

Attenuation of the Adoption of a New Place of Refuge International Obligatory Instrument

Capt. Mohamed Ahmed Essallamy (Presenter)

Assistant Dean for Education
Maritime Safety Institute - AASTMT
Abo Qir Branch

messallamy@gmail.com

Abstract

The research targets to enlighten the reader for the problem of granting/refusing a place of refuge within a coastal state territory for a ship in cases of force majeure. As will be shown in included case studies, both the environment and the economy would be preserved by employing the proper way of treatment methodology in allocating determining a place of refuge in such dire situations. To overcome the debate, a literature review and analytical research were conducted to conclude whether it is needed to build a new international convention with regard to place of refuge.

It is known and accepted to host a ship seeking shelter due to severe conditions during transit in coastal state territorial waters. However, a decision maker may refuse to deal with Maritime Casualty; on the other hand, it is internationally accepted as per rules contained in many international conventions, such as UNCLOS, SOLAS and Salvage conventions. The reasons for not granting a ship a place of refuge in such a dire situation are many and include political, commercial, community and media pressures and fears. One case in particular, the M/T Prestige, is a prime example of how a decision-making process failed to deal with a ship in distress due to the lack of a proper instrument. Both the Spanish and Portuguese authorities refused to grant the severely troubled tanker the right of sheltering in 2002, which led to severe economic and environmental consequences due to the ship's break up.

Admitting the problem and employing the proper methodology can assist a decision maker in granting a ship in distress a place of refuge, with the hopes of avoiding the reoccurrence of similar disaster. This recommended methodology may take into consideration the severity, probability and consequences of an unfolding situation so a place can be chosen to host such a ship in distress until it can be repaired or discharged. Such careful and strategic decisions will consequently help to preserve the environment and avoid undue stress on the local economy. Moreover, benefits can be gained by applying these same methodologies; salvage operations and long-term jobs could be granted for large sectors of workers, inter alia.

Using analytical approaches after thoroughly literature reviews, this research aims to interpret the articles can be found in the available international treaties to attenuate the escalated demands to adopt newly established instrument. The paper also recommends ways to overcome the escorted risks and it describes the benefits can be obtained by following the proper way of treatment. These recommendations may be applied especially in marine high traffic areas that may carry very high commercial values for their natural resources, navigational routes that serve international trade, and for the availability of petroleum and /or gas exploration or production areas.

1. Introduction

Images of oiled seabirds with a stricken tanker in the background are, thankfully, rarer than the news media might have the general public believe. Yet when there is an incident, coastal states need to be prepared. The issue of "places of refuge" is one aspect of contingency planning where the rights and interests of coastal states, as well as the need to render assistance to vessels that are damaged or disabled or otherwise in distress at sea, ought to be taken into account (IMO, 2010).

As defined by the International Maritime Organization (IMO), a "Place of refuge means a place where a ship in need of assistance can take action to enable it to stabilize its condition and reduce the hazards to navigation, and to protect human life and the environment" (IMO, 2004).

Under longstanding maritime tradition and the practice of good seamanship, the master of a ship faced with a serious emergency is expected to seek shelter within a coastal state to avoid dramatic consequences. Based on the master's overriding authority and his/her professional judgment, to some extent the practice is codified in the revised Chapter V, Regulation 34-1, of the International Safety of Life Convention (SOLAS), which requires 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 is necessary for safe navigation and protection of the marine environment (IMO, 2010a). In other words, a master has to practice his overriding authority, based on his professional judgment, to seek external assistance or shelter in a place of refuge to save life or to prevent pollution to the environment (York Antwerp rules, 2004).

Actually, there is no legislation that has been identified yet for the development of international obligation by IMO with regard to place of refuge. At least, since the Legal Committee recognized that the principal challenge was to find the proper balance between the duty of states to render assistance to ships in distress and the right of states to regulate entry into their ports and to protect their coastlines from pollution or the threat of pollution (Sophie, 2007).

The issue of place of refuge was raised during the late 1980s, when the Legal Committee was considering the draft provisions of the International Convention on Salvage. At the time, it was discussed that there should be an obligation on States to admit vessels in distress into their ports. This was ratified by some delegations; however, some others showed doubt on the desirability of application. In addition, the guidelines recognize that, when a ship has suffered an incident, the best way of preventing damage or pollution from its progressive deterioration is to transfer its cargo and bunkers, and to repair the casualty. Such an operation is best carried out in a place of refuge. However, to bring such a ship into a place of refuge near a coast may endanger the coastal state both economically and environmentally; moreover local authorities and populations may strongly object to the operation (IMO, 2010b). While undergoing the research literature review, many Articles in the international legislation were found satisfying the needs and that can be interpreted to the desire of granting a place of refuge, and some others could be

applied when and by granting a place of refuge. Therefore, it can be inferred that there is no need to take the hard way of adopting a new international instrument that may be not entered into force due to lack of some acceptance criteria.

2. Historical background:

During the late 1980s, in debating the draft provisions of the International Convention on Salvage, it was suggested that there should be an obligation on states to admit vessels in distress into their ports. Although, this was endorsed by some delegations, others expressed doubt of the desirability of including such a "public law" rule in a private law convention. It was also pointed out that the interests of coastal States would need to be duly taken into account in any such provision. Doubt was also expressed as to whether such a provision would in fact affect the decisions of the authorities of coastal states in specific cases (IMO, 2010b).

The need to review the issues surrounding the need for places of refuge was included in a list of measures aimed at enhancing safety and minimizing the risk of oil pollution, which was drawn up in December 2000 in response to the Erika incident of December 1999 (IMO, 2010b).

However, even before the Erika incident, issues surrounding places of refuge were also discussed focusing on technical considerations with regard to ship and hull design in light of the Exxon Valdez disaster. Following the Exxon Valdez accident in 1989, the United States, dissatisfied with the weakness of international standards on the prevention of pollution from ships, adopted the 1990 Oil Pollution Act (OPA 90), unilaterally imposing double hull requirements both for new tankers and for existing tankers, in the form of age limits (as of 2005, between 23 and 30 years) and cut-off dates (2010 and 2015) for abandoning single hull tankers.

Further urgency regarding these issues came in the aftermath of the incident involving the fully laden tanker Castor which, in December 2000, developed a structural problem in the Mediterranean Sea. In early 2001, IMO Secretary-General William O'Neil suggested that the time had come for the Organization to undertake, as a matter of priority, a global consideration of the problem of places of refuge for disabled vessels and adopt any measures required to ensure that, in the interests of safety of life at sea and environmental protection, coastal states reviewed their contingency arrangements so that such ships are provided with assistance and facilities as might be required in the circumstances. The November 2002 sinking of the Prestige further highlighted the issue (IMO, 2010b).

2.1. M/T Prestige disaster consequences:

In fact, the first reaction of an authority may naturally be to refuse the access of a severely troubled ship with dangerous cargo in distress situation and thereby 'apparently' deflect the problem elsewhere. And yet, as we have often seen, there are clear indications that a refusal can result in compounding the problem, which ultimately endangers lives, the ship and the environment.

Upon the ship's break up after the Spanish authorities' refusal to host the cracked tanker, thousands of tones of heavy fuel oil spilled into the sea, polluting the Galician coastline. The pollution then spread to the shores of the Spanish Basque country. On 31 December 2002, it reached the French coast and the first lumps of oil were washed up on the beaches of the Landes and the Gironde. A week later, more than 200 km of Atlantic coastline from the Spanish border to L'Ile d'Yeu were affected (Weuster-Botz, 2008).

In conclusion, should the authorities grant a place of refuge to the tanker Prestige, on condition of applying the proper salvage operation, environment and economy would be preserved.

2.1.1. Actions Taken:

To combat the pollution, the European Union's special cooperation mechanism was activated. Resources and equipment from several Member States became available for mapping oil slicks, treating and recovering the oil were mobilized for the clean-up operation. The Commission has expressed its full solidarity with those whose livelihoods have been devastated by the spill, and adopted special emergency measures. Around €120 million have been made available to help Spanish fishermen cope with the situation. The approved support measures covered the following, *inter alia*:

1. financial compensation for individuals and businesses whose activities have been temporarily suspended,
2. aid for the replacement of fishing vessels,
3. aid for cleaning, repairing and reconstructing shellfish culture and aquaculture sites,
4. Financial compensation for the replacement of shellfish stocks (EU, 2003).

3. Focusing on the problem:

At IMO, it is clearly understood that, in any casualty situation, it is the safety of human life that takes the first and immediate priority and then attention can be turned to the ship and pollution prevention. That is why there is a sense of relief and satisfaction if the crew has been evacuated safely: at least one of the potentially catastrophic consequences of an incident has been averted.

Ships with structural damage and a dirty or volatile cargo in their tanks are not among the most welcomed visitors in the coastal waters of any state, particularly for those states with low tolerable safety and environmental limits, since the ships are merely passing through bringing no apparent positive commercial gains. Of course, there is also point of apportion blame for those who have made decisions to either keep stricken ships away from their coastlines, like in the M/T Prestige case, or even to host a stricken ship within a place of refuge.

Should a stricken ship be expelled to high seas, she would face more extreme conditions that can't be afforded. However, agreeing to grant assistance in a place of refuge within a coastal state would be a dangerous decision due to the severe consequences that might happen. In both cases, a decision should be made and supported by a scientific methodology to justify the decision maker's

point of view who may lack experience and the scientific background with regard to marine accidents and crisis management.

4. Sources of obligations:

The duty to render assistance to vessels and persons in distress at sea is a well-established principle of international maritime law (Article 98.2, UNCLOS) and SOLAS Regulation V/7, which require governments to ensure that any necessary arrangements are made for distress communication and co-ordination in their areas of responsibility and for the rescue of persons in distress at sea by their coasts. These arrangements shall include the establishment, operation and maintenance of such search and rescue facilities as are deemed practicable and necessary, having regard to the density of the seagoing traffic and the navigational dangers and shall, so far as possible, provide adequate means of locating and rescuing such persons. Those are applied as far as safety of lives is concerned.

During the debate on places of refuge, the legal issues surrounding this concept were analyzed and the question was asked whether a coastal state is under an obligation, or at least is not precluded, under international law, from providing a place in order to remove the ship from the threat of danger and undertake repairs or otherwise deal with the situation.

Moreover, international law recognizes the right of states to regulate entry into their ports, which comes in the United Nation Convention on the Law of the Sea (UNCLOS), Article 2 that refers to the sovereignty of a coastal state over its land territory, internal waters, archipelagic waters and the territorial sea.

Furthermore, the right of a foreign ship to stop and anchor in cases of force majeure or distress or for rendering assistance to persons, other ship or aircraft in danger or distress is explicitly referred to by UNCLOS in the case of navigation in the territorial sea (Article 18.2); similar rights are given in straits used for international navigation (Article 39.1-C) and in archipelagic waters (Article 54, UNCLOS).

Maritime Casualty is well defined in the UNCLOS Article 221.2 as a collision of vessels, stranding or other incident of navigation, or other occurrence on board a vessel or external to it resulting in material damage or imminent threat of material damage to a vessel or cargo that best describe a ship that suffers a trouble and consequently seeks a shelter in a coastal state for repair and/or lightering operations. This definition is the best description can be found for the term force majeure for the purpose of this paper.

4.1. Points of interest:

The right of a foreign ship to enter a port or internal waters, in other words which can be called 'place', of another state in situations of force majeure is not regulated by UNCLOS, although this constitutes an internationally accepted norm, at least in order to preserve human life and to practicably offer the needed assistance e.g. lightering the cargo during salvage operations, when a shelter is deemed necessary for the success of the operation. This, however, does not preclude the adoption of rules or guidelines complementing the provisions of UNCLOS.

On the other hand, the right of a coastal state to take action to protect its coastline from marine pollution is well established in international law, and it can be implied from the gusts of regulations that place of refuge should be granted to a ship in force majeure. Relevant provisions include UNCLOS, Articles 194, 195, 197, 198, 199, 202, 203, 219, 211, 221, 225; Salvage Convention, Article 9, and Facilitation Convention, Article V(2). That would be discussed briefly in the following part.

4.2. United Nation Convention on the Law Of the Sea:

However, a place of refuge is not literally mentioned in the UNCLOS but it can be inferred in many Articles, as discussed below.

4.2.1. Taking the necessary measures for pollution control, Article 194:

Particularly, as per the Article 194 of UNCLOS, States are required to take the necessary measures to prevent, reduce and control pollution of marine environment:

Article 194.1 states "whether individually or jointly by applying regional conventions", (UNCLOS, 194.1). Doing so, a place of refuge may be granted and deemed the best practice to a ship in *force majeure* to properly control and repair the damage.

While Article 194.2 reads "to ensure that all activities done under their jurisdiction or control are so conducted as not to cause damage by pollution to other States and their environment", (UNCLOS, 194.2). Doing so, a State is required to conduct all the necessary communication and cooperation with neighboring countries, perhaps under regional agreements, to host and to control the pollution of a ship in *force majeure*.

Moreover, the Article resumes, "that pollution arising from incidents or activities under their jurisdiction or control does not spread beyond the areas where they exercise sovereign rights in accordance with this Convention," (UNCLOS, 194.2). Doing so, a State is better to host the ship in force majeure in a place of refuge not to leave it to the mercy of the sea.

In doing that, a State is also seen practically required to grant a place of refuge to a troubled ship for effectively applying this Article.

4.2.2. Containment of pollution, Article 195:

Moreover, this Article would be best applied by granting a place of refuge to a ship in *force majeure*. In the granted place of refuge, a coastal authority is to contain the pollution using the proper pollution containment, e.g. booms and skimmers for oil cargo cases, not to allow the pollutant material to spread out of the place of refugeⁱⁱ.

4.2.3. Having regional and international cooperation, Articles 197 and 198:

Applying these Articles, States are required to cooperate under regional or global conventions to protect and preserve the environment by applying the standards and recommended practices and procedures, *inter alia*, e.g. choosing

a place of refuge and control the pollutant material. Moreover, to immediately notify other states for the imminent danger of pollutionⁱⁱⁱ.

4.2.4. Pollution prevention preparation, Article 199:

Unlike the above mentioned Articles where States are urged to prevent pollution and cooperate accordingly, Article 199 states that States are best be prepared for pollution accidents, and contingency planning is seen an advisable way to do so. Choosing a place of refuge on case by case basis, would allow better protection for the environment. In other words, a State can select a place of refuge that has the basic acceptable and established appropriate scientific criteria, as per the requirement of Article 200 and 201 to host disabled ships for repair and lightering operations, under a proper contingency plan, and as discussed below in Articles 202 and 203^{iv}.

4.2.5. Having proper resources, Article 202 and 203:

Granting a place of refuge would require having the proper equipment, scientific and educational levels or in other words all the necessary recourses that might be not available in developing countries. Therefore the Article 202 urges developed countries to introduce the proper training for technical personnel of developing countries. Furthermore, supplying and advising of manufacturing of necessary equipment for containment of the pollutant materials are deeply required e.g. oil booms and escorted tug boats. Moreover, developed countries are required to conduct and convey to the developing countries the research on combating and containment techniques. In addition to that they are required to provide the necessary assistance for developing countries in cases of major pollution accidents to minimize the consequences to the marine environment^v.

In addition, Article 203 states that developing countries are to be granted the appropriate funds and technical assistance which are two important elements in granting a place of refuge. However, salvage operations can afford the fiscal indemnity, as per the well known salvage clause "No Cure, No Pay".

4.2.6. Application of the necessary regulations for prevention, reduction and control of marine pollution, Article 211:

Article 211.1, Pollution from vessels: implies that "prevention of pollution is better than cure". It urges countries to establish international rules, *inter alia*, to prevent, reduce and control marine pollution from ships. It indicates that one of the ways to do that is by adopting routing systems to prevent accidents. However, adopting a place of refuge would be better scenario for a damaged ship.

While, Article 211.4 gives the right to the coastal state to apply the necessary laws on the foreign ships in innocent passage to prevent pollution within their territorial sea.

In parallel, coastal states are given the right in Article 211.6 to enforce the necessary rules and regulations not only in its territorial waters but also in its economical zone to prevent pollution from ships, particularly if there were lack

of international instrument to meet special circumstances. Accordingly, a coastal state may apply the notion of place of refuge to serve a ship in a *force majeure*, as it is not internationally applied yet.

4.2.7. Detention of ships, Article 219:

Article 219 obviously states that a State has to take administrative measures to prevent the vessel from sailing if found in breach of standards relating to seaworthiness of vessels and thereby threatens damage to the marine environment, as far as practicable. In other words, a ship can be detained in case if it is found below the internationally accepted safety standards. Detention is done until a ship is repaired and it can be deemed seaworthy, this of course for the fears to allow the ship to leave a port while it is threatening the safety of lives and the environment for pollution. Similarly, a ship in *force majeure* is better to be hosted in a place of refuge to be handled properly, and not to be permitted to leave that detention place or we can name it "place of refuge" unless it is surveyed and found satisfactory.

4.2.8. Applying the domestic law on a foreign ship in force majeure, Article 220:

If we consider a ship like Prestige, regardless due to its break up or if committed in violation to the international law, is deemed a source of pollution, she was not allowed for sailing not only in the territorial sea but also in the exclusive economic zone. Article 220.6 gives the right to a coastal State to apply its domestic law. Accordingly, a ship in a similar case to Prestige is better be hosted in place of refuge until the salvage operation are properly undergone and safely ceased.

4.2.9. No obstacles to apply the notion of place of refuge, Article 221:

As explained earlier, Article 221.2 defines Maritime Casualty as "a collision of vessels, stranding or other incident of navigation, or other occurrence on board a vessel or external to it resulting in material damage or imminent threat of material damage to a vessel or cargo". While in Article 221.1, a coastal State is given the right to take and enforce measures beyond the territorial sea proportionate to the actual or threatened damage to protect their coastline or related interests, which means there is no obstacles to apply the notion of place of refuge or any similar action to eliminate and control the pollution consequences.

4.2.10. Benefits of applying the law, Article 225^{vi}:

If a ship is not hosted in a place of refuge the said adverse consequences are to be met, accordingly a coastal State is better to enforce its power against not only native ships but also on foreign ships and not to refuse offering a place of refuge. Doing so would cause the following, *inter alia*:

- Not to endanger the safety of navigation, if a ship sank particularly in shallow waters as wrecks are considered hazardous to navigation, in addition to the pollution threats,

- Not to create any hazard to a vessel by expelling it to the international waters, e.g. the Prestige case, or
- Not to bring a ship to unsafe port or anchorage, this is to be properly selected as per the mentioned earlier criteria.

In conclusion, reading and interpreting the above mentioned articles of the UNCLOS, however it is not mentioned literally, shows that it is already implied that a place of refuge would be one of the most effective ways to prevent pollution to the environment and to safe life at sea. There is no obstacle in UNCLOS to the development of such obligations provided they respect the principles of international law, including those relating to the balance of interests between the ship in distress "needs" and the coastal state "authorities".

4.3. The Salvage Convention:

In addition to the said UNCLOS Articles, the Salvage convention mentioned literally that a State party to the convention is responsible for the processes of regulating and taking decision with regard to salvage matters. The International Convention on Salvage 1989 done at London on 28 April 1989, and it entered into force on 14 July 1996.

4.3.1. Article 11 of the Salvage Convention^{vii}:

However, the Article concentrates on the safety of life and the property in danger, yet, it mentions also about the efforts should be taken to the environmental damage. Focusing more on human life and safety rather than on what is to be done with the ship in cases of force majeure or distress, these provisions do not of themselves give a right of entry to a place of refuge, nor do they explicitly refer to the question of a coastal state's obligation to establish places of refuge. However, neither do they preclude such a principle.

Therefore, it is seen, from the practical point of view, to establish and maintain a place of refuge and to grant or refuse a ship in distress, on a case by case basis.

4.4. Facilitation Convention, Article V (2)^{viii}:

The Article implies that a State is to apply any measure to preserve the public health and animals and plants; protecting the environment from pollution. A place of refuge is considered a way to reach the desired achievements.

5. International efforts and work done:

In addition to the recent educational and training aspects, almost all of the internationally taken measures mainly concentrated on the technical and administrative measures, such as:

- Intensive training and education for ships crews in compliance with the amended STCW convention and the ISM code application requirements.
- double hull acceleration and single hull phase out after the M/T Prestige accident,

- banning single hull tankers, at least from the USA and EU waters,
- obligatory insurance coverage for tankers carrying cargo oil of more than 2,000 tons,
- Port state harsh inspection and control, and
- Regional agreements among some countries for combating marine disasters e.g.:
 - Mediterranean countries 'Barcelona convention' and
 - Red Sea countries 'Jeddah convention' regional agreements, *inter alia*.

6. Risk Based Decision Making Methodology:

The risk-based decision making methodology would persuade a decision maker, including media and community groups, to make the best applicable decision and would help in choosing the most suitable place to host a troubled ship within a suitable window of opportunity, before it may be too late. That methodology is considered also as a tool by which a decision maker bases his/her decision, whether to grant the needed aid or to refuse offering assistance to a ship in distress.

In order to conduct the methodology, it is thought to select a research location that not to contain:

- High beach severity,
- High priority activities e.g. tourism activities or surface sports.

And perhaps it may contain:

- High shipping traffic within navigational routes, and
- Petroleum exploring and/or production activities,

Then, to apply the risk-based decision making methodology by:

- Identifying the threats and hazards that can be applied and found within the selected areas based on probability theories,
- Analyzing the risk components e.g. severity and consequences based on statistical approaches.
- Setting the risk matrix.
- Putting in place the risk control options that can eliminate, if not mitigate, the risk to the tolerable limit.

Finally, putting the rules into force, by applying the plan that would include:

- Supplying the selected place with the resources and the needed infrastructure such as:
 - Training of crews on different pollutant material techniques, and ships handling,
 - Providing the escorting tugs to assist the ship in trouble,
 - Providing storage places, e.g. and containment barges, for the cargo lightered from ships in trouble,
 - Providing booms to surround the ship to contain the oil spilled if any, and
- Building the infrastructure for ships' repair or to provide sub-contractors that can offer the assistance, *inter alia*.

It is then useful to identify the evaluation of risks associated with the provision of places of refuge, as per the A 23/Res.949:

- 1 Identification of events,
- 2 Assessment of risks related to the identified event taking into account:
 - Environmental and social factors,
 - Natural conditions,
 - Contingency planning,
 - Foreseeable consequences (including in the media) of the different scenarios envisaged with regard to safety of persons and pollution, fire, toxic and explosion risks.
- 3 Emergency response and follow-up action, (A 23/Res.949, PP. 12-14).

7. Estimated gained benefits:

Some successive salvage examples could be given as mentioned in a speech by Mr. William O'Neil, the IMO former secretary general, in the Fourth International Marine Salvage Conference on 19 March 2003; in some of these cases places of refuge were granted. Offering assistance to ships in distress can have a prize under the salvage rules e.g. 'No Cure No Pay'.

An image of an arbitrator considering the circumstances and offering an award covering out-of-pocket expenses, plus other incidental expenses and adding an extra reward related to preventing or minimizing environmental damages as provided for in the Salvage Convention of 1989 (Mackay, 1997).

Moreover, some countries suffer high unemployment rates; granting a place of refuge would offer long-term jobs for labors assisting in the salvage and lightering operations, if under proper supervision.

One of the most useful benefits is the control of the amplification of risk that can explode in or in some times by the media, within unions and environmental protection groups. Consequently, a decision maker, who is under severe political pressure, will be able to defend his/her refusal/granting of a place of refuge.

8. Conclusion:

In conclusion, although it is internationally expressed in some internationally applied conventions that pre-designation of places of refuge might be useful in prevention of pollution in some maritime casualties. However, several IMO member states delegations do not believe that pre-designation of places of refuge is appropriate. Reading this paper would convince the reader that such pollution prevention methodology is already implied by some international instruments, and it can be deemed the best practice, which can be determined on case by case basis.

However it is not mentioned literally in the international law to host a ship in force majeure in a place of refuge, it is really better for party States to be prepared for similar situation. It would be highly desirable if coastal states pre-designated places of refuge for use when confronted with situations involving ships, particularly with dangerous cargo, in need of offshore assistance and, accordingly, apply the readymade relevant emergency plans, instead of being unprepared to face such situations and, because of that, risking the wrong

decision being taken by improvising or, in the heat of the moment, acting under pressure from groups representing various interests.

Granting access to a place of refuge could involve a political decision which can only be made on a case-by-case basis. Doing so, consideration would need to be given to balancing the interests of the affected ship with those of the environment and economy of the coastal state(s).

9. Recommendations:

However, it has proven possible for the IMO to develop Guidelines on places of refuge i.e. A 23/Res.949, on a case by case basis, for Maritime Casualty in a manner which retains a proper and equitable balance between the rights and interests of coastal states and a ship in distress at sea. Conversion of the soft law, A23/Res.949, to internationally accepted convention would be of good help.

Moreover, the risk-based decision making process would be considered the best applicable tool and would help in choosing the most suitable place to host a troubled ship within a suitable window of opportunity. Moreover, it could be considered a tool by which a place is granted or banned.

9.1. Escorting measures to be taken:

This research topic is brainstorming a lot of other potential ideas that can be applied within the main core of the research. In fact, there are significant measures that could be taken which should help improve the whole maritime safety system and reduce the risk of maritime accidents, marine pollution and loss of human life at sea. Some of these measures are to escort all the mentioned above, such as:

- Suggesting a thorough study that should be made of the extent to UNCLOS regulations dating from 1982,
- Motivating and promoting safety culture within communities for better understanding of risk tolerability,
- Using better media attenuation/amplification of risks to educate the community for the troubles can be suffered in cases of crises, taking into considerations the enormous economic and environmental costs of pollution on the scale caused by Erika and Prestige.
- Applying and putting into force regional and international agreements with regard to the technical cooperation in case of marine crises,
- Ensuring application of salvage agreements on ships in place of refuge.
- Ensuring wreck removal that must operate in parallel.
- Applying liability and insurance issues such as CLC and FUND conventions,
- Noting ship recycling could be needed, particularly in total loss or presumed loss cases.

References:

1. Cacciaguidi-Fahy, Sophie, 2007, *The Law of the Sea and Human Rights*, Vitoria.
2. D. Weuster-Botz, Marea Negra, 2008, *The daily danger of tanker disasters*, Barcelona.
3. European Union Commission (EU), 2003, *Prestige Accident*, as retrieved from the www.observatoriodelitoral.es/.../prestige_accident_03.pdf on 1/12/2010.
4. International Maritime Organization (IMO), 1965, *FAL convention*, IMO, London.
5. International Maritime Organization (IMO), 2004, *Resolution A 23/Res.949*, IMO, London.
6. International Maritime Organization (IMO), 2010a, *International Safety of Life at Sea Convention SOLAS*, IMO, London.
7. International Maritime Organization (IMO), 2010b, "Places of refuge" addressing the problem of providing places of refuge to vessels in distress, as retrieved from the <http://www.imo.org/OurWork/Safety/Navigation/Pages/PlacesOfRefuge.aspx> on 1/12/2010.
8. Mackay, 1997, as retrieved from [http://www.ipsufactoj.com/international/2000/Part6/int2000\(6\)-014.htm](http://www.ipsufactoj.com/international/2000/Part6/int2000(6)-014.htm) on 1.1.2011
9. United Nations, 1982, *United Nation Convention on the Law of the Sea (UNCLOS)*, United Nations, Geneva.
10. York Antwerp rules, 2004. As retrieved from the www.marineclaimsconference.com/2004/.../Ben%20Browne%20paper.doc on 1/1/2011

UNCLOS:

- i "194.3. *The measures taken shall deal with all sources of pollution of the marine environment. These measures shall include, inter alia, those designed to minimize to the fullest possible extent:*
 - a. ...
 - b. *pollution from vessels, in particular measures for preventing accidents and dealing with emergencies, ensuring the safety of operations at sea, preventing intentional and unintentional discharges, and regulating the design, construction, equipment, operation and manning of vessels;" (UNCLOS, PP. 100, 101).*
- ii "Duty not to transfer damage or hazards or transform one type of pollution into another: *In taking measures to prevent, reduce and control pollution of the marine environment, States shall act so as not to transfer, directly or indirectly, damage or hazards from one area to another or transform one type of pollution into another."* (UNCLOS, P. 101).

iii *"Cooperation on a global or regional basis: States shall cooperate on a global basis and, as appropriate, on a regional basis, directly or through competent international organizations, in formulating and elaborating international rules, standards and recommended practices and procedures consistent with this Convention, for the protection and preservation of the marine environment, taking into account characteristic regional features."* (UNCLOS, P. 102).

iv *"Contingency plans against pollution: In the cases referred to in article 198, States in the area affected, in accordance with their capabilities, and the competent international organizations shall cooperate, to the extent possible, in eliminating the effects of pollution and preventing or minimizing the damage. To this end, States shall jointly develop and promote contingency plans for responding to pollution incidents in the marine environment"* (UNCLOSE, P. 102).

v *"Scientific and technical assistance to developing States:*

States shall, directly or through competent international organizations:

- (a) promote programmes of scientific, educational, technical and other assistance to developing States for the protection and preservation of the marine environment and the prevention, reduction and control of marine pollution. Such assistance shall include, *inter alia*:
 - (i) training of their scientific and technical personnel;
 - (ii) facilitating their participation in relevant international programmes;
 - (iii) supplying them with necessary equipment and facilities;
 - (iv) enhancing their capacity to manufacture such equipment;
 - (v) advice on and developing facilities for research, monitoring, educational and other programmes;
- (b) provide appropriate assistance, especially to developing States, for the minimization of the effects of major incidents which may cause serious pollution of the marine environment;
- (c) provide appropriate assistance, especially to developing States, concerning the preparation of environmental assessments." (UNCLOS, P. 103).

vi *"Duty to avoid adverse consequences: in the exercise of the powers of enforcement*

In the exercise under this Convention of their powers of enforcement against foreign vessels, States shall not endanger the safety of navigation or otherwise create any hazard to a vessel, or bring it to an unsafe port or anchorage, or expose the marine environment to an unreasonable risk" (UNCLOS, P. 113).

1- Salvage Convention:

vii *"A State Party shall, whenever regulating or deciding upon matters relating to salvage operations such as admittance to ports of vessels in distress or the provisions of facilities to salvors, take into account the need for co-operation between salvors, other interested parties and public authorities in order to ensure the efficient and successful performance of salvage operations for the purpose of saving life or property in danger as well as preventing damage to the environment in general."* (Salvage Convention, P.5).

2- Facilitation Convention:

viii *"Nothing in the present Convention or its Annex shall be interpreted as precluding a Contracting Government from applying temporary measures considered by that Government to be necessary to preserve public morality, order and security or to prevent the introduction or spread of diseases or pests affecting public health, animals or plants."* (IMO, 1965).