therefore it was deemed unjust to take advantage of its position, for example by charging local taxes and levies, unless the ship broke cargo. According to van Hooydonk (2004) the position in international law is ‘that the local state shall not take advantage of the ship’s necessity’ (p. 408). Without doubt, aspects of the refuge custom are still visible today. For example the *National Places of Refuge Guidelines of Australia* (2009) clearly refer to it: ‘under longstanding maritime tradition, and the practice of good seamanship, a ship’s master faced with a maritime casualty, *force majeure*, or some other operational situation may seek a place of refuge’ (p. 5). However, because the refuge custom falls into the remit of customary law as opposed to having been formally codified, today it arguably lacks the wide acknowledgment and respect it previously enjoyed. This will be explained in more detail in the next section and in Chapter III.

Customary Law and the Refuge Custom

Through codification, the law(s) referring to a particular subject(s) within a particular jurisdiction are collected and laid down in an authoritative work such as a code. At the international level, international agreements and conventions can be considered representatives of codified law. The benefit of codification is the restatement of the law in a written, authoritative form which can be referred to by parties and thus contribute to establish legal clarity. In addition, changes to the law can only be exercised through formal processes which clearly establish the end and starting points of the amended law. As Chircop (2006) shows, the refuge custom – even though it has been practiced for centuries – has “escaped” codification (pp. 163-231). The reasons for this are not clearly known but it has been speculated that the whole process of providing refuge was taken for granted, almost something natural that does not require regulation through specific laws. Accordingly the legal foundation of the refuge custom remained customary as opposed to codified law. Nevertheless, customary law can be highly authoritative provided that it is unchallenged and practiced over a long period (Chircop, 2006, p. 229). When challenged by a change in state practice, however, customary law itself can change since ‘it is responsive to changing needs as expressed by state practice’ (Chircop, 2006, p. 229). Pursuant to D’Amato, ‘what may be perceived illegal might in fact constitute the seed for a new rule’ (Chircop, 2006, p. 222). The trouble with customary law when challenged and in a process of transition is that precisely because it is not codified there is no formal amendment process and therefore an unambiguous end and starting point of the new/amended custom does not exist: ‘if needs change, there can be a process of counter-practice that may lead to uncertainty for an indefinite period of time’ (Chircop, 2006, p. 229). Only once a sufficient number of States, with a wide geographical coverage, have replaced an old rule and practice the new one in unison for a considerable period of time, can it be possible to argue that customary law has definitely changed. As Chircop (2006)

explains, ‘the critical mass and universality needed to substitute a new for an old rule are significant’ (p. 229).

In the author’s opinion it appears that today we are witnessing a gradual departure from the refuge custom as States’ perception about, and practice on, maritime casualties seeking refuge, has changed. We have seen already from *Stolt Valor*, *MSC Flaminia* and *Maritime Maisie* that today vessels still seek for and require places of refuge. But today such vessels are often viewed with suspicion rather than goodwill by the coastal State which has been requested to provide refuge. No longer does the decision to provide access seem to be natural and straightforward. The next chapter considers developments and changes during the 20th and 21st centuries which conjunctively have changed the perception and practice of the refuge custom and effectively undermined it.

CHAPTER III: THE REFUGE CUSTOM UNDERMINED – 20th & 21st CENTURY DEVELOPMENTS

According to van Hooydonk (2004) the state practice today of denying access does not conform well with the old refuge custom, indeed due to repeated refusals, ‘the general practice of states (*usus*) has changed and the conviction that there is a legal duty to grant access (*opinion juris*) has been abandoned by states’ (p. 415). These changes in state practice have commenced in the 20th century and are continuing today. According to Murray (2002) ‘international shipping has changed so dramatically in the last fifty years that simply forcing coastal states to accept any vessel in distress is no longer viable’ (p. 7). In this section the factors and developments which are responsible for this change will be systematically examined. For that purpose, the factors have been subsumed into seven broader categories: Developments in Shipping Industry, Ecological Factors, Casualty response, Developments in trade, Economical considerations, International legal developments, Modern media and communication

Developments in Shipping Industry:

It is safe to say that the increasing size of ships and the associated alleged increasing risk of pollution has become a major concern for coastal States responding to a refuge request. According to Mukherjee (2006) ‘indeed, if a refuge-seeking ship is a polluter, there is no doubt that the coastal State to whom request is made will be quick to assert the legal position that prima facie it has a right to refuse that ship entry into its waters’ (p. 272). The risk of pollution from ships in the age of sail was basically negligible. However when ships began carrying massive quantities of potentially hazardous materials it became clear that such ships could threaten the well-being of the sea itself and those who depend on its water, coast and produce (“Bonn Agreement,” 1969). The development of dedicated oil tankers following the discovery and large-scale exploitation of oil fields in Saudi Arabia and the Gulf States in the late 1940s increased the potential of massive pollution. (“Tanker Chartering,” 2011, pp. 1-2). Witte (2008) argues that particularly the advent of VLCCs and ULCCs in the 1970s following the Suez Crisis resulted in a dramatic shift in the character and scale of risk. Fear of “sacrificing” a place of refuge to significant pollution may motivate a coastal state to reject a refuge request of large tankers (Linden, 2006, p. 66). Notably, economies of scale³ in ship-design are not isolated to tankers. Today the objective of cost reduction has permeated all types of ships through the concept of economies of scale, for instance fully cellular container ships.

³ Economies of Scale in ship-design: total cost advantages obtained by increasing ship capacity which allows fixed costs to be spread over greater quantity of revenue creating space.

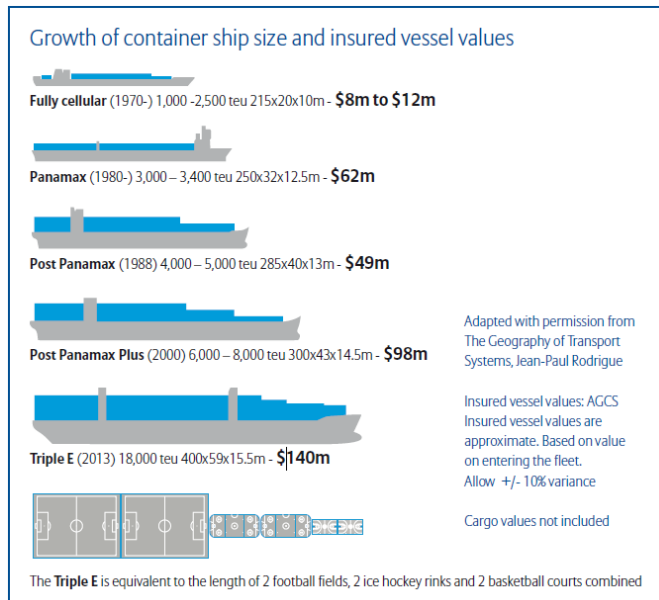


Figure 1: Growth in container ships and insured values 1970-2013
Source: Allianz (2014). Safety & Shipping Review 2014.

As seen in Figure 1, containerships have become larger and larger. Large containerships with high-powered engines also require higher quantities of Heavy Fuel Oil (HFO) which is highly viscous and more difficult to clean up than crude oils or even products of much lighter hydrocarbon fractions. Thus the pollution potential has apparently moved beyond “only” tankers. Practically this is illustrated by the salvage of fully cellular containership *MSC Napoli* in 2007 where the *SOSREP*⁴ recognized a significant pollution risk due to the vessel’s 3,500 mt of HFO (Shaw, 2013, p. 43). Pollution aside, the economical consequences to ports resulting from blockage of entries to ports, fairways, berths or terminals, not to mention wreck-removal should a vessel founder, have been increased by economies of scale in ship-design.

⁴ UK’s key figure involved with salvage and places of refuge decisions. *SOSREP*’s role is to represent the Secretaries of State for the Department for Transport (in relation to ships) and for the Department of Energy and Climate Change (in relation to offshore installations) by removing or reducing the risk to safety, property and the UK environment arising from accidents involving ships, fixed or floating platforms or sub-sea infrastructure (Department for Transport, *SOSREP*). The *SOSREP* system will be discussed in more detail later.

Ecological Factors:

Arguably general environmental awareness is increasing around the globe as ecological problems are mounting and resources become scarcer. Oceans and coastal regions are not isolated from this. This is evident from increasing international and national environmental requirements which are becoming more demanding and tend towards zero-tolerance of spills into the marine environment. It is also evident from developments in salvage, where in the last two decades pollution defense has taken priority over property salvage, according to one commentator (Lacey, 2006). Contractual provisions in the LOF agreement (Lloyd's Open Form) such as the requirement on salvors while performing their services to 'use their best endeavors to prevent or minimize damage to the environment' illustrate this. Because in the majority of maritime casualties salvors are the first line of defense, this development is important in the context of places of refuge (POR). Especially in POR situations do environmental concerns come into sharp focus: according to Richie (2006) during the 20th and 21st centuries the concept of places of refuge 'has been given additional application in response of the fear of risk of pollution' (p. 90). As has been shown already, the risk of pollution has grown due to the developments in ship size so far that 'environmental concerns have taken on a significance that overshadows any nascent right of access' (Morrison, 2011, p. 82). Actual tanker casualties causing significant pollution, as can be seen from Table 1 especially during the 1970s, 1980s and 1990s, illustrate the potential risk to the environment in places of refuge.

Table 1: Major oil spills since 1967 (quantities rounded to nearest thousand)

Source: ITOPF (2013). Oil Tanker Spill Statistics 2013

Position	Shipname	Year	Location	Spill size (tonnes)
1	ATLANTIC EMPRESS	1979	Off Tobago, West Indies	287,000
2	ABT SUMMER	1991	700 nautical miles off Angola	260,000
3	CASTILLO DE BELLVER	1983	Off Saldanha Bay, South Africa	252,000
4	AMOCO CADIZ	1978	Off Brittany, France	223,000
5	HAVEN	1991	Genoa, Italy	144,000
6	ODYSSEY	1988	700 nautical miles off Nova Scotia, Canada	132,000
7	TORREY CANYON	1967	Scilly Isles, UK	119,000
8	SEA STAR	1972	Gulf of Oman	115,000
9	IRENES SERENADE	1980	Navarino Bay, Greece	100,000
10	URQUIOLA	1976	La Coruna, Spain	100,000
11	HAWAIIAN PATRIOT	1977	300 nautical miles off Honolulu	95,000
12	INDEPENDENTA	1979	Bosphorus, Turkey	95,000
13	JAKOB MAERSK	1975	Oporto, Portugal	88,000
14	BRAER	1993	Shetland Islands, UK	85,000
15	AEGEAN SEA	1992	La Coruna, Spain	74,000
16	SEA EMPRESS	1996	Milford Haven, UK	72,000
17	KHARK 5	1989	120 nautical miles off Atlantic coast of Morocco	70,000
18	NOVA	1985	Off Kharg Island, Gulf of Iran	70,000
19	KATINA P	1992	Off Maputo, Mozambique	67,000
20	PRESTIGE	2002	Off Galicia, Spain	63,000
35	EXXON VALDEZ	1989	Prince William Sound, Alaska, USA	37,000
131	HEBEI SPIRIT	2007	Taeon, Republic of Korea	11,000

Although objectively spills such as the *Prestige* could actually have been minimized or even prevented precisely if a place of refuge had been granted in the first place⁵. The special character of the coastal zone has certainly contributed to coastal State's concerns over providing refuge. According to Linden (2006), only about four percent of the surface of the earth is made up of coastal zones thus representing a rare ecological area,

⁵ The *Prestige* case will be considered in greater detail throughout this thesis. On 13 November 2002 the 42,820 GT tanker carrying 76,972 mt of HFO developed a structural failure, began listing and leaking cargo some 30 km off Galicia, Spain. On 19 November, whilst under tow away from the coast the vessel broke in two and sank some 260 km west of Vigo, Spain. The breakup and sinking released an estimated 63,272 mt of cargo. Due to the highly persistent (i.e. viscous) nature of the cargo, released oil drifted for extended periods with winds and current, travelling great distances. The west coast of Galicia was heavily contaminated and oil eventually affected the north coast of Spain and France ("incident involving IOPC Funds, 2013, p. 12). The general industry consensus is that a spill of this magnitude could have been avoided had a place of refuge been granted: 'the provision of a place of refuge could well have resulted in a much more favorable outcome and prevented the subsequent large scale pollution of a long stretch of coastline' (Bahamas Maritime Authority, 2004, p. 81). This opinion is also endorsed by the legal advisor of the International Salvage Union, Archie Bishop (Oil Pollution Liability, "n.d.")

some of which have species-rich marine environments such as coral reefs (p. 61). Coastal zones are however also magnets of immigration. Often, they provide for ideal settlement locations, attracting human immigration to the use of water for commercial activities such as ports, fishing, aqua farming, as well as for leisure activities (Linden, 2006, p. 62). Future population growth is likely to increase pressure on coastal zones making them even more susceptible towards and alert against environmental pollution. Remaining unpopulated areas are often – at least in densely populated small countries such as in Europe – natural habitats with special conservatory status. In the end there may simply be few suitable places of refuge available in the coastal zone where a vessel could be dealt with satisfactorily without causing any safety and pollution risks whatsoever.

Growing environmental awareness has also brought port operation itself into focus. Environmental friendly port operation is regulated by national laws as well private initiatives from the industry. The *Port Law of the People's Republic of China* (2004) Article 26 for instance prescribes that ‘a port operator shall, in accordance with the law and regulations concerning environmental protection, take effective measures to prevent and control pollution and hazards to the environment.’ It is safe to assume that similar national legislation exists in the majority of maritime States. At the same time, industry leaders such as Maersk are trying to reduce their ecological footprint through their entire logistics value chain which includes not only seaborne transportation and onwards logistics, but also ports/terminals through their APM terminals vehicle. Recently ports aspire to become “green ports” by working towards bringing improvements in water quality and other environmental performance indicators (Richie, 2006, p. 87). Port of Busan for instance recently has launched an initiative to offer discounts to “green” ships i.e. those they benchmark as having superior environmental performance (“Busan offers discounts,” 2014) Taken together, port laws and private initiatives of terminal operators reduce a port’s sympathy to accommodate a distressed ship which could jeopardize their “green” aspirations should it cause pollution within the area of the port.

Developments in Casualty Response:

In the past, to rescue human life at sea, the ship itself had usually to be saved and accordingly there was no controversy about providing refuge. To the contrary, the human factor was probably the most important rationale for providing refuge. Due to developments in technology such as long-range helicopters with operational ranges of up to 150 miles offshore (Bryant, 2013, p.1), Search and Rescue (SAR) has become much more effective. It is possible today to rescue mariners independent of the distressed vessel itself. Therefore developments in emergency response have undermined ‘the predominant humanitarian rationale for a right of access of vessels in distress to a place of refuge – a right often asserted to be existing in customary international law’ (Noyes, 2008, p. 137). According to Noyes (2008), this change has consequently helped to minimize the danger to humans, but has increased risk of damage from ships (p. 138). Contemporary court ruling and State practice clearly demonstrates this change in perception of the refuge custom: Justice Barr J in ruling the *Toledo*⁶ (1995) found that ‘the absence of any risk to human life excludes the most compelling reason in support of an application for refuge’ (Morrison, 2011, p. 137). Barr J went on to argue that ‘if safety of life is not a factor [for example if crew was airlifted], then there is a widely recognized practice among maritime States to have proper regard to their own interests and those of their citizens in deciding whether or not to acceded to any such request’ (Chircop, 2006, p. 218). Changing state practice which prioritizes the humanitarian aspect of the refuge custom was clearly demonstrated by Spain’s justifications in the case of *Castor* and *Prestige*: ‘its responsibility was primarily humanitarian, and that once the crew was rescued, which was the case [...] there remained no further coastal state obligation towards the ship’ (Chircop, 2006, p. 215).

⁶ In the *Toledo* the crew was airlifted off the ship which was then quasi abandoned to salvors and unsuccessfully sought refuge first in Ireland and then England where it was eventually scuttled

Considerations on effective oil oil-spill response are also crucial in refuge decision-making. As Richie (2006) explains

as a general rule, both the perception and the reality of an oil spill on economic, social and environmental grounds increases greatly with proximity to the coastal zone [...] all of which begs the questions, why bring a leaking tanker into shallow water close to the coastline (p. 82)?

In this view, remoteness from coastline is viewed as advantageous as it allows for natural processes on the high seas to eliminate or reduce spills and increases the available time to organize an effective response to prevent coastal pollution. Importantly from the perspective of the coastal state, towing a (leaking) casualty out also reduces the complexity of the problem by eliminating from the equation near-shore factors such as fishing, aquaculture, coastal habitats, recreation, commercial traffic, local currents and tidal effects etc. (Richie, 2006, p. 84). Accordingly, if a vessel is threatening to pollute near the coastline, a coastal State may be lead to believe acting reasonably if he tows the vessel out to the high seas.

Economical Considerations:

Economical considerations undermining the refuge custom are twofold. First, as a result of perceived greater health & safety and pollution risks, places of refuge, particularly large ports, are concerned suffering damages to infrastructure and facilities and resultant consequential losses. For instance in the case of *MSC Flaminia*, Le Havre justified its rejection of the vessel based on the incalculable risks and the location of the container-terminal within a large industrial area (Beckmayer et al., 2012, p. 2). Second, the designation of places of refuge requires significant investment to make them operative.

Coastal State budgets may not cover such investments. First of all man-power goes into pre-identifying suitable potential places of refuge and the creation of a respective inventory. Considerable costs can be occurred when some essential facilities have to be constructed in order to make such places really operational. According to Richie (2006), ‘irrespective of the type of natural coastline that might be designated, the extent and cost of creating facilities, equipment and staff in some type of standby system would be considerable’ (p. 87). This opinion is endorsed by Middleton⁷ (2009) who confirms that especially when states pre-designate places of refuge this can have potential implications for the State to provide extra protection to such sites and extra funding for response facilities (pp. 47-48). Cost-avoidance by preferring not to deal with places of refuge may therefore be an option to coastal States, especially if their fiscal basis and discipline are weak.

Developments in seaborne trade:

The environmental dimension of places of refuge and particularly the potential threat from large tankers has already been discussed. Arguably, the attendant growth of seaborne chemical trades increased pollution threats further but has especially raised health & safety concerns of coastal states. Seaborne chemical trade is undertaken by dedicated chemical tankers and within dangerous goods containers. Chemical tankers typically carry a range of cargoes as opposed to large crude oil tankers which typically carry 1-2 cargoes. Moreover, not many people are familiar with the wide range of chemicals, their potential hazardousness and exact effects on health and the environment. This complicates decision-making when a chemical tanker seeks refuge. Two recent cases, *Stolt Valor* (2012) and *Maritime Maisie* (2014) involved chemical tankers carrying hazardous cargoes. According to Banchemo Costa (2013) seaborne chemical trade has

⁷ Robin Middleton is the former UK SOSREP. In that function he dealt intimately with places of refuge. Accordingly his opinion carries some weight.

grown by a strong 4.9 percent y-o-y between 1995 and 2010 (p. 52). The increasing demand has been met by aggressive buildup of supply through newbuildings over the last decade: 1350 units were delivered in just five years from 2006-2010 (Banchero Costa, 2013, p.9). Chemicals are however also shipped via containers on fully cellular container ships. Approximately 15-20 percent of the total goods shipped by containers are classified as dangerous goods (Beckmayer et al., 2012, p. 2). Whilst the IMO addressed this topic with the *International Maritime Dangerous Goods Code (IMDG Code)* establishing mandatory requirements on how to ship dangerous goods in terms of packaging, stowage, classification and documentation of the cargo by shippers, problems persist. That these can even lead to maritime casualties and places of refuge situation was clearly demonstrated by *MSC Flaminia*⁸. Uncertainty over the actual state of the IMDG cargoes onboard – particularly what contents had mixed with fire water creating what kind of new compounds, what had combusted fully or partly, the possibility of re-ignition, toxic fumes etc. all played a role in the evaluation of the casualty as a significant health & safety concern and certainly prolonged the search for refuge (Shaw, 2013, p. 44).

International Legal Developments:

As has already been stressed, the legal situation of places of refuge is complex and not systematically covered in this thesis. Nevertheless, the London *Intervention Convention of 1969 (Intervention Convention)* will be considered here due to its direct relevance on place of refuge situations. The desirability of specific powers designed to enable government to intervene in the public interest when facing the threat of marine pollution

⁸ The initial fire and subsequent explosions onboard *MSC Flaminia* were likely the result of stowage of IMDG cargo close to heat sources due to inappropriate classification of these substances in the IMDG Code (Bundesstelle fuer Seeunfalluntersuchung, 2014, p. 117)

became clear following the *Torrey Canyon*⁹ incident in 1967 (Department of Transport, “n.d.” p. 4). This incident inspired the *Intervention Convention*. Article 1 allows a coastal State to intervene beyond the territorial sea, i.e.

to take such measures on the *high seas [emphasize added]* as may be necessary to prevent, mitigate or eliminate grave and imminent danger to their coastline or related interests from pollution or threat of pollution of the sea by oil, following upon a maritime casualty or acts related to such a casualty, which may reasonably be expected to result in major harmful consequence.

Clearly, the *Intervention Convention* is a very powerful tool which strengthens State sovereignty when a casualty threatens the coastal zone. Because the convention only covers intervention on the high seas, it is typically complemented by national laws which allow the same intervention in national waters including the exclusive economic zone, territorial waters and inland waters including ports. The 2009 *National Maritime Place of Refuge Risk Assessment Guidelines* of Australia for example explicitly make reference to national law - *The Protection of the Sea (Powers of Intervention) Act 1981* - which provides for state intervention in national waters (p.13). Absence of complementary national laws covering national waters would give rise to ‘absurd situations’ where the coastal state can intervene on high seas but may lose this power when the distressed ship for instance drifts into the territorial sea as van Hooydonk (2004, p. 417) explains. Where a ship that has made refuge requests poses health & safety threats or is or could become a polluter, a coastal state can rely on its responsibility to protect the coast and take whatever intervention measures deemed necessary, including refusing access or even destroying a vessel.

⁹ *Torrey Canyon* was bombed by the Royal Air Force to burn oil onboard which threatened the English coastline. This was justified by the British government claiming a situation of extreme danger and that the decision to bomb the ship had been taken only after all other means had failed (van Hooydonk, 2004 pp. 424-425)

Modern Media and Communication:

In the past, not only were coasts more scarcely populated than today, but also communication methods were incomparably more primitive. Today in an emergency the situation is rapidly “socialized” using not only traditional media channels but also smart phones and social media with the effect that decision makers quickly come under the spotlight. Whilst increased media attention can be healthy, leading to greater self-correction of the industry, it can also be counter-productive in effective casualty response: it can amplify the crisis that is already over the heads of decision-makers. Actual or perceived pressure from a multitude of different stakeholders¹⁰ can easily jeopardize clear, rational decision-making on technical grounds – something which is essential in the context of places of refuge and which will be covered in more detail in Chapter IV.

Summary and Critical Assessment:

The brief survey of the above factors demonstrates that in the modern context of shipping the threats it poses to coastal State interests are viewed fundamentally different from the past (Chircop, 2006, p. 219). On the one hand the risks from large tankers and seaborne chemical trade have allegedly grown. On the other hand, coastal zones today have been penetrated commercially, are heavily urbanized and therefore are more susceptible to damages. Further, in the event of damages, the economic stakes have increased. Legal

¹⁰ The number of stakeholder which can be affected by places of refuge situations is enormous. Just the number of potential “onshore” stakeholders taken into account in the USA is enormous, involving inter alia: federal and state natural resource trustees; federally recognized tribes; U.S. possessions, territories and commonwealths; foreign governments; State On-Scene Coordinators; Federal, State and local safety and health entities; Federal, State and local critical infrastructure entities; Federal, State and local security entities; Federal, State and/or local economic entities; Federal, State, and local agricultural entities; Local governments; Port authorities; Private landowners and business owners (NRT Guidelines for Places of Refuge Decision-Making, 2007, p. 23)

developments have facilitated decisive state intervention on the high seas and national waters. Advancements in SAR have broken the unity of mariners and ship in an emergency. Taken together, these factors undermine the refuge custom. State sovereignty over ports, coastal zones and national waters appears to be asserted much more offensively today than before. In terms of places of refuge the general conviction today appears to be that coastal protection is much better warranted by refusing access. Indeed, according to Morrison (2011) ‘security and safety concerns brought about in the early 21st century have increased the bases of refusal of entry of ships into port to the extent that it can no longer be argued that there is a general right of access’ (p. 82). This view is endorsed by the *Comite Maritime International* (CMI): ‘the right, according to customary law, for a vessel in distress to be granted a place of refuge no longer appears to be recognized by many states as an absolute right and has become clouded’ (Comite Maritime International, 2009). The fact that we today no longer speak about ports of refuge but places of refuge certainly illustrates that at least the access to ports has become much more difficult (Grey, 2013). The times when a ship in distress could steer to the closest harbor with all the attendant useful facilities appear to be over. In China for instance, the *Maritime Traffic Safety Law* Article 11 establishes the right of foreign flag vessels to enter national waters or harbors in the event of emergency, that right is however immediately qualified by the strict provision under Article 18 stipulating that ‘if the competent authority believes that a vessel presents a menace to the safety of a harbor, it shall have the right to forbid the vessel from entering the harbour or to order it to leave the harbour.’

In many ways however, the general conviction today that a coastal State’s protection is much better warranted by refusing as opposed to granting access, does not stand up to scrutiny: first, one has to be careful analyzing the general risk of pollution from large tankers. According to Witte (2008) such risk analysis is by no means straightforward, as larger vessels reduce the number of loading and discharging

operations and it is usually under berthing maneuvers and cargo operations that incidents occur most frequently. Second, the argument that economies of scale in shipping in general and in tankers in particular have exacerbated the risks to the extent that right of access is an anachronism and not to be encouraged is clearly proven wrong by recent experience with casualties:

recent incidents with the *Erika*, the *Castor* and the *Prestige* clearly demonstrate that in the light of modern environmental problems the right of access should be encouraged. The interest of the environment are in most cases better served by granting access rather than sending the ship in distress back out to sea (van Hooydonk, 2004, p. 426)

Ostensibly good reasons for towing out are often debunked by practical considerations: First, towing out completely disregards the impact on the offshore marine environment should pollution occur. Second, towing out of course increases the time until a spill will actually be combated. Since casualties at sea deteriorate quickly, a delayed response may prove exactly counter-productive. Third, moving/towing a vessel can increase the geographical range of the impact of the oil and the range and extent of potentially vulnerable habitats (Richie, 2006, p. 86). Fourth, the process of towing itself can lead to further deterioration of the casualty at sea. In the case of *Prestige*,¹¹ the actual towing process coupled with the direction of the tow further out into inclement weather with dynamic waves is believed to have caused the final breakup of the ship and the resultant pollution of the coast. Finally, pollution of vast stretches of the Spanish coastline subsequent to the sinking of the vessel ca. 130 nm offshore further illustrates that by

¹¹ Classification society ABS concluded their analysis as to the causes of the sinking of *Prestige* as follows: ‘sustained dynamic wave loading for the period while the *Prestige* was under tow subsequent to the initial casualty was the direct cause of the ultimate disintegration of the hull structure and subsequent sinking of the vessel’ (Ship Structure Committee, “nd”, p. 6)

towing out the effects of pollution on the coastal zone were not avoided in this incident, far from it. Also the current position that the principal humanitarian rationale for providing access no longer applies due to developments in more effective SAR is in fact invalid and contradicted by the fact that assistance must be given to the ships¹² themselves (van Hooydonk, 2004, p. 426). The significant powers afforded to coastal States under the *Intervention Convention* can only be used in extraordinary cases. The order to tow a vessel out, as opposed to granting refuge, can only be given when clear grounds exist. In other words, the risk associated with the approach of a ship in distress must be exceptionally specific and serious before a state may intervene on the high seas. It cannot be argued that the *Intervention Convention* provides a general legal basis for denying access to ships in distress (van Hooydonk, 2004, p. 424). Interestingly, *the Places of Refuge Guidelines of Australia* (2009) also qualify the usefulness of intervention since

a pro-active approach whereby the relevant agency seeks to provide any necessary assistance to assist as master and/or a salvor to achieve a desired outcome is more likely to be productive rather than using the intervention powers as a measure of last resort after salvage attempts, etc, have failed (p. 14).

Objective assessment of all of these factors demonstrated that while indeed the bases for refusing access to a vessel requesting refuge have become higher, a coastal State is often still better advised to take a pro-active approach and grant refuge as opposed to “knee-jerk” refusals. As Mukherjee (2006) argues, ‘the perils of denying refuge, as demonstrated in numerous incidents, is often more environmentally damaging than allowing refuge’ (p. 297). It has to be emphasized that a place of refuge does not have to

¹² Art. 98. 1 (c) LOSC obliges every state to require masters, after a collision, to render assistance ‘to the other ship, its crew and its passengers’

be a port in all circumstances. Sometimes, simply sheltered waters closer to shore are sufficient to allow salvors to respond effectively to a casualty. In many cases, the ability to move the vessel to a safe, sheltered location is the most important single contribution that a port or coastal authority can make but this should be done in the full understanding of the risks that attach to the damaged condition of the ship (SIGTTO, 2003, p.1). Thus, a coastal State may indeed have compelling reasons to refuse access to any sort of place of refuge. It should be obvious by now that what is really required is unemotional, objective risk-assessment on technical grounds and a solid framework for decision-making in order to find the best course of action. This will be addressed in the next Chapter.

CHAPTER IV: EXAMINATION AND ASSESSMENT OF THE IMO GUIDELINES ON PLACES OF REFUGE (2003)

International Response:

The loss and the pollution caused by the *Prestige* had demonstrated clearly to the IMO the urgency to find an international framework addressing the problem of POR. Work on such had already begun by IMO subcommittees following the *Erika*¹³ and the *Castor*¹⁴ incidents. In particular the treatment of the *Castor* by the coastal States of the Mediterranean was received with wide condemnation from the industry and called for

¹³ The *Erika* was a 19,666 GT tanker which broke into two in severe weather conditions in the Bay of Biscay some 60 nm off the coast of Brittany, France, on 12 December 1999 whilst underway to a port of refuge, Donges, France. She carried a cargo of 31,000 mt of HFO, a highly persistent and viscous cargo, of which some 19,800 mt were spilled at the time of the incident. Ca. 400 km of shoreline was affected by the oil (“Incidents involving IOPC Funds”, 2013, p. 6). Unbeknownst to the Master of the *Erika*, the harbour master of Donges had refused permission for the vessel to enter the port of Donges (Constantinou, p. 6). Whether or not the vessel could have been preserved and the spill prevented had a place of refuge been granted is disputed (Constantinou, p. 6). According to one observer the incident might have been avoided by engaging immediately a professional salvor, slowing down the ship, navigating in a way that protected the hull from stress and heading to a sheltered spot around the French coast (Tsavlis, 2001, p. 4)

¹⁴ The *Castor*, a product tanker carrying 29,500 mt of unleaded gasoline developed a crack in way of her cargo tanks across the main deck during rough weather 25 nm off Melilla on the Moroccan coast in the Mediterranean Sea on 31 December 2000. Salvors were engaged and refuge requests made to eight coastal states, incl. Morocco, Spain, Algeria, Tunisia, Gibraltar, Greece, Malta all of which refused the tanker refuge in the course of the operation. This complicated and endangered the operation significantly, as salvors had to lighten the vessel’s cargo and bunkers at sea where the vessel faced difficult situations incl. a violent storm of force 10 with winds close to Beaufort 12 a near-miss situation with another vessel which passed over the towline. Without causing pollution, operations were completed during February and the vessel delivered back to her owners (Tsavlis, 2001, pp. 1-7).

IMO intervention. These incidents had shown that the problem was of international nature and hence required an international response. It was clear that this intervention fell into the ambit of the IMO. In May 2011 just months after the *Castor* incident, then Secretary General of the IMO William O'Neill justified IMO intervention as follows:

I Intervened... to insist that the issue should be tackled as a matter of international concern by IMO. It is simply not acceptable that a damaged ship should be left at the mercy of the weather for as long as 35 days with the distinct risk that cargo would be spilled and cause environmental damage. Governments, the shipping industry and salvors all need formal guidelines on how to proceed in these circumstances and IMO is the obvious place to address the problem” (Morrison, 2011, p. 142)

Importantly, before drafting of the guidelines could proceed, IMO had to consider and clarify a fundamental question: was there an obligation on coastal States to provide refuge? On the one hand IMO recognized that state practice had changed for the reasons outlined in Chapter IV. On the other hand, the importance of providing places of refuge to avoid even greater damages had clearly been shown by maritime casualties and this was also fully appreciated, as can be seen by the quote of Mr. O'Neill. Generally speaking, IMO chose to tread a middle way which van Hooydonk (2004) has called the “balancing-interests” theory: this approach basically tries to reconcile the (often fundamentally opposed) interests of the casualty with that of the coastal State asked to provide refuge. Growing international acceptance of this approach was already visible during the 1990s. In the *Long Lin*, the judge proposed a weighting and risk-assessment procedure whereby the risks involved if a ship remains at sea should be compared against the risk that it would pose to the place of refuge and its environment:

Under international law the respondent may not go so far as to prevent a ship which is in distress and requires repairs from entering territorial and coastal waters and seeking safety in a port or elsewhere along the coast. In such a case, the seriousness of the situation in which the ship finds itself should be weighed against the threat which the ship poses to the coastal state. (Morrison, 2011, p. 136).

The IMO *Legal Committee* which was tasked by IMO to assess the practicability of guidelines fully endorsed the balancing-interest approach, giving the following advice:

it would seem quite possible for IMO to develop the concept of places of refuge in a manner which retains the proper and equitable balance between the rights and interests of coastal States and the need to render assistance to vessels which are damaged or disabled or otherwise in distress at sea. (Morrison, 2011, p. 151).

As we shall see the balancing-interest theory permeates the Guidelines in the form of risk assessments to be conducted by masters, salvors and coastal states.

Salient Provisions of the Guidelines:

In December 2003 the IMO adopted *Guidelines in Places of Refuge for Ships in Need of Assistance*, complemented by Resolution A.950(23) *Maritime Assistance Services (MAS)*. The Guidelines essentially provides in short and succinct format a framework that helps those involved in POR situations to rationalize decision-making on whether to grant or refuse access. In so doing it builds upon objective risk-assessments which are to be performed both by the casualty/salvors and the coastal state requested to grant refuge.

The scope of the Guidelines is narrow. The Guidelines treat the rescue of crew onboard distinct from the rescue of the ship itself. Whilst the former falls into the scope of SAR, the latter is the subject and objective of the Guidelines. This clearly demonstrates the finding made in Chapter III, that development in SAR has effectively disconnected the unity of crew and ship. The objective of the Guidelines is to provide coastal States on the one hand and shipmasters/owners/salvors on the other, with a common framework for assessing and evaluating the situation of ships in need of assistance to enable them to respond effectively and complementary. Obtaining complementary action however is difficult, given that bringing a ship into a place of refuge may endanger the coastal State's environmental, economic and security interests (IMO POR Guidelines, 2003, p. 4). This dilemma is clearly demonstrated by the general question at the start namely

what to do when a ship finds itself in serious difficulty or in need of assistance, without however, presenting a risk to the safety of life of persons involved. Should the ship be brought into shelter near the coast or into a port or, conversely, should it be taken out to sea? (IMO POR Guidelines, 2003, p. 4).

Two general observations can be made from this question. First, the weighing between the interest of the vessel and the interest/safety of the coastal State strikingly demonstrates the "balancing interest" approach. Second, it lists three courses of actions how a coastal state can respond to refuge request. Crucially, the Guidelines stipulate that the latter option – leaving/taking the vessel out to sea – is the least promising since

in some circumstances, the longer a damaged ship is forced to remain at the mercy of the elements in the open sea, the greater the risk of the vessel's condition deteriorating or the sea, weather or environmental situation changing and thereby becoming a greater potential hazard (IMO POR Guidelines, 2003, p. 4).

Certainly the experiences with the *Prestige*, which deteriorated significantly only after being send away from the Spanish coast into more severe conditions and being pushed at up to 6.5 kn into a head using the main engine for several hours (Bahamas Maritime Authority, 2004, p. 81), contributed to this view. Noting that ‘in fact it is rarely possible to deal satisfactorily and effectively with a marine casualty in open sea conditions, the Guidelines clearly prescribe that the best course of action in most circumstances will be instead to bring the vessel into a place of refuge: ‘the best way of preventing damage of pollution from its progressive deterioration would be to lighten its cargo and bunkers; and to repair the damage. Such operation is best carried out in a place of refuge.’ This prescription seems to be based also on the experiences of the *Prestige*, but mainly the *Castor*, where salvors were forced to lighter the ship’s cargo and bunkers at sea. Such is an inherently risky operation in sheltered waters, not to mention in the open sea. Arguably the refusal to provide sheltered waters did not only put salvors into a much more dangerous situation, but also increased the risk of environmental pollution. As Tsavlis (2001) reminds, the incident of the *Castor* ‘unfolded in the Mediterranean, a closed sea – how far did the authorities think they were protecting their people from pollution (p. 3)?’ Appreciating that providing refuge may severely threaten the area of refuge, the Guidelines continue to express nevertheless the advantages of limiting pollution by providing refuge: ‘taking a ship to place of refuge would also have the advantage of limiting the extent of coastline threatened by damage or pollution (IMO POR Guidelines, 2003, p. 4).’ This clearly shows the potential tradeoffs encountered in POR decisions. Establishing the right course of action for each case shall therefore be accomplished through risk-assessment which notably has to be rational, unemotional and objective. The Guidelines are quite explicit about that: ‘the coastal States should recognize that a properly argued *technical case* based on a *clear description* of the state of the casualty would be of great value (emphasis added) (IMO POR Guidelines, 2003, p. 4).’

Decision rationalization through risk assessments:

The need for and reasonableness of proper risk assessment runs like a common thread through the Guidelines: masters and salvors are expected to evaluate the situation and to undertake a risk assessment by estimating the likely consequences of the damaged ship under four kinds of responses 1) the ship remains in the same position, 2) the ship continues its voyage, 3) the ship reaches a place of refuge, 4) the ship is taken out to sea. In doing so, the Master/salvor shall for each response identify the type of assistance required from the coastal state. Communication between vessel/salvors and coastal state's authorities is to be channeled via the coastal states Maritime Assistance Service¹⁵ (MAS) in order to have a focal contact point and clear reporting. The MAS should inform the vessel/salvors with facilities that it can make available with a view to assistance or admittance of the ship to a place of refuge. Further, 'subject, where necessary, to the coastal state's prior consent, the shipmaster and the shipping company concerned should take any necessary response actions.' This may for example include signing a salvage or towage agreement in order to deal with the ship's situation.

Based on the information/risk assessments received from the vessel/salvors, the Guidelines require coastal States to continue further evaluation and assessments in order to rationalize the granting/refusal of a place of refuge. Three assessments, each at different stages in the casualty response should be performed:

first, a generic, pre-incident evaluation of potential suitable places of refuge along the State's coast has to be performed. Such evaluation shall take into account natural

¹⁵ IMO Resolution A.950(23) adopted December 2003 requires Member States to establish a Maritime Assistance Service. A MAS is a coastal States focal contact point dealing with ships involved in incidents not involving the rescue of persons, such as POR incidents. In a POR situation, the MAS functions as intermediary receiving information from the casualty/salvors and channeling it to relevant coastal authorities involved in POR decisions. Likewise, coastal authorities are required to go through MAS to communicate with the casualty/salvors. This establishes a clear reporting channel and avoids duplication. MAS can but do not have to have the authority to grant/refuse access to a place of refuge.

analysis factors¹⁶ such as the prevailing winds in the area, whether the POR is guarded against heavy winds and rough seas, prevalent tides and tidal currents, bathymetry incl. the minimum and maximum water depths in the place of refuge and its approaches and the condition of the seabed regarding the possibility to ground/beach the ship etc. Besides natural factors, also environmental and social factors¹⁷ shall be taken into account, such as nearest distance to populated areas, designated environmental areas, sensitive habitats and species, fisheries, economic and industrial facilities and amenity resources and tourism. This shall be complemented by an analysis of contingency planning factors¹⁸ available such as available response equipment and facilities, possibility of containing pollution in the place of refuge, evacuation facilities etc. The rationale for this is that great value lies in preparation and that a properly created inventory of suitable places of refuge can be rapidly utilized in an incident and checked and compared against the requirements of the actual casualty.

The second assessment requires the coastal authority in charge to perform an event-specific analysis of the casualty, ideally utilizing the information and assessments received already from the vessel/salvors. Factors evaluated include the seaworthiness of the casualty, in particular buoyancy, stability, availability of means of propulsion, power generation, distance and estimated transit time to a place of refuge, whether the Master is still onboard, whether a salvor has been engaged, etc. As each vessel poses different risks, information on the nature and condition of the cargo, bunkers and other hazardous goods has to be obtained and evaluated¹⁹.

The third assessment (expert analysis), required if time-allowing and if appropriate, is an inspection of the casualty performed by inspectors of the coastal State for the purpose of gathering evaluation data and damage assessment. This data is to

¹⁶ The complete list of natural analysis factors is listed under Appendix 2, paragraph 2.2 of the Guidelines

¹⁷ The complete list of environmental and social factors is available under Appendix 2, paragraph 2.1 of the Guidelines

¹⁸ The complete list of contingency planning factors is available under Appendix 2, paragraph 2.3 of the Guidelines

¹⁹ The complete list of event-specific analysis factors is listed under paragraph 3.9 of the Guidelines

assists a comparison between the competing risks of leaving ship at sea or bringing it to a place of refuge, taking due account of risks to crew and salvors onboard (if any), risks to persons ashore in the place of refuge, risk of pollution or disruption of port's operations, risk should a place of refuge be refused including such impact on neighboring states and property risks associated with the casualty vessel itself (Morrison, 2011, p. 172). The requirement for an expert analysis is probably inspired by, inter alia, experiences with the *Castor*, where, except for Spain, the seven other coastal States which refused access did not properly inform themselves about the actual condition of the ship. This lack of on-site ship inspection and condition assessment by coastal States probably caused a subjective assessment of the risks posed by the vessel which in turn motivated coastal State refusals. According to Constantinou, there was no justification for such refusals following the complete discharge of the damaged tanks and their inertion²⁰, as well as the inertion of all other tanks: 'once the damaged tanks were discharge and the ship inerted, the vessel did not represent any higher risk than any other tanker' (p. 8).

At the end of these three assessments, the decision-making process can be completed by either granting or refusing access. Indeed a coastal state is free to refuse access on objective and rational grounds since 'there is no obligation for the coastal state to grant it' (IMO POR Guidelines, 2003, p. 9) and 'there is at present no international requirement for a State to provide a place of refuge for vessels in need of assistance' (IMO POR Guidelines, 2003, p. 10). Such refusal however should be the ultima ratio, since the coastal state is obligated to 'weigh all the factors and risks in a balanced manner and give shelter whenever reasonably possible' (IMO POR Guidelines, 2003, p. 9). Once again this clearly shows that while the refuge-custom is still acknowledged, it is today

²⁰ inertion refers to the process whereby the oxygen content of cargo tanks is reduced in order to reduce the probability of combustion of inflammable cargo. Usually a chemically non-reactive gas such as nitrogen, which can be created onboard some ships via N2 generators, is passed into cargo tanks to create a nitrogen blanket. Otherwise, the inertion can be created from external resources.

weakened by state sovereignty over national waters and a coastal' states ultimate privilege to refuse access.

Summary and Critical Assessment

It should be obvious from the preceding survey of the Guidelines that the refuge-custom has been undermined to a considerable extent. Certainly the factors surveyed under Chapter III are mainly responsible for this. The Guidelines establish clear procedural requirements in the form of risk assessments which need to be performed before entry can be granted or refused. As was shown in Chapter II, historically the refuge custom did not require for procedural requirements. According to Chircop (2006), the procedural requirements significantly control the enjoyment of the refuge custom to the extent that the traditional right of access is today treated more in terms of a privilege and further subordinates it to the right and interest of the coastal state (p. 44). Essentially the procedural requirements in the form of risk assessments performed by the master/salvor and coastal states lead to a balancing and weighing of the interests of the vessel vis-à-vis the interests of the coastal State. Because there is no obligation imposed on the coastal State to grant access, the Guidelines are ultimately weighted in favor of the coastal State. Consequently Morrison (2011) summarizes that the Guidelines clearly put an end to the view that a ship in distress has an automatic right to access a POR (Morrison, 2011, p. 183). This view is endorsed by Chircop (2006) who argues that 'perhaps more than any other modern multilateral instrument, this compromise text suggests that the traditional right of refuge has been made subject to the paramount principle of coastal State protection' (p. 43). In his assessment of the Guidelines, van Hooydonk (2004) even goes further and argues that in practice the "balancing-interest" approach rooted in the Guidelines will be more akin to an absolute right of refusal since the state will be inclined to refuse the ship because it is 'both judge and interested party' (p. 435). According to

this view, the Guidelines offer too many opportunities which a reckless State could abuse in order to shift the casualty vessel and the problem to someone else. In my opinion precisely because the Guidelines provide for a set of risk assessments that should be used by all parties', reckless abuse should not be possible, or at least very unlikely. The master/salvor can expect the coastal State to perform a detailed and technical assessment on objective foundations. This should at least prevent "knee-jerk" rejections. A State is perfectly free to refuse access, but such refusal must now be carefully rationalized. In other words, the procedural requirements put a burden of States. As a result, 'at a minimum, the deciding state can be expected by other interested parties such as the owner, salvor and other states to demonstrate that its decision was justifiable and defensible with reference to the criteria in the Guidelines (...) (Chircop, 2006, p. 37).

Further, the provision for an expert analysis of the ship through qualified coastal State inspectors further reduces the risk of blatant coastal state refusals. Instead it should lead to a much deeper involvement of the coastal State in actually assessing a vessel's actual condition as opposed to "armchair-decisions". Cases such as the *Castor*, where coastal States turned down refuge requests without having objectively assessed the casualty themselves should become few and far between. It is also laudable that the Guidelines explicitly refer to the need of the expert team 'to be composed of persons with expertise appropriate to the situation.' The *Prestige*²¹ demonstrated how important the need for qualified inspectors really is in order to deal effectively with a casualty: apparently the Spanish inspector who boarded the *Prestige* did not conduct a proper assessment of the damages. Instead his sole purpose appears to have been to order the starting of the vessel's Main Engine in order to speed up the tow away from the coast. This was contrary to the concerns of the Master (later confirmed by the salvage Master who stopped the Engine) that vibrations from starting the Main Engine would be induced

²¹ The *Prestige* case (2002) occurred before the IMO guidelines were adopted. Nevertheless, the need for condition assessment of casualties through coastal state inspectors is established practice and was also performed on *Prestige*.

into the hull leading to further damages of the already weakened structure. The Bahamas Investigation Report (2004) concludes: ‘had the surveyor made a proper assessment of the situation on board, he could have given the shore authorities a more complete picture on which to base their subsequent decisions’ (p. 80). Salvor’s Smit later endorsed the view that the Spanish inspector arguably was not qualified enough for the situation he encountered: the shore based inspector who boarded the ship ‘was not briefed or equipped to make an expert assessment of the ship’s condition, or enter into meaningful dialogue with the Salvage Master’ (van Rooij, 2003, p. 3). Therefore the requirement for an expert analysis performed by qualified inspectors is surely a good one.

There are however negative provisions and omissions in the Guidelines which have to be addressed.

Coastal State’s consent:

For instance the provision that a coastal state’s prior consent has to be obtained before the Master/owner can undertake response actions such as e.g. engaging a salvor to assist dealing with the ship’s situation appears to be counterproductive. It is difficult to see how a coastal State can be better placed than the master onsite to assess whether or not salvage is needed or not. If in the master’s opinion, salvage is needed then valuable time could be wasted obtaining the necessary consent. Safety of the ship and pollution prevention is foremost the master’s responsibility. *SOLAS* Chapter V explicitly determines that

‘the owner, the charterer, or the company (...) operating the ship *or any other person*, shall not prevent or restrict the master of the ship from taking or executing any decision, which, in the master’s professional judgment, is necessary

for the safe navigation and the protection of the marine environment (emphasis added)'

In addition, the *ISM Code* clearly endorses the master's authority: 'the Company should establish in the safety management system that the master has the overriding authority and the responsibility to make decisions with respect to safety and pollution prevention.' It follows that whenever this should be overridden by anybody, it must be clearly explained. Again the *Prestige* case illustrates this. Here the coastal authorities ordered the vessel to do or to refrain from doing certain actions without however establishing clearly their authority and when the master believed he was still in charge of the ship. This created confusion. To avoid such situations, the Bahamas Investigation Report (2004) recommended that 'any steps to remove or alter that authority should be clearly explained and justified to the master' (p. 74). Incidentally the *IMO Guidelines on the Control of Ships in an Emergency* (2007) now stipulate clearly that when a state intends to use intervention powers, he has to ensure that 'the master of the ship, the company and the salvage team involved are told clearly what degree of responsibility remains with them and what limitations are being placed on their freedom of action' (p. 5).

In the author's opinion the requirement to obtain the state's prior consent for certain response measures is not really in the interest of the state since it can delay important response measures. Especially in salvage operations time is undoubtedly of the essence, in those circumstances 'the requirement is an impediment to efficiency and can be grossly counterproductive in terms of maintaining maritime safety and preventing or mitigating pollution damage (Mukherjee, 2006, p. 280)

Publishing of Places of Refuge details:

The Guidelines do not prescribe the publishing of a list of suitable pre-designated places of refuge. That decision solely lies with the respective coastal State. Some States, such as the United Kingdom do not pre-designate places of refuge. The UK takes the view that in an emergency any site could become a place of refuge depending upon the particular circumstances of the incident. According to the former *SOSREP*, even an area of high environmental sensitivity should be regarded as being a place of refuge for some ships when lives are at risk or when the pollution potential is minimal (Middleton, 2009, p. 47). The UK also does not have a pre-conceived list or ranking of places of refuge because each incident has its own unique, transient and varied nature (DFT, “UK’s Approach to Assigning PORs”). Other states, such as Denmark take the opposite view and publish a list of pre-designated places of refuge (Danish Environmental Protection Agency, 2012). Certainly this could be advantageous to mariners and salvors who in the event of an emergency could within very short time ascertain the available places of refuge options and the best course of action. However, it took the author considerable time to locate the list of the officially designated places of refuge on the web. Further, a salvor when asked whether or not they are aware of officially designated places of refuge responded in the negative²². It is also doubtful whether the actual mariners onboard ships are aware of such pre-designated places of refuge and their exact locations. As the salvor suggested ‘it does not suffice to (just) hear about it as such an important matter should be marked on charts or be subject matter of nautical publications such as Notices to Mariners.’ In the author’s opinion this is something which requires amendment and perhaps could be regulated in the Guidelines.

²² Feedback received from a well informed industry source

Decision-making and response systems:

A significant omission in the Guidelines is its silence on effective decision-making arrangements and response systems. The Guidelines specifically mention maritime authorities, port authorities and authorities for shore-side safety should be involved in pre-event assessments of suitable places of refuge, but do not specify further which authority or organization is ultimately responsible for granting/refusing refuge, other than “the coastal State”. This effectively leaves it at the discretion of coastal States themselves to determine decision-making arrangements. This is problematic, because in an emergency an efficient decision-making process is of utmost importance and there are practical response and decision-making setups and arrangements which have proven to be superior to others.

A major problem arises when the decision-making in a maritime emergency is fragmented and executed by a number of authorities who all have to agree on a joint course of action. Difficulties are very likely to arise in 1) timely communication between internal levels of decision making, 2) disagreement between national and local levels of decision making and 3) potential lack of leadership and indecisive decision making in a crisis situation (Chircop, 2006, p. 41). Opposed to this, centralized decision-making is considered valuable. Interestingly, the IMO Guideline *On the Control of Ships in an Emergency* (2007) is very outspoken about the advantage of having a “military-style” command and control style system as opposed to fragmented decision-making. It explicitly recognizes that in an emergency the lines of command must be clear and the responsibilities of the parties involved in assessments and decision-making must be unambiguous. In particular it states that ‘having a clear chain of command in an emergency is essential if efforts to save life and property and prevent pollution are to be maximized’ (p. 2). Lacey (2006) fully endorses this warning that in the absence of a clear command structure there is chaos, especially informational chaos: ‘far too often what

happens is that where there is no established control and command procedure, numerous organizations can be demanding information, all believing they need it (...)’ (p. 6). This can lead to confusion, duplication and in general inefficient use of time.

There are essentially three factors which can, but do not necessarily have to, give rise or contribute to a fragmented decision-making process: federal state systems, localized decision-making and the ‘politicization’ of decision-making.

Federalization:

In federal, decentralized systems, smaller units of governance such as “states” typically enjoy autonomy over particular matters of governance. In Germany for instance, the local “Laender” (states) enjoy regional autonomy in important matters such as ports, police affairs, environmental control in the 12 nm territorial sea and disaster management onshore and offshore. Opposed to that navigational uses of the territorial sea, the high seas and most matters of maritime transport fall under federal jurisdiction, which is also in charge of the conclusion of international conventions (Jenisch, 2006, p. 473). It is obvious that in order to ensure maritime safety in such a system, close communication and coordination between federal and local/regional authorities is paramount. This can be troublesome when command chains to the various federal and state/regional authorities are too complicated and split into too many lines of communication. Often, the communication and coordination process is not the only problematic area in federal states. Ambiguity over accountability and responsibility of the plethora of authorities involved in a decentralized system also may cause uncertainty. Citing the situation in Belgium, another federal State, van Hooydonk (2006) explains that ‘that the devolution of maritime powers in a federal State may lead to legal uncertainty as to the competence of authorities involved, as well as to gaps in the statutory regime (...)’ (p. 427).’

Furthermore, the situation in Germany suggests that the *Havariekommando*²³ faced with a real crisis may be torn between the interest of central and regional stakeholders: the head of the *Havariekommando* ‘is obliged to take into account both federal and Laender interests’ (p. 486).

Localization:

Federal-systems can also encourage the second problematic factor – localized decision-making. According to Noyes (2008), the localization of decision-making may be particularly prevalent/suited in federal States where “control over port and coastal activities often has resided with local or other sub-state components of government’ and this ‘may compound the difficulties in fashioning sensible procedures for evaluating requests for refuge’ (p. 142). One of the main problem associated with localization is that local decision-makers may prioritize the safety of their local constituency and do not consider the bigger picture of maritime casualties and how these can impact on and affect other areas or even neighboring countries. Instead of refusing access it could be much more reasonable making the perhaps hard decision to accept pollution in a limited and controllable area, such as a place or port of refuge and thus to avoid a major pollution affecting vast parts of a State or neighboring States. The *US Coast Guard Places of Refuge Policy* (2007) specifically recognizes this problematic aspect of local decision-making where the decision-maker such as a harbor master may –overwhelmed by the incident and blinded by the potential risks, decide subjectively: ‘place of refuge situations can raise significant concerns among local stakeholders, who may have little understanding of the technical nature of the problem, but clearly see the risks to their citizens (...)’ (p. 7). The case of *Maritime Maisie* illustrates how local pressure can actually influence place of refuge decision-making. Here managers of the ship initially

²³ Principal maritime authority in Germany which is in charge and coordinates the place of refuge decision making process between central and regional authorities.

focused on obtaining access at Yeosu anchorage (South Korea) which is a famous STS location and since the vessel only required an inner-anchorage to transfer cargo and bunkers, this was a suitable location. According to the managers, access was denied by Korean authorities due to an oil spill²⁴ in the port of Yeosu that occurred basically at the same time the request was made²⁵. It stands to reason that local pressures concerned about a repeat pollution were instrumental in the refusal. Whether or not concerns over granting access were justifiable and based on objective risk-assessments certainly is debatable. The experience of the recent spill might well have overlaid objective risk assessment in order to avoid any further risk to the port whatsoever. If that really was the case, it would be deplorable since as Donner (2006) rightfully asserts, ‘any decision on whether to grant or refuse a place of refuge should be based on risk assessment, not on risk aversion’ (p. 346).

Politicization:

Arguably subjective decision-making is encouraged if the assessments are not done by experts with the necessary expertise and if the decision-making is politicized. As Noyes (2008) explains, considerable weight should be accorded to the views of experts (p. 142) as opposed to a local port authority or a local politician who may focus too heavily on the particular port than to fully consider all environmental risks should access be refused. The *US Coast Guard Places of Refuge Policy* (2007) “Place of Refuge Job Aid” specifically requires the probability section of the generic assessments/evaluations of suitable places of refuge and also the event-specific risk assessment associated with a particular casualty, to be performed by salvors, professional mariners and persons with

²⁴ On 31 January 2014 laden VLCC *Wu Yi San* collided with a shore jetty and pipeline at the GS Caltex terminal at Yeosu leading to the cracking of oil pipelines and a resultant spill of about 164 mt of crude oil, naphtha and other compounds from the terminal (Mohindru, Platts, 2014)

²⁵ Based on information received from a well informed industry source

expertise in engineering, ship structure, and similar fields (p. 1). The probability of risks occurring can only be realistically evaluated by experts with the requisite experience and expertise. Hence this requirement ensures the professionalization of the decision-making process. As opposed to this, an example of how it should not be is when a number of political figures are closely involved in the practical response on whether to grant access or not. Maintaining as bigger distance between operational response and politics as possible mitigates the risk of political pressure being applied. Politicians are typically not knowledgeable on technical aspects of shipping, salvage or complex environmental relationships. Therefore they should as far as possible not be involved in the assessment and decision making on places of refuge. A review of European response systems by *the European Maritime Safety Agency (EMSA)* confirmed that in the best systems politicians were not involved in the technical response (Middleton, 2009, p. 57). Further, Lord Donaldson in his review of salvage and intervention in the UK following the *Sea Empress* incident concluded that it is practically impossible to keep politicians fully and technically briefed at all stages of a rapidly developing marine incident (Middleton, 2009, p. 57). Therefore Lord Donaldson considered involvement of ministers in operational decisions ‘is not a practicable option’ (Mulvana, 2013, p. 3).

The SOSREP system in the UK:

A response and decision-making system that steers clear of the problems associated with federalization, localization and politicization is the *SOSREP* system of the UK. Lord Donaldson’s review of salvage and intervention had discovered inadequacies in the UK’s marine emergency response system. In response Lord Donaldson recommended there should be ‘ultimate’ control of salvage by a Secretary of State’s Representative (*SOSREP*) acting in the overriding public interest (Shaw, 2010, p. 6). Accordingly a new role was created in 1999, *SOSREP*. *SOSREP* is essentially a single incident commander

who exercises ultimate command and control of all serious incident response operations, empowered to make crucial and often time-critical decisions, without delay and without recourse to higher authority where such decisions are in the overriding UK public interest (“UK National Contingency Plan”, “n.d.”, p. 5). Importantly, *SOSREP* is the designated UK competent authority to assign places of refuge: ‘the *SOSREP* has in mind that time may be short and the damaged ship may not be in a condition to travel very far’ (“UK National Contingency Plan, p. 34). In places of refuge situations, *SOSREP* is empowered to override arguments and orders given by other authorities or individuals. Crucially, this includes orders and directives from local harbour masters. Such overriding directives are likely to occur where the sheer size of an incident exceeds the port’s ability to respond or when the port is unwilling to respond or grant access. For example, where there is an urgent need of a place of refuge for a vessel to prevent pollution or in the interest of safety and the local harbour master does not wish to admit the vessel, the *SOSREP* is authorized to override the authority of the harbour master through directions (“UK National Contingency Plan, p. 33). Effectively the directions can require the person to who they are given to take, or refrain from taking, any action of any kind whatsoever (Middleton, 2003, p.3). It is clear that through the *SOSREP*’s power of intervention the problem of localized decision-making in terms of granting/refusing places of refuge is practically eliminated. Further, even though *SOSREP* is the representative of the Department of Transport he is not a politician. Rather *SOSREP* is a professional with the technical knowledge and expertise required. The two *SOSREP*’s who have held office so far are highly qualified experts in salvage, emergency response and counter-pollution and were recruited from the *Maritime and Coastguard Agency*. Because *SOSREP* is the ultimate decision-maker on places of refuge and the response group is kept as small as possible, this practically also eliminates undue political interference and the problem of decentralization associated with federal systems where responsibilities are spread over several authorities. Finally even though ultimate power is vested in the *SOSREP*, the system allows for and encourages the involvement of experts at different stages of the

response to provide advice directly to the *SOSREP*. In an emergency, internationally renowned experts on “call-off contracts” are engaged. These experts cover a wide range of fields e.g. salvage, fire and shipboard explosions and ship-types such as tankers chemical carriers and gas carriers or specialists for specific cargoes (Middleton, 2009, p. 57). This arrangement takes into account that no incident is the same and there will always be a need for a different specialist expert. Further, a specialist “environmental group” acting in advisory function is activated and incorporated into the *SOSREP* response system where a place of refuge situation threatens the environment. Again the *SOSREP* ultimately has overriding control and authority to make decisions independently, but the active involvement of experts from varied fields ensures that assessments are performed by personnel who are well qualified thus professionalizing the entire response.

The entire *SOSREP* system is not dogmatic but rather pragmatic. For instance while it clearly recognizes ecologically sensitive habitats along the UK coast, it does not pre-emptively rule them out as places of refuge if safety of life is involved or when the pollution risk can be adequately controlled. Depending on the nature and scale of the incident, the *SOSREP* can convene a *Salvage Control Unit* (SCU) composed of experts in order to monitor salvage operations and to advise the *SOSREP* on matters related to salvage activity to ensure such activities have no adverse effect on safety and the environment. The practical usefulness of this was clearly seen during the *MSC Napoli*²⁶ incident (2007). While the vessel was under tow to a place of refuge its condition

²⁶ On 18 January 2007 while navigating in the English Channel, fully cellular container ships *MSC Napoli* loaded with 2,318 containers and 3,500 mt HFO suffered a catastrophic hull failure and got into severe difficulties. No suitable place of refuge was available in French waters, so *SOSREP* took control over the ship. Deciding the vessel was in danger of breaking up and polluting the English Channel, *SOSREP* decided to tow the vessel to a place of refuge, Port Hortland. En-route the vessel encountered severe weather and the ship’s condition deteriorated rapidly. To avoid its breakup, *SOSREP* and SCU decided to beach the ship at Lyme Bay on 20 January. Subsequently all 3,500 mt HFO were systematically removed in relative safety. The last container was only removed on 17 May 2007, 120 days after the incident (MCA, “*MSC Napoli Incident*”, “n.d.”, p. 5). The decisive and pragmatic response of the *SOSREP* system has been praised by the industry.

deteriorated further due to adverse weather. To prevent the vessel from breaking up and resultant pollution, the SCU and the *SOSREP* quickly decided on an alternative course of action – beaching the ship at Lyme Bay, notably a world heritage site, to remove the bunker fuel onboard in relative safety (MCA, “MSC Napoli Incident”, “n.d.”, pp. 11-15). Again this showed not only the usefulness of the SCU but also the ability of the *SOSREP* system to respond effectively to dynamically evolving situations. External factors which are not controllable, in this case the adverse weather deteriorated the condition of the vessel so far that a new response was needed in short time. The *SOSREP* system was able to deliver this. In this case it was the pragmatic solution to beach the ship.

It is for these reasons that the *SOSREP* system is recognized by the wide industry as the most efficient and suitable response system for maritime casualties involving salvage and places of refuge situations in particular. Witte (2008) recommends the *SOSREP* system as best practice in command and control and regards it as by far the most successful system devised to date as it has been extraordinarily effective in promoting streamlined, timely decision-making in challenging situations (p.2). Only recently this view was endorsed by the *International Chamber of Shipping (ICS)*, the *International Salvage Union (ISU)* and the *International Union of Marine Insurers (IUMI)* in a joint press release on *Maritime Maisie* where they appealed for ‘wider adoption by coastal states of simple, robust, “single point” command and control models akin to that of the UK’s *SOSREP* system (IUMI, 2014).

Again it seems curious why the Guidelines which after all have the purpose of improving the responses of masters, salvors and coastal States to maritime casualties are completely silent on decision-making and response systems, especially when there appears to exist a consensus on a best-practice system which could be used as a model for other maritime States.

CHAPTER V: TEN YEARS ON – THE IMPACT OF THE GUIDELINES

A thorough survey of the impact of the Guidelines on places of refuge is difficult for a number of reasons. First, no coherent and complete data on every place of refuge request exists. Typically only the search for places of refuge of high-profile casualties is known and also evaluated, for instance in flag-state incident reports²⁷. Second, generation of primary data on global implementation of the Guidelines would require direct contact with national maritime authorities of a number of countries from all regions of the world. This is beyond the possibilities of this thesis. Nevertheless, some observations and conclusions can be made by examination the legal status of the Guidelines themselves, examination of national place of refuge guidelines and also by evaluation of recent place of refuge incidents.

Legal status of the Guidelines:

First of all, even though the Guidelines are not a formal legal instrument per se, it explicitly invites governments to take the Guidelines ‘into account’ in practice and recommends that ‘coastal States endeavor to establish procedures, such as national plans, which are consistent with the Guidelines by which to receive and act on requests for assistance with a view to authorizing, where appropriate, the use of suitable places of refuge (IMO Guidelines, 2003, p. 2). Hence the Guidelines are designed to influence state practice. Examination of a number of national places of refuge plans from different areas

²⁷ For example the incident report on *MSC Flaminia* undertaken by the Bundesstelle fuer Seeunfalluntersuchung on behalf of the German flagstate has an entire section on the chronology of the salvage and the search for a place of refuge

of the world confirms that this is happening. For instance in Australia, the *National Maritime Place of Refuge Risk Assessment Guidelines* (2009) were developed to ‘complement the IMO guidelines on Places of Refuge’ (p. 3). Also in Canada, the *National Places of Refuge Contingency Plan* (PORCP) (2007) provides that the PORCP takes into account and implements the IMO Guidelines to the extent possible (p.1). Further, the *US Guidelines for Places of Refuge Decision-making* (2007) stipulates that they are consistent with the IMO Guidelines (p. 7). In Europe, the German *Notliegeplatzvereinbarung*²⁸ (2005) states that the ‘IMO Guidelines were closely followed during the drafting process’ (p. 1). In addition, in the UK the IMO Guidelines have been used as a basis for the assessments undertaken by the *SOSREP* system (Stone, 2006, p. 439). In Asia, the *Hong Kong Marine Department* will make reference to the IMO Guidelines when handling applications for places of refuge. But the Guidelines are not implemented in the form of formal written documents, such as national plans. It was also stated that by and large Hong Kong will follow the criteria in the IMO Guidelines to consider a case of application for place of refuge²⁹. As regards the situation in China, the IMO Guidelines appear to be taken into account by reference, but not implemented straightforward. No written statement by the *China Maritime Safety Authority (MSA)* was obtained to confirm this. Moreover no written formal national guidelines on places of refuge exist, neither in Chinese let alone in English³⁰. A closer survey of the provisions in the UK, German, Australian, U.S. and Canadian national plans confirms that tribute is paid to the Guidelines. All these plans call for structured risk assessments to be performed. Some heavily rely on assessments by checklist (Germany); others have a specific weighting-system (U.S.) which goes even beyond requirements under the Guidelines. In the U.S. weights are allocated to specific risk assessment factors and then the total risk for each place of refuge will be determined by the formula

²⁸ Framework/plan for the assessment of places of refuge in Germany

²⁹ Information received from a well informed industry source

³⁰ Information received from a well informed industry source

RISK = PROBABILITY * CONSEQUENCES

In the UK different risk assessment techniques are used with the objective to keep risks *ALARP* (as low as reasonably practicable). Pre-event generic analysis of locations that lend themselves to becoming a POR and event-specific analysis of data relating to an incident is performed, clearly in line with the Guidelines. An improvement to the Guidelines is an explicit statement that assessments and the interpretation of results have to be undertaken by personnel who are qualified and skilled to do so (UK Port Marine Safety Code, 2012, p. 19). The recommendation firmly established in the Guidelines that granting refuge is often the best course of action is also reflected in the national guidelines. The German *Notliegeplatzvereinbarung* e.g. explicitly states that the allocation of a place of refuge is one of the preconditions to deal successfully with a complex emergency³¹ (p. 301). Further, the *US Guidelines for Places of Refuge Decision-making* specifically state that recent incidents

clearly demonstrated that in some cases, the coastal states actually increased their risk to significant contamination by denying a vessel the opportunity to make repairs in relative safety, or by delaying a decision until no options remained (...). Therefore “the decision whether to allow a distressed vessel into a place of refuge, including cases of force majeure, should be reached after consideration of the full range of potential impacts, rather than being based on a policy of wholesale denial of entry (p. 7)

This clearly reflects the need to offer refuge in certain cases, the balancing of interests and the need for risk-assessments to compare the risks –all aspects which have been established in the Guidelines.

³¹ translated: “Dabei ist die Zuweisung eines Notliegeplatzes eine der Voraussetzungen zur erfolgreichen Bekämpfung einer komplexen Schadenslage”

Even though the Guidelines are not itself a formal legal instrument of binding character, at least in Europe they have been given direct legal effect through *European Union Directive 2009/17/EC, 23.04.2009, amending Directive 2002/59/EC*. Article 20a of this Directive requires EU Member States to ‘draw up plans for the accommodation of ships in order to respond to threats presented by ships in need of assistance in waters under their jurisdiction (...) the plans shall be prepared (...) on the basis of *IMO Resolutions A.949(23)* and *A.950(23)*.’ Outside Europe however, the status of the Guidelines as a non-binding as opposed to formal instrument which would be legally enforceable reduces its impact. As a result they might be ignored and ‘proper implementation of them will depend entirely on the goodwill of the coastal State’ (Morrison, 2011, p. 183). Therefore, a determined politician or administrator with little knowledge of ships and the sea or the real dangers posed by them can fairly easily avoid the Guidelines (Bishop, 2009, p. 201). This view is endorsed by Hetherington (2009) who claims that the Guidelines ‘lack teeth’ since they are merely a representative of soft-law (“CMI Conference Report”, p. 1). The author believes there is some truth to these allegations. The next section will consider these claims in more detail by reference to recent place of refuge cases. General and specific problems in the current system of dealing with places of refuge which these cases revealed will be highlighted.

Recent Place of Refuge cases (*Stolt Valor*, *MSC Flaminia*, *Maritime Maisie*)

‘Let’s get real on ports of refuge’, ‘No refuge in Asia for distressed Hong Kong chemical tanker’, ‘*Maritime Maisie* could break up at sea’, ‘Governments urged to fulfill their obligations over ports of refuge’, ‘No hiding place from the refuge issue’. These are just a selection of gloomy headlines that can be read in maritime industry newspapers in recent months. Referring inter alia to the cases of *Stolt Valor* (2012), *MSC Flaminia* (2012), and

Maritime Maisie (2014)³² these articles illustrate that the current system for dealing with places in need of assistance does not work satisfactorily.

Stolt Valor:

The decision to admit *Stolt Valor* into a port of refuge, Asry (Bahrain), came on 25 June 2012, 105 days after the fire onboard was extinguished on 22 March 2014 (the ship was ablaze for seven days) (“Statement by the Delegation of Liberia”, 2012). The first round of place of refuge requests had been made by owners and salvors on 21 March 2012 to States in the region. But all requests for a place of refuge were declined and no additional support was offered (“Statement by the Delegation of Liberia”, 2012). Salvors proceeded with the removal of all bunkers at sea via STS operations. After removal of all bunkers, a second request to grant a place of refuge for safe removal of the remaining cargo and lub-oils onboard was declined by littoral States. Subsequently this operation was also performed offshore in exposed waters and successfully completed after around one month without causing any spill (“Statement by the Delegation of Liberia”, 2012). During the salvage and STS operations coastal States used their intervention powers: the tow was at two occasions harassed by coastal States Navies which –under the threat of gunfire –ordered the tow with the salvage flotilla to leave the State’s Exclusive Economic Zone (EEZ). At the first time, fire-fighting was ongoing, at the second the removal of bunkers was conducted (“Statement by the Delegation of Liberia”, 2012). It appears that only when no more cargo, bunkers, lub-oils and other hazardous materials remained onboard and when other operational safety criteria had been met, the coastal States were satisfied that the environmental and safety risks could be controlled and a place of refuge was provided. This view is contested. The response or rather lack of response and

³² Refer to pp. 1-3 for an overview of these incidents

assistance provided to *Stolt Valor* by coastal States was heavily criticized by industry organizations. In a report submitted to IMO's *Maritime Safety Committee (MSC)*, the *ICS*, *BIMCO*, *Intercargo*, *IPTA* and *Intertanko*, expressed their concerns regarding non-compliance with the Guidelines ("Concerns regarding non-compliance", 2012, p. 2). In particular the excessive response time and the apparent failure to apply the Guidelines were slammed. Despite the experience with the *Castor*, salvors again had to perform STS at the open sea where waves of up to 6m were encountered, as opposed to offer sheltered waters to facilitate this operation. Arguably this did not reduce but increase risks to human life and the environment: first it ignored increased risks to salvors and responders even though the Guidelines specifically require that human life at sea must be safeguarded (p. 9). Second, the risk of further deterioration and breakup of the vessel during STS operations was increased even though the Guidelines require that 'due regard should be given to the preservation of the hull, machinery and cargo of the' (p. 9). Third, as an overall result the environmental risks were increased, in particular pollution risks from the viscous bunker-oil onboard.

MSC Flaminia:

In the case of *MSC Flaminia*, the decision to admit the vessel into its place of refuge, Wilhelmshaven (Germany), came on 31 August 2012, ca. 48 days after the initial fire and explosion which occurred on 14 July 2012. Again the length of the response time seems concerning. Between 23-25 July salvors had addressed informal requests for a temporary refuge to Ireland and the *SOSREP*. On 27 July the salvage flotilla with the vessel in tow had assumed a waiting position 100 nm of the British coast (Reederei NSB, 2013, p. 1). Formal requests for the granting of a place of refuge were addressed to Belgium, Spain, France, Portugal, Great Britain, Netherlands and Germany between 30 July and 7 August (Bundesstelle fuer Seeunfalluntersuchung, 2014, pp. 166-169). The analysis of coastal

states responses performed by the Bundesstelle fuer Seeunfalluntersuchung (BSU) (2014) demonstrates that individual coastal states responded quite differently, some paying respect to the requirements under the Guidelines, whilst others refused without paying respect to the requirements of the Guidelines. Spain for instance refused access in relation to all ports only shortly after the request had been made. According to the BSU (2014) it is considered extremely unlikely that the Spanish authorities acted in accordance with the Guidelines since only two days can hardly be regarded as sufficient time period for conducting a thorough risk analysis and also considering that Spain made its decision without any exchange with the *SOSREP* who possessed the most information about the actual condition of the vessel (p. 167). Further, the position of Portugal that its duty to make a discretionary decision existed only after the other coastal states had rejected the vessel is worthy of criticism. This position cannot be reconciled with the Guidelines which do not provide for a priority setting approach (BSU, 2014, p. 169). Some participants, such as the managers of the vessel and observers such as Kuffler (2014) also expressed concern regarding the long waiting time between July 14 and the shipboard inspection on 28 August performed jointly by German, French and British authorities. Nevertheless, the BSU (2014) points out that the time elapsed can be largely excused by contravening external factors such as adverse weather, beyond the coastal states control. This delayed the boarding of the inspectors to perform an expert inspection, as required and in line with the Guidelines (p. 169). Appreciating this, the date of the inspection may however have been brought forward precisely if one of the coastal States had offered a more sheltered position closer to the coast. This did not have to be a final place of refuge, but rather a temporary place to help with condition assessment (Reederei NSB, 2013, p. 1). Especially because it was already clear early on that the final place of refuge would have to be a port, due to the difficulties associated with discharging the containers – damaged and contaminated container on top of that – in a temporary place of refuge lacking the terminal and facilities required for such operation.

Maritime Maisie:

In the case of *Maritime Maisie*, the decision to admit the vessel into a place of refuge, Ulsan (South Korea) was made on 2 April 2014, 94 days after the initial incident collision and subsequent chemical fire on 29 December 2013. During that time, the vessel was stabilized by salvors and towed in the open sea off Tsushima Island (Korea Strait) as neither South Korea nor Japan were initially prepared to grant a place of refuge, which could have been simply sheltered waters to stabilize the ship and perform STS operations in greater safety, as requested by managers and salvors. The search for a place of refuge was further complicated by the fact that by 30 December 2013, the vessel had drifted into Japanese waters³³. Subsequently responsibility to assist the vessel in terms of providing refuge was denied by both coastal States, each holding the other responsible. A final incident report by the vessel's flagstate, Hong Kong has not been released yet. However, again the long response time until a place of refuge was granted can hardly be justified. Leakage of toxic vapours from the damaged tank and rough sea conditions increased the difficulties and risks to salvors and responders boarding the vessel. Salvage and condition assessment could have been rendered more safe had a temporary place of refuge in sheltered waters been provided where also the lightering of bunkers and cargo could have been performed in greater safety. Instead this lightering operation was ultimately performed in the final place of refuge, Ulsan, in closer vicinity to population. From the view of safeguarding health and safety the decision to bring the vessel with its cargo still onboard into port and conduct STS operations there is difficult to comprehend.

This brief survey has demonstrated shortcomings in the present place of refuge regime. Contrary to the spirit of the Guidelines that 'shelter should be given whenever reasonably possible', it appears instead that providing refuge is considered the ultima ratio when all

³³ Information received from a well placed industry source

other options have been exhausted. This is supported by Chircop (2006) who argues that when a ship in distress is perceived as posing a real environmental, economical or public safety threat, self-defense is more likely to take preference in coastal State decision-making (p. 227). This would be comprehensible if such a decision was arrived at on sound, technical and objective assessment. However, it appears that – at least a number of coastal states –only pay “lip-service” to the Guidelines and its requirement to rationalize decision-making by way of thorough risk-assessments. The Secretary General of the IMO, Sekimizu, voiced his concerns over precisely this matter saying ‘we have adopted IMO Guidelines of refuge and the Guidelines should be paid respect. I hope all stakeholders and authorities will seriously consider and take action in order to avoid what we do not want to see’ (Leander, 2014). Other observers such as Kuffler (2014) underline this view, stating that ‘whilst the IMO Guidelines created a framework assisting the international community dealing with the issue, national implementation of procedures and execution of those procedures continue to present great difficulty’ (p. 2).

These three incidents illustrate a number of problems which appear to be general problems in the current place of refuge system. They also point to specific lessons which can be learned from each case. In the following section, these general problems and specific lessons will be examined.

General lessons to be learned from *Stolt Valor*, *MSC Flaminia* and *Maritime Maisie*:

Temporary refuge:

All three cases involved vessels ablaze on the open sea and illustrated the problem of forming an efficient fire-fighting and salvage response under those circumstances. For

example in the case of *Maritime Maisie*, rough sea conditions continually hampered fire-fighting. They also rendered the boarding of salvage and response personnel more difficult which in any case was already delayed due to the delayed fire-fighting. As we have seen in Chapter IV, the gathering of accurate data on the condition and situation of the casualty including on-site inspection is, however, crucial to allow the coastal State to perform assessments and to form an adequate response. As Kuffler (2014) argued in his assessment of *MSC Flaminia* ‘operationally, onboard inspection gobbles up time in giant-sized quantities, but without data from the vessel, the coastal state will be unable to appraise the risks which refuge may present’ (p. 10). Under the Guidelines, specifically the event-specific assessment relies heavily on data and information received by the vessel/owners/salvors such as stability, seaworthiness, etc. If however the vessel is under difficult circumstances on the open sea and cannot be accessed by response personnel, the timely generation of such data and information is not possible. This leads to a vicious circle: if proper casualty inspection cannot be done in the first place, then the coastal State has no verifiable data on which to base his decision whether or not to grant refuge. It stands to reason that if sheltered waters would be provided to a casualty early on, not only could lightering operations be performed under greater safety, but also the generation of information and data on the state of the vessel could be facilitated and expedited.

Operational Requirements:

The three cases also demonstrated that a coastal State will impose challenging operational requirements before providing final access. The Guidelines specifically regulate that when a State provides access it is entitled to impose ‘practical requirements’ (IMO POR Guidelines, 2003, p. 9). In the case of *Maritime Maisie*, managers/salvors inter alia had to undertake the following in order to secure access to Ulsan: add inhibitor into some of the

cargoes to ensure they are stable, arrange for inspection of vessel's key systems by makers' engineers, ensure P&I insurance letter was in place, re-establish the vessel's own propulsion, have at least four tugs to assist, guarantee a time limit for the length of STS operations, deploy oil booms around the vessel before the start of STS operations, provide a detailed and approved salvage plan³⁴. Operational requirements for Stolt Valor were similarly strict ("Safety at Sea Remains Key Focus", 2012). A State is perfectly entitled to impose strict practical requirements as a precondition to granting final access in order to mitigate the risk pollution and health and safety threats. It is important all stakeholders are aware that such practical requirements will be imposed. Specifically managers/salvors must cooperate closely with coastal authorities and meet all these requirements in order to expedite final access.

Flag-state Responsibility:

All three cases also pointed to the responsibility and vital role a casualty's flag-state can and has to play in assisting the vessel securing a place of refuge. For instance in the case of *Maritime Maisie*, the *Hong Kong Marine Department* assisted owners, managers and salvors finding a place of refuge in South Korea. Its instrumental role was specifically stressed by an industry participant: 'the Marine Department of Hong Kong had played a major part of communications with Korean Authorities on behalf of the Owner'³⁵. A flag-state seems like the obvious choice assisting an owner/manager not simply just because they are his clients, but also because a flag-states' large network and potential experience dealing with marine casualties can be valuable. Moreover, *MSC Flaminia* illustrated the role a flag-state can play as a potential place of refuge provider itself in the event other coastal states refuse refuge. *MSC Flaminia* was eventually towed to Wilhelmshaven, due

³⁴ Information received from a well placed industry source

³⁵ Information received from a well placed industry source

to the intervention of Germany as flag-state. In the *Castor*, Cyprus, the vessel's flag-state eventually offered refuge even though ultimately this offer was not used (Constantinou, "n.d." pp. 9-10). Ultimate responsibility of the flag-state to assist in finding refuge or even provide itself refuge (provided it is geographically practicable) appears to be firmly acknowledged in maritime practice and international law (BSU, 2014, p. 173). It is strange that the Guidelines completely fail to address flag-state responsibility and the important role it can play in resolving place of refuge searches.

Multi-jurisdictional responses:

The problem with multi-jurisdictional responses to a casualty was also demonstrated in all three cases. In the case of *Maritime Maisie* it was expressed that had the vessel not subsequently drifted into Japanese national waters, the search for a place of refuge would have been much easier³⁶. Instead South Korean authorities, initially at least, argued that responsibility for the vessel including the provision of a place of refuge had now shifted to Japan. Conversely, Japan throughout argued that responsibility for the vessel including the provision of a place of refuge remained with South Korea where the initial incident happened and tried to support this claim by the rather incredible argumentation that 'Japanese waters do not exist in the UN Convention on the Law of the Seas' (Leander, 2014, p. 6). Thus there appears to be a real risk that when a place of refuge situation unfolds in the vicinity of a number of coastal States (such as in Europe, the Middle East Gulf or Asia), that their administrations will, at least initially, either deny responsibility and 'pass the buck' to a neighboring coastal administration, or adopt a wait-and-see approach akin to procrastination, precisely when determined coastal State response/assistance is needed. Thus a vessel searching refuge in South Africa or Australia

³⁶ Information received from a well placed industry source

may ironically well be better placed, because Australia explicitly recognizes that its 'relative geographic isolation means that there are few nearby maritime administrations that could provide assistance to a ship requesting a place of refuge' (National Maritime Place of Refuge Risk Assessment Guidelines, 2009, p. 11) and hence may feel greater responsibility to deal with the request. *MSC Flaminia* illustrated another problem associated with the passage of a casualty through confined waters the national waters of several jurisdictions. Transferring the stricken *MSC Flaminia* to Wilhelmshaven necessitated the passage of the English Channel. Aside from the fact that this is an extremely busy strait, it borders the England, France, Belgium and Netherlands all of which had to ensure that the vessel did not pose any significant environmental and health and safety threat whilst in transfer. Accordingly, permits were required from all of these countries before the vessel could commence its tow to Wilhelmshaven (Kuffler, 2014, p. 8). It is conceivable that similar permits would be required by neighboring States of other major Straits such as Hormuz, Malacca, Gibraltar, and Bosporus etc. if a casualty would have to be moved across. Salvors and owners/managers of the vessel may be in a difficult position, when they have to engage in time-consuming and laborious communication with all the administrations possibly involving duplication.

Aside from these general problems in the current place of refuge system, which have been observed in the three cases, some specific lessons can be learned from particular incidents.

Specific lessons to be learned from *Stolt Valor*, *MSC Flaminia* and *Maritime Maisie*:

New Decision Assessment factors:

The incident of *Stolt Valor* introduced new decision assessment factors which are taken into account by coastal States. As shown in Chapter IV the Guidelines simply provide a non-exhaustive list of assessment factors including inter alia natural conditions, environmental factors, social factors and contingency-planning factors. Each coastal States is however free to complement his assessment by factors which may be particular and of relevance within his jurisdiction. In the case of *Stolt Valor*, the new assessment factors were desalination plants installed in Saudi Arabia, Qatar and Bahrain. Apparently the presence of desalination-plants was used, amongst other things, as justification to refuse access to the stricken vessel (Laruelle, 2013, p. 15). Whether or not the damaged vessel objectively posed a threat to these plants and by implication a health and safety risk to the population depending on drinking water generated by these plants, is difficult to assess. This demonstrates however clearly, that each region may have its own unique decision-assessment factors which may tilt the balance in favour for or against providing access.

Coastal State infrastructure:

Stolt Valor further illustrated that the existence or absence of coastal State infrastructure equipped to handle a stricken vessel may prove to be decisive. It was quite clear from an early stage that *Stolt Valor* would be declared a constructive total loss as a result of the significant damages. Therefore the final place of refuge would have to be equipped to scrap the vessel under controlled conditions. The lack of suitable repair/scrap-yards

eliminated some of the coastal States as likely providers of a final place of refuge. Conversely, the existence and expertise of ASRY Shiprepair yard in Bahrain made this the only real option for a final place of refuge (“Safety at Sea Remains Key Focus”, 2012). Jenisch (2006) reminds that the presence of advanced coastal infrastructure including ship(repair)-yards, and enterprises handling dangerous materials may have an active business interest in rendering services to stricken vessels (p. 486). The presence of such specialists may prove to be crucial in some place of refuge decisions. In *Stolt Valor* it may have, if only after a long period of time had passed. Conversely, in the absence of such specialists, a coastal State may well decide that refusal is the correct decision. In that context the absence along vast stretches of the South American and African coasts, of sophisticated coastal State infrastructure incl. shipyards, recyclers and specialists in the handling and storage of dangerous goods may prove to be critical for a sophisticated vessel such as crude-, gas-, and chemical-tankers which develop into a casualty there.

The incident of *MSC Flaminia* points to five specific problems in the place of refuge system: lack of progress in establishing *Maritime Assistance Services* (MAS), irresolute coastal State response if a casualty unfolds on the high seas, coordination of multi-jurisdictional response, problems posed by the growth in carriage of IMDG containers and casualty response associated with “mega” containerhips.

Maritime Assistance Services:

The importance of the IMO Resolution on *Maritime Assistance Services* (MAS) in facilitating effective and timely casualty communication has already been highlighted earlier. The MAS resolution accounts for the fact that it is very helpful for the master of a stricken ship and salvors with a unique point of contact in the coastal State requested to provide assistance which is reachable 24 hours and serves as the permanent point of

contact between the ship, salvor and the competent authorities involved in refuge decision-making in the coastal State. It especially accounts for the fact that in the absence of such a single-point contact, a Master will be overwhelmed by communicating with numerous authorities all of which are –or worse believe to be – functionally involved with the decision-making. The report by the BSU (2014) on the *MSC Flaminia* casualty points to severe deficiencies in the establishment of MAS points and to their publication and accessibility by salvors and owners/managers (pp. 162-163). Indeed to date only 19 out of a total of 170 IMO Member States have implemented MAS centres and published their details incl. call numbers. Further, major maritime nations and those with previous experience with place of refuge cases have so far failed to establish MAS centres and publish their details, including Spain, South Africa, UK, USA, Singapore, China, Norway (IMO, 2014, “Information on MAS services”). Taking into account that the MAS Resolution was passed more than ten years ago and also the specific requirement in the Guidelines that coastal States should establish a MAS, this slow “progress” is very disappointing. The observation by the BSU (2014) that MAS details are not properly published by IMO and difficult to locate for salvors and operators (p. 169) is however only confirmed partly. Whilst the MAS information is indeed hardly accessible via the IMO website by the general public³⁷, it appears at least that shipmanagers and salvors are fully aware of the information. One shipmanager confirmed that MAS details incl. call numbers are published twice annually by IMO in concise format and access to same is possible via “IMO Webaccounts”. The shipmanager also confirmed that actual onboard personnel will be made aware of MAS contact details³⁸.

³⁷ The author failed to locate them in a concise and complete format

³⁸ Information received from well placed industry sources

Response to incidents unfolding on high seas:

The *MSC Flaminia* incident also demonstrated real problems in forming a resolute response if a casualty unfolds on the high seas far away from coastal States. The initial fire and explosion onboard *MSC Flaminia* occurred while the ship was in the middle of the Atlantic en-route from Charleston, USA to Antwerp, Belgium. At the time of the incident, distances to nearby coastal States were immense, ranging between 650 nm up to 1000 nm³⁹, in other words ca. 3-4 days at normal speed away. The Guidelines do not provide a mechanism whereby responsibility for a casualty on the high seas is allocated. This causes real problems. If the casualty occurs on the high seas which coastal State is responsible to respond? Common sense would dictate it is the nearest coastal State. But that State may not have the best infrastructure and places of refuge to handle the casualty. Alternatively, does the loadport or port of call owe a responsibility to respond, or possibly the flag-state, if it is also in geographical reach? Under these circumstances and in the absence of a location that perfectly lends itself as a place of refuge, it is conceivable that administrations will “pass the buck” or adopt a wait-and-see approach, delaying effective response.

Coordination of multi-jurisdictional responses:

MSC Flaminia also demonstrated that in multi-jurisdictional situations the current place of refuge system does not satisfactorily allow for coordination of the response through one designated maritime administration. In order to increase their chances of being offered refuge, salvors/owners/managers had liaised with and requested refuge in a

³⁹ According to BSU (2014) at the time of the incident the distances to nearby shore were as follows: St John, Canada – ca. 1000 nm; Gijon, Spain – ca. 970 nm; Brest, France – ca. 930 nm; Falmouth, UK – ca. 900 nm; Vigo, Spain – ca. 890 nm; Bantry Bay, Ireland – ca. 740 nm; San Miguel, Azores – ca. 650 nm (p. 122)

number of coastal States. As a result, some⁴⁰ of the coastal States requested commenced the decision-rationalization process of in-depth assessments required under the Guidelines. To this end they engaged in in-depth communication with salvors and managers in order to obtain and generate the necessary information. This however proved to be inefficient use of time and resources as salvors and managers ‘had to simultaneously or successively enter into drawn-out, concurrently held negotiations with the laboriously identified agencies responsible – or possibly those that merely believed they are responsible in various Member States’ (BSU, 2014, p. 177). Certainly this is not expedient especially when negotiations drag on and the casualty threatens to deteriorate further.

Challenges poses by large containerhips and IMDG containers:

MSC Flaminia showed that overall casualty response including fire-fighting, salvage and the search for a place of refuge can be severely complicated when a fully cellular containerhip is ablaze. At the time of the incident, the vessel had 2,876 containers of various sizes onboard including 149 containers carrying dangerous goods (BSU, 2014, p. 8). In terms of salvage, immediate and decisive response may be delayed since a salvor initially has no information about the content of the containers. Whether or not the content of the containers poses an explosion risk cannot be ascertained as a result of this information deficit. Therefore response personnel will perhaps only board the ship once clear information on the content of the containers is available and an appraisal of the situation is possible. As Lacey (2006) stresses the information deficit is particularly vexing for large multi-slot chartered container vessels where it may take weeks to obtain accurate data regarding the contents of containers (p. 6). In terms of fire-fighting, it is

⁴⁰ As shown before, Spain appears not to have rationalized its refusal whereas Portugal did not even consider it necessary to evaluate the situation

difficult to assess the actual state of a fire when the fire is spread over and inside numerous containers. Even when the fire superficially appears to be extinguished, seats of fire may continue inside individual containers. Practically every single container in the area of the fire therefore necessitates individual checking. On the *MSC Flaminia* exactly this delayed fire-fighting. The search for a place of refuge was prolonged and complicated due to the fire and its consequences. Coastal States were concerned that the fire could re-ignite if a seat of fire was overlooked in one of the containers. Even after the fire was extinguished, risks to human health remained. According to the *SOSREP*, the mixing of large quantities of fire water with the contents of the IMDG-containers created new and unknown compounds (Shaw, 2013, p. 43). All of these problems occurred onboard a 6,732 TEU containership. With that size, the *MSC Flaminia* can almost be considered small in comparison to today's "mega" containerships which ply the east-west trades. The objective of cost optimization and economies of scale illustrated in Chapter III has produced larger and larger containerships with Maersk's Triple E's of 18,000 TEU already being surpassed by even larger ships. Notably these vessels have capacities for between 1,000 to 1,800 IMDG-containers (Morrison & van Zoelen, "n.d." p. 2). Therefore arrival of these ships is accompanied by significant concerns over salvage difficulties⁴¹. Especially if such a vessel is caught up in an incident similar to *MSC Flaminia*, involving a large fire, possibly even chemical fire, salvage will be very difficult and the search for a place of refuge even more difficult. Re-insurer Allianz (2014) points out that there at present only 51 ports around the world which are equipped

⁴¹ Several industry observers and insiders recently expressed their concerns: Loynd (2014) argues that large modern ships are a challenge that has 'salvos worried' and particularly points to the problem of how to remove 18,000 containers from a ship in bad weather' (pp. 1-2). Equally, ISU president A. Tsavlis finds that the difficulties which may be encountered with giant ships may be 'beyond problem solving', and especially sourcing equipment capable of intervening in such cases will be difficult (BIMO Watchkeeper, 2013). Whilst there are initiatives underway to deal with this problem such as Svitzer's mobile crane system which can be packed up and flown to a casualty "meccano style", some observers remain sceptical calling it an 'invention clouded in mystery' (Information received from an industry source)

to handle “mega” container carriers⁴² (p. 24). Whilst ports are working to improve handling capacity, this issue gives cause for wider concern on the number of ports able to offer a safe final place of refuge to ship of that size in need of assistance. As was already demonstrated by *MSC Napoli* and *MSC Flaminia*, ultimately a larger stricken containership will need to be transferred into port even if a temporary place of refuge is provided in order to stabilize a situation. It took four months to simply unload the “only” 2,318 containers on *MSC Napoli* in its provisional place of refuge where she was beached (BSU, 2014, p. 172). Undertaking the same for an 18,000 TEU vessel, potentially ablaze and in open waters is not practical. A port is the most practical solution as a final place of refuge as it has the infrastructure, berth space, cranes, equipment and quay space for segregation that is needed to handle damaged and undamaged containers (Morrison & van Zoelen, “n.d” p. 2). In this context the lack of adequate ports able to handle mega ships is even more concerning.

The examination of the cases of *Stolt Valor*, *MSC Flaminia* and *Maritime Maisie* has demonstrated some common and some particular flaws in the present system of dealing with places of refuge. Some of these are standalone problems, such as the problem of mega containerships and lacking port infrastructure. Others can be directly related to shortcomings in the Guidelines. The next Chapter presents a number of recommendations for improvement of the Guidelines.

⁴² Allianz (2014) defines mega containerships as fully cellular containerships with a capacity in excess of 10,000 TEU (p. 24)

CHAPTER VI: RECOMMENDATIONS FOR AMENDMENT OF THE GUIDELINES AND CONCLUSION

In Chapter IV the salient provision of the Guidelines were assessed and some problematic areas pointed out. Chapter V expanded on this by analyzing the Guidelines in the context of national place of refuge guidelines and recent cases. To the author's knowledge, the Guidelines have not been amended since the ten years of its existence, despite some obvious shortcomings. Based on the findings and observations made so far, recommendations for improvement of the Guidelines will be presented here. The practical basis for amendment of the Guidelines is the preamble to the Guidelines which calls for the *MSC* and *MEPC* to 'keep the Guidelines under review and amend them as appropriate (IMO POR Guidelines, 2003, p. 2).

No rejection without inspection:

The provision in the Guidelines for an expert analysis is certainly a good one as it requires the coastal State to gather objective data on which to base his refusal or acceptance. However, the Guidelines do not make it a mandatory requirement. The author fully endorses the view of *ISU*, *ICS* and *IUMI* that there shall be no rejection without inspection. Knee-jerk refusals based on no or subjective assessment would thereby be eliminated. Further, the Guidelines should stipulate that the expert analysis be done as soon as possible after an incident to prevent a further deterioration of the vessel due to procrastination. Whilst the Guidelines require the inspection team to be composed of persons 'with the expertise appropriate to the situation', it is recommended that the

required expertise be specified further to ensure they can engage in meaningful discourse with the salvage master. The Australian *National Maritime Place of Refuge Risk Assessment Guidelines* (2009) achieves this by requiring the inspector(s) to have extensive knowledge of ship structures and stability and experience in salvage operations (p. 9).

Empower masters and salvors to fashion emergency response:

As has been discussed, subjecting response measures of the master/salvor to coastal State consent is counter-productive and cannot be in the interest of a coastal State. Often, time is of the essence and the master on site is arguably in a better position to assess whether or not e.g. a salvor is to be engaged. If first consent has to be obtained, valuable time could be squandered. It is recommended that this provision is deleted from the Guidelines in its entirety.

Address Decision-making and Response Systems:

The silence of the Guidelines on effective and efficient decision-making arrangements and response systems is considered a serious omission. If it is left to the discretion of individual maritime States to fashion response systems, alignment and standardization is impossible. In an emergency when time is of the essence, it would however be helpful if response systems of different maritime administrations were standardized and streamlined as far as possible to ensure all stakeholders are aware of what is expected of them. The *SOSREP* command and control system of the UK is generally considered the best-practice approach because it is pragmatic and largely avoids the pitfalls associated with politicization, fragmentation and localization of the decision-making. It is

recommended that the Guidelines are revised to address response systems and encourage emulation of the *SOSREP* system.

Improve nautical publications on places of refuge:

Whilst this is perhaps not a subject which can be regulated in the Guidelines directly, it would be of practical value if those places of refuge which are publically designated were made the subject of nautical publications, such as charts and Notices to Mariners. The existence of a place of refuge is of little value to the mariner, if, in the heat of the moment he does not know where precisely this place of refuge is. It is recommended that publically designated places of refuge, for instance those in Denmark, are marked in nautical charts.

Define Flag-state responsibility:

In the case of *MSC Flaminia*, the vessel's flag-state intervened and by providing a place of refuge broke the stalemate in the discussions. However the flag-state was in the beginning only included passively in the discussions between salvors and coastal States. In the case of *Maritime Maisie*, flag-state intervention and pressure was instrumental in securing refuge in South Korea. Both cases illustrate the important role flag-states can play in the search for a place of refuge. The Guidelines which are presently silent on the issue of flag-state responsibility should address this issue and at the very least require that a flag-state is involved in place of refuge discussion from the beginning.

Implementation of *MAS Resolution* to be made a priority at IMO:

The importance and practical value for the master and salvors of having a single and permanent point of contact in the coastal State where a refuge request is made has been discussed. Conversely, the slow progress made to date with establishing MAS centres is concerning. It is recommended that IMO take this issue up on priority basis and push harder for implementation of the *MAS Resolution*. Likewise the importance of having a single and clear channel of communication should be emphasized more in the Guidelines. *The National Maritime Place of Refuge Risk Assessment Guidelines* of Australia (2009) explicitly stress the importance of MAS stating that 1) ‘the problems associated with multiple points of contact during a maritime incident are well recognized’ and 2) that it is ‘important to try to minimize the number of contact points between those interests associated with the ship and the relevant government agency’ (p. 8). Similar emphasis should be made in the Guidelines. In order to facilitate the publication and accessibility of MAS details including call numbers, these should be appended to national place of refuge guidelines where these exist. The national guidelines of Australia and Canada provide laudable examples in this respect.

Professionalization of risk assessments:

The importance of having experts with the respective experience and expertise perform risk assessments fashioned under the Guidelines has been discussed. If it is allowed that non-experts perform these or even political pressure impinges on the risk assessments, these will be subjective, probably emotional and distorted. Whilst the Guidelines stress the value of technically and objectively argued cases, this does not go far enough. It is recommended that the Guidelines explicitly require risk assessments to be performed by experts with the respective expertise and experience in salvage, shipping, cargoes,

engineering and ship structures, as conceived in the *U.S. Coast Guard Places of Refuge Policy (2007)*.

Define more clearly the scope and application of the Guidelines for ships on the high seas:

The Guidelines do not define whether they apply in respect to refuge requests received from vessels in a country's inland waters, territorial sea, EEZ or even on the high seas. The case of *MSC Flaminia* has clearly shown coastal State responsibility and accountability issues when an incident evolves on the high seas. Canada's *National Places of Refuge Contingency Plan (2007)* for instance also applies where a ship is destined for Canada and has reported a problem. This could be a vessel on the high seas and accordingly Canada would be responsible and have to address and process the request. It is recommended that the Guidelines are amended to specify clearly that all refuge requests received should be acted upon, regardless whether the stricken vessel is within a country's national waters or on the high seas.

Reduce bureaucratic procrastination:

The U.S. Coast Guard Places of Refuge Policy (2007) stresses the need for rapid communication in all aspects of the response as opposed to a bureaucratic approach: 'the complex and sensitive nature of Place of Refuge incidents makes rapid communication with stakeholders, partner agencies, and the Coast Guard chain of command particularly important' (p. 5). Further, once the decision whether to grant or refuse a place of refuge has been made, this should be communicated immediately to the requestor as time may well be of the essence. The Australian *National Maritime Place of Refuge Risk*

Assessment Guidelines (2009) achieves this: ‘once a decision on whether to grant or refuse a place of refuge request has been made the decision should be *immediately* communicated to the person who made the request (emphasis added)’ (p. 11). It is recommended that the Guidelines are amended accordingly to highlight the importance of time.

Provide for alternative coastal State assistance if refuge is refused:

Currently, if a vessel’s request for refuge is refused, the Guidelines do not provide for alternative assistance which can be rendered by the coastal State. This is not satisfactory since if a place of refuge is refused, a stricken vessel may have nowhere else to go. Canada’s *National Places of Refuge Contingency Plan* (2007) explicitly provides for the rendering of alternative assistance: ‘in the case where the risk is considered too great and access to a place of refuge must be denied, then all possible assistance must be offered to the ship offshore as to prevent and control any environmental damage that may or will occur’ (p. 17). Similarly, the *U.S. Coast Guard Places of Refuge Policy* (2007) also provides that

Any decision to deny a vessel a place of refuge should be accompanied with a plan to render assistance (...) an arbitrary decision to force the vessel to another locale, particularly one which may involve higher risk and/or with less capability to address the situation is unacceptable (p. 3).

It is recommended that the Guidelines are amended on similar lines to provide for alternative assistance offshore in case refuge is denied on objective grounds.

Update coastal State assessment factors:

As discussed, the Guidelines provide for a non-exhaustive list of coastal State assessment factors. In different parts of the world there exist unique assessment factors, consideration of which may prove to be decisive in a coastal State's decision whether or not to grant refuge. It was discussed that in the case of *Stolt Valor*, a number of coastal States refused access due to risks to desalination plants and by implication health and safety. In China, Norway and Chile aquaculture/fish farming is of great commercial importance. These coastal States will consider this assessment factor in their decision-making. Interestingly, in a Chinese case, the local maritime bureau evaluated suitable places of refuge for a ship which had ran aground off Weihai and considered nearby areas where expensive sea-cucumbers were farmed commercially, unsuitable⁴³. Moreover, Richie (2006) has pointed out that coastal States will utilize oil-spill trajectory models in their assessments when the vessel seeking refuge causes spills. Further, the *U.S. Coast Guard Places of Refuge Policy* (2007) makes specific mention of national defense concerns as an assessment factor.

Operational commanders shall evaluate the risks a vessel seeking a Place of Refuge may pose to national defense, including limiting freedom of action (such as by blocking a channel, or compromising Operational Security (OPSEC) by exposing Department of Defense (DOD) or Coast Guard personnel, installations, or equipment to unacceptable surveillance (p. 4).

It is recommended that the Guidelines are updated to take account of these "unique" assessment factors since it can be useful for stakeholders, such as refuge requestors, to know exactly the assessment factors which will be evaluated by a coastal State in a particular area in the decision-making. This could enable them to make their own

⁴³ Information received from a well placed industry source

“calculations” whether or not their request will be successful or whether they have to seek for alternative assistance.

Coordination of multi-jurisdictional response:

MSC Flaminia demonstrated that in multi-jurisdictional situations the current place of refuge system does not satisfactorily allow for coordination of the response through one designated maritime administration which would be more efficient. In multi-jurisdictional regions such as Europe or Asia, neighboring States should agree as soon as possible after a casualty unfolds whether in the specific case it is appropriate for a State - and if so which – to take the charge of coordinating requests for the allocation of a place or port of refuge addressed to several States after an incident (BSU, 2014, p. 177). In the case of *MSC Flaminia*, the *SOSREP* assumed this coordination function voluntarily because he had the most information about the stricken vessel. *SOSREP* also arranged crisis meetings which the other coastal States attended. This proved valuable for all participants. It is recommended that the coordination of multijurisdictional responses is addressed in the Guidelines even though real solutions or coordination mechanisms are however more likely to be established on a regional level.

Conclusion:

In conclusion, developments inter alia in shipping have changed state practice and thus fuelled a counter-practice which has undermined the traditional custom of providing refuge. This was shown in Chapters II and III. The Guidelines which have been analyzed in Chapter IV represent a compromise between the coastal State on the one hand and shipping interests on the other. They call for a careful balancing approach between the

risk posed to the asset including human life at sea and health and safety, environmental and economic risks to the coastal State at large. Accordingly they contain both elements of the old refuge custom and State sovereignty over its coastal waters. Whilst the procedural requirements in form of risk assessments ultimately allow a coastal State to refuse access, the requesting vessel, her owners, managers, salvors, flag-state and insurers are all entitled – at least when the coastal State implements and complies with the Guidelines – to a correct and carefully reasoned decision made on objective grounds. It has been shown in Chapter V that despite some progress with the Guidelines through national implementation in a number of countries, there still remains a disconnect between what is talked about and reality – genuine compliance with the Guidelines appears to be lacking. In particular the cases of *Stolt Valor*, *MSC Flaminia* and *Maritime Maisie* have shown that despite objective reasons in favour of a temporary place of refuge to stabilize a situation and reduce risks, even this is typically not granted, although the Guidelines explicitly state that a place of refuge does not necessarily have to be a port and that providing refuge is often the best course of action. This suggests that the risk assessment and decision-making process of coastal States requires improvement. To that end, a number of recommendations how the decision-making process can be professionalized, objectified, expedited and the Guidelines overall improved, have been made in Chapter VI. Amendment and revision of the Guidelines is considered a practical and achievable proposition, since the Guidelines themselves provide for a review procedure. Certainly the wider maritime industry would stand to benefit if the IMO act along these lines.

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