



Emergencies in Ships at Open Seas and Places of Refuge

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ABSTRACT

From the sinking of the tanker "Prestige", debates on whether or not to have pre-established places of refuge in the Spanish and European coasts have been intensified, as well as having contingency plans for decision-making about a ship in need of assistance. This paper summarizes how is, ten years after, the legislation in Spain in this area and, as a theoretical exercise, a protocol to different emergencies on ships at sea is proposed.

1. Introduction

More than ten years after the shipwreck of the oil tanker "Prestige", and finished the trial on this accident, many voices in the industry suggest that if a similar situation occur today with another ship the result may be the same as that reached in Galicia in those days of November 2002.

In the sentence of the "Prestige", it's said that it was initially correct the action of removing the vessel from the coast, but also explains that according to most experts consulted during the trial, the final decision to take him away "once the towline was firm, and without an imminent risk of crash against the shore, the logical, prudent and right action technically was sheltering the ship in a harbor or estuary to transfer its load or take it to calm waters offshore to do likewise".

However, in the same sentence it has explained the difficulty of the maneuver of taking the ship to a port or place of refuge other according to some experts, and highlights the lack of a single opinion in this action. And the sentence adds that "just faced with an emergency situation, prior the most rigorous and

capable technical advice, an entirely logical and clearly prudent, partially effective but controversial decision was made so that except for the imposition of a very personal approach and hardly founded, is authority decides to impose unreasonable a different approach".

And on places of refuge and how to act in the future, in the sentence it's said: "It has never said what the far right to take decision and protocol to follow in the event of non-negligible repeat of similar events or even now after extensive training and a long, arid trial, no one has been able to point out what is to be done apart from some individuals more or less technical opinions".

We see, therefore, that there are no defined criteria and the sentence says that no definitive conclusions can be drawn for a hypothetical future similar accident.

It is true, on the other hand, that there have been various legislative changes in this area both in Europe and in Spain.

First we must say that the European Union agreed to the "Guidelines on places of refuge for ships in need of assistance" (IMO, 2003); which were implemented in Spain by Royal Decree 210/2004 of 6 February establishing a complicated protocol to authorize access for ships in need of assistance to a place of refuge.

But, are enough these new rules and laws? Does this legislation prevent that a ship with problems and potentially dangerous for the environment contaminate a wide area finish our shores? Or put another way, have we learned anything from

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all that happened with the Prestige and other similar incidents such as the Erika in France? Do we know better now how to deal with a ship in distress near the coast?

With this article, we summarize what has been achieved so far in legislation and, as a theoretical exercise; we propose a possible proceedings facing various emergencies that may occur in a vessel in navigation.

2. Applicable regulations. State of the Art

If we analyze in chronological order the legislation that has been developed in Spain since 2002, we must begin by Royal Decree 210/2004 of 6 February establishing a monitoring and information system for maritime traffic is established.

This Royal Decree incorporates into Spanish law the European Directive 2002/59/EC that establishes a community vessel traffic monitoring and information system for maritime traffic.

As indicated by the R.D. 210/2004 in Article 1, the purpose is, on one hand, the establishment of a monitoring and information system for maritime traffic in Spanish waters to enhance maritime security and, on the other hand, improve the ability of response of the Spanish maritime administration to potentially dangerous situations at sea to prevent contamination that could be caused by a ship in distress.

This R.D., on top of the articles for the monitoring of maritime traffic, in terms of what to do with ships in distress, Chapter IV, under the title of "Monitoring of hazardous ships and intervention in case of problems and accidents at sea" provides in its Article 19 measures relating to incidents or accidents at sea. Specifically the R.D. says that in case of accident at sea and when the Maritime Administration considers that a ship is a grave and imminent danger that threatens the coast, it may take any action it deems necessary, including restrict the movement of the ship or to impose it to follow a specific course and ordered the captain to go to a place of refuge or impose a tug line.

On places of refuge, the R.D. in the Article 20 states that maritime administration, after consultation with the (non - binding) stakeholders and technical report of the Entity State's Ports, draw up plans to accommodate the stricken ship in Spanish waters.

And in the Article 21, under the heading "Authorization entry of a ship into a place of refuge", the R.D. listed the conditions under which the administration would authorize or not the access of a ship in need of assistance to a place of shelter and regulated that the mentioned administration should develop the necessary protocol in which the advantages and disadvantages of allowing such access taking into account various factors listed in the body of the article would be analyzed.

But this Article 21 was amended in the Royal Decree 1593/2010 of 26 November, and under the title "Plans for the accommodation of ships in need of assistance", it simplified protocol content and reception plans, and eliminate the first point of the article in which it was said that the administration is not required to provide authorization to access a place of refuge. The new redaction also includes, specifically, that the Director General of Merchant must participate in the development of these

plans that must cite the identity of the competent authority to assess the situation.

We should also mention, that Article 22 of Royal Decree 210/2004 states that the possible release of a vessel at risk to a place of refuge "may also be conditional on the provision of financial security". And the changes added to the R.D. 1593/2010 establishing that financial security is not removed.

To finish with this R.D. 210/2004, it must be said that in the consolidated redaction of the text of this R.D. amended on September 22nd 2012 was added, among other changes, the Second transitional provision by which the circumstances are regulated to the host vessels in places of refuge referred to in Article 21 "host plans until they develop", and specifies that in assessing whether any accommodation of a ship in need of assistance in a place of refuge the circumstances in each case taking into account the circumstances of the vessel, cargo, location, etc. will be evaluated.

From this second transitional provision is inferred that the reception plans mentioned in the article 21 were not reach completion.

Finally we quote the Royal Decree 1695/2012 of 21 December, that approved the National Response System to a marine pollution incident and which specified which applies to all cases of accidental marine pollution or approved deliberately prejudicial to the Spanish coast. This R.D. stipulated, in turn, that any private entity should develop contingency plans for marine pollution within no more than twelve months from the approval of the R.D.

Well, after more than twelve months from the entry into force mentioned R.D., maritime captaincies are getting the plans drawn up by different companies and institutions involved in possible contamination, such as refineries, port authorities, ancillary businesses, etc..

Regarding risk vessels offshore, to an event of marine pollution in this National Response System provides *inter alia* a general policy framework for integrated contingency plans in order to define the guidelines for action depending on emergencies according to the severity of the event and also define what type of actions and means must be applied by competent institutions.

In addition, it also regulates the content of the various contingency plans to be drawn up according to the R.D. regarding risk analysis and vulnerable areas and in determining the circumstances that established the plan and protocol to follow is activated.

We see, therefore, how this Royal Decree 1695/2012 instructed the Maritime Administration making plans for accommodating ships in need of assistance, to an event of marine pollution, with the notable participation of the Director General of Merchant Marine. These plans must be available and potential places of refuge able to host at a given time a ship in distress. Also in the plans for accommodating ships should be a clear process for assessing when a ship should be admitted or rejected in one of the possible places of refuge identified.

However, there are people who criticize how it is designed this Plan, as it is little new in substance regarding the Plan 2001 is provisional, since for application expect that the future Na-

tional Maritime Plan is established, it is not technical, and expressly designated as a single control for political office (Ministry of Development), is in many cases not feasible due to the amount of security to be deposited any operator of a vessel at risk in order to be welcomed into a place of refuge, and finally, despite efforts to give a solution, it is incomplete, as it is intended for situations maritime emergencies when they are already producing pollution, but does not regulate anything to potentially dangerous situations as the decisions made may decrease or even disappear as a possible threat.

In addition, at the writing date of this article, and so we could find out, these plans have not been developed entirely, until required level of the Royal Decree 1695/2012. Also, as what we can tell, neither have developed these plans to the level required by the Royal Decree 1695/2012.

Moreover, in the National Plan of Spanish Maritime Safety and Rescue (National Plan of specialist rescue services of human life at sea and pollution of the marine environment from 2010 to 2018) in the "Program for Research and Innovation for sustainable use of the sea", in the 3rd area on "Optimization of current and future emergency response and marine pollution events" we found in paragraph 3.5. on innovation in the integration of information from sensors and numerical models in the procedures and protocols in case of crisis. At this point there is talk of creating protocols that integrate all existing information and systematize its use for various purposes intended: punishment of offenses by operational spills, rescue at sea, fighting great pollutions, etc..

If we turn to Spanish legislation and regulations on assistance to vessels in distress, we first Law 33/2010 of 5 August, amending Law 48/2003 of 26 November on the economic regime and service delivery at the ports of general interest published in the Official Gazette on Saturday August 7, 2010.

In Article 107 addresses for vessels in danger of sinking ships and provides that the Port Authority will, in the event that the hazard is in port, the Harbour Master or, if in the territorial waters, who are competent to decide what to do with the vessel and to require the ship-owner, operator or consignee for the vessel leaves the port or take appropriate measures to prevent contamination.

Thus, the Spanish legislation grants the Port Authority, in case of accidents within a port state, or Harbour Master, if the incident outside port waters occur, the power of final decision on what action to take to minimize the consequences of the accident provided that "a ship present danger of sinking in the harbor or constitute a serious risk". But we still have no clear how to challenge a potential hazard in a ship situation when is not yet in real danger but that taking the wrong decisions (or fail to make some decisions) can make your situation becomes that of a ship with serious risk of subsidence and pollution.

3. About the Ports or Places of Refuge

We have seen in the previous section that the subject of the previous designation of ports or places of refuge on Spanish coasts already appears in the current legislation in one or another form. This issue of places of refuge is a recurring theme

in recent years around the world and revive the debate every time a new near shore marine casualty occurs.

The IMO adopted in 2003 A.949 (23) entitled Resolution "Guidelines on Places of Refuge for ships in need of assistance", in which, in the words of the IMO "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 can be better 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 from the environmental point of view, and local authorities and populations may strongly object to the operation. Therefore, granting access to a place of refuge could involve a political decision, which can only be taken on a case-by-case basis. In so doing, consideration would need to be given to balancing the interests of the affected ship with those of the environment".

Note that this resolution the IMO gives the guidelines for decision-making regarding the accommodation of ships with problems at some place of refuge, and IMO "invites" to the states to consider their advices but does not oblige them to adopt its resolution like a standard to meet.

The National Congress of the Environment (CONAMA) held in December 2006, in Madrid, Mari₂ Remedios Zamora, from the Department of Public Law at the University of Mi₂laga, presented a Technical Communication entitled "Lugares de refugio para buques necesitados de asistencia. Perspectiva jurí₂dica de una problem₂tica ambiental" where as the main conclusions that we can mention that in addition to a Royal Decree that shall provide an appropriate regulatory framework for maritime security and help for protect the environment, there must be, in practice, a "development of protocols and contingency plans provided, which must be accompanied by the provision of adequate infrastructure and personnel resources that make possible access to a place of refuge in the minimum security standards required" (Zamora, 2006).

In the final reflection of this paper is aimed at that "are maritime disasters, and social pressure that cause, that determine the development of recommendations and standards". He adds, "It is possible that further disasters still required to the effective implementation of Community rules about places of refuge" (Zamora, 2006).

In another publication of the University of Deusto (in the Master in Business Administration Maritime Port and Maritime Law), Irene Santisteban Baquerizo precisely analyses, under the title "Places of Refuge", how this issue is in Spain from the regulatory point of view. In its conclusions states that "it is disappointing that it gets to the point of adopting rules that seems to be born without interest to be fulfilled and that go against the spirit that drove its first approval". (Santisteban, 2010).

In addition, he adds, after analyzing the text, criticism to the places of refuge as the panacea, for what is questioned that "if it has been concluded that places of refuge are not the answer, Why they adopted the provisions that regularize them? What sense has a rule that makes such difficult conditions to fulfill to be effective? (...)Why the competent authority to decide on

these matters is a person whose experience in the matter we do not know? In this sense, it could be a good reference to get as it is a pity that the example of SOSREP of UK is taken". (Santisteban, 2010).

Well. At this point, let us briefly see how this issue has been dealt in different countries. First of all, we have the well-known case of the UK, mentioned above, and that is usually cited as an example of what should be done in other countries.

The British system spins around the Representative for Maritime Salvage and Intervention of the State Secretariat for the British Ministry of Interior (Secretary of State's Representative for Maritime Salvage and Intervention, SOSREP).

This representative has a delegated authority in which the decisions are taken under the responsibility of a qualified person (supported by a team of specialists) independent of government. It has, in the words of Robin Middleton, who served until 2008, "freedom to act without recourse to a higher authority and power (...) to order to a ship in difficulties to proceed to one place of refuge". In 2007, after the failure, in the English Channel, of the ship MSC "Napoli", and that was rejected in French ports, the British SOSREP ordered its grounding on a beach in the south of England and the incident did not develop in major casualty.

About the places of refuge in the UK must say that do not exist as such places, but any part of the British coast could be susceptible to accommodating a ship in distress if the circumstances so indicate, and SOSREP decides, because he assume that a maritime accident can occur anywhere and no two accidents will be the same, because there are too many external elements that influence, to reduce the chances of rescue preconditions. In addition, as Andreas Tsavlis note in the above article, not designating as a place of refuge to any port nor specific area as prior designation, the stigmatization of these areas is avoided.

In another European country, Germany, the take of the decision to maritime emergencies with risk of contamination, pass through the German Central Command for Maritime Emergencies (Havariekommando), which is organized into several departments under the direction of a Director appointed by the federal Government. This command, as difference from SOSREP, operates only when there is no agreement on the decisions to be taken between authorities in each case.

With regard to the U.S., having in mind the cases of emergencies at sea with the possibility of contamination, exists the National Response Team (NRT), which is incorporated a working group for the establishment of potential places of refuge. In this group are involved people from different government departments, such as the Department of Commerce, Agriculture, Defense, Minister of Interior or the Environmental Protection Agency.

It is highlighted that in the "Guide for take the decisions about places of refuge" published by the NRT clearly states that there are no pre-assigned places on American coasts to be intended to be a place of refuge in the event of a marine casualty nearby. This makes sense, since, as pointed out by the Guide, each accident is unique and different and there are no places of refuge which are suitable for all ships and for all situations. Fur-

thermore, the information about these sites may be incomplete or out of date, fisheries and natural resources are changing, the commercial, fishing and tourism activities also vary with the time, and resources against one accident also vary. (National Response Team, 2007).

Therefore, the NTR, in front of a potentially dangerous incident what he does is to establish a protocol how to identify the particular for that specific case of potential places of refuge that could accommodate the vessel in distress.

All the protocol faced to any incident is under the technical direction of the Captains of Port of the U.S. Coast Guard (COTPs) which decides if the ship in distress needs to be taken to a place of refuge and, if needed, which will be the place of refuge where it will be taken.

In another country with a huge extension of coastline, such as Australia, and been a member of the Commonwealth, its political action against this type of maritime risk is similar to that of British SOSREP, as it passes through the figure of MERCOM (Maritime Emergency Response Commander), created in 2009 by the Australian Maritime Safety Authority (AMSA).

We also want to bring to these lines some of the conclusions of Captain Andreas A. Constantinou published in his article 'Places of refuge - a Myth or a Reality?'. In this article, after studying how it has been addressed the issue of places of refuge through the story, also analyses the differences within the European Union itself in several countries with maritime tradition (Andreas, 2007).

Thus, begins by explaining the case of Cyprus. In this country, according to the Merchant Shipping Law of 2004, it is the minister of the branch who makes the final decision on an requisition for a place of refuge for the ship at risk, but the proposition will arrive to the minister already studied and reasoned by the Advisory Committee for Places of Refuge, composed by technicians from different departments who at the same time consult with experts when selecting a possible place of refuge.

As the reporting article explains, since this law was approved there have been several occasions in which the actuation has been successful carried out against different maritime emergencies.

In the case of France, the Maritime Prefect is who decides alone about the place of refuge in case of needed. Only the Directors of the ports can oppose to that decision. In these cases, a solution is taken with the agreement with the Director of Ports, Ministry of Transport or the Minister of Transport.

The 'Institut Français de la Mer' (IFM) differs from the idea of creating a likeness of British SOSREP figure to deal with emergencies at sea in the European Union. For this organism, the European Commission must ensure that the response to a risk has to be quick and efficient rather than independent, and adds that the idea that it can be taken a completely independent decision about a possible place of refuge for a ship at risk is a myth.

Among the conclusions of the article of the Captain Constantinou can emphasize that each state has an obligation with the rest of the neighboring states to do not transfer their problem from one place to another refusing a place of refuge in case of ship at risk.

Furthermore, despite what might appear after the adoption of Directive 2002/59/EC about Places of Refuge in the European Union, is not a reality at this moment, to ensure a place of refuge in case of need. In addition, as an example highlights the requirement established under Spanish regulations about high financial guarantee required to a shipping company in case of his ship at risk can be accepted in a place of refuge, guarantee that in practice, often, makes it impossible for him to be allowed to enter to an appropriate place of refuge in the circumstances.

Regarding the question of who is responsible to take the final decision about what to do with a ship in distress and where to take it, Captain Constantinou summarizes its conclusions in two actual paths, namely: one, that a completely independent technical department independent from the government of the day, should be who study each case and impose the solution in his professional judgment; and, two, that the technical department study the case and advise to the ultimate political responsible about what to do in every situation, but falling the final decision and responsibility over the political office.

For Captain Constantinou the right choice is the second one, as it cannot be known how an independent technical is actually truly independent, and because it responds better to the principles of democracy that political officials are elected to govern and decide. It is easier for a politician to make the right decisions based on the recommendations of a coaching staff whose professionalism is not questioned (Andreas, 2007).

Finally we bring to these lines some conclusions of a doctoral thesis about the Places of Refuge that under the title "Shelter from the Storm - the problem of places of refuge for ships in distress and proposals to remedy the problem", makes a study of the problems with the administrations of different countries face in dealing with this issue: "Any proposal for reform in the area of places of refuge must inevitably encounter and attempt to balance two firmly entrenched and largely incompatible positions. Shipping interests involved in the success of the marine adventure have a strong interest in preserving the vessel through timely intervention in a place of refuge. Coastal States have an equally strong interest in preserving their national waters and territory from pollution damage and their populations from danger from hazardous cargoes. To date, the task of trying to balance these varying interests, either through existing laws and institutions or through the solutions proposed by the IMO and CMI, has proved to be difficult. Additionally, there are a number of factors, which could influence the way in which coastal States respond to requests for access. These include the age and condition of the world fleet; the failure of flag State control, port State control and classification societies to detect substandard shipping; and the failure of current international conventions to cover all aspects of possible damage to places of refuge". (Morrison, 2011).

4. Conclusions

As we have seen, the problem of how to deal with emergencies at sea as to whether or not they wished to legislate on places of refuge is far from having a consensual and unanimous

solution between all sectors involved, both technical and political. Every country, even within the European Union itself has a different way of dealing with this issue from a policy perspective.

In general, we can say that every maritime accident is different and unique, as the circumstances and variables that influence each accident are so many and so different degree that is almost impossible to have provided all in one contingency plan for elaborate. One vessel in a same technical failure will act very differently as the sea, wind or cargo state. And, for the same vessel may have one day an appropriate place of refuge due to the prevailing weather conditions, and other day that place of refuge could be completely inadequate.

On the other hand, as we have seen, designate a place in advance of the coast as a possible place of refuge for a future maritime accident supposed stigma of that area of the coast and there will be an opposition of the local population to that designation.

Therefore, despite how good it sounds the idea of having a list of potential places of refuge on the shores of each country. In practice, it may be no more than an impossible theoretical idea to carry it out in all its consequences.

The shipping business evolves and grows. And, while boats transporting goods all over the world, and while the sea remains an environment that is sometimes hostile to human activities, is sure that shipping becomes to be a risk.

Furthermore, in an accident on a merchant ship at sea is inevitable that different interests will collide with one another. The captain and the owner will want to save, while is possible, the ship and cargo and wait to be given refuge in the coast. And if possible, the countries whose shores are threatened will want to remove the danger. On the other hand the nearest neighbors to the accident will be interested in that give shelter to ship as soon as possible so that the problem does not move to its shores.

Another problem that must meet the laws of each country is to decide who granted the responsibility to make the final decision on a ship in distress, especially when the risk of contamination is high.

For some people the solution of the British having a technician, independent and unique with full power of control is the best decision, as this is guaranteed, in theory, the best technical solution to a technical problem.

However, for others it is doubtful the total independence of a technical command and the solution would be more suited to a democracy where you have chosen, albeit indirectly, to the charges that makes the decisions.

As a final conclusion, we can only say that we are still far from reaching the ideal solution to these problems and that when the case of a new serious maritime emergency is given we will see that there will be different views on how to address it in the best way possible. As always has been.

Appendix A. Proposed Protocol to an Emergency Action Near Shore

After seeing the state of the issue from a legal point of view, let us to conclude this article makes a general proposal for the

development of a theoretical protocol for action in a vessel in an emergency near the coast following IMO guidelines and in response to Article 21 of Royal Decree 210/2004.

Once received by the Maritime Rescue notice of an emergency of a ship at sea, plus implement all the protocol specified in the Manual of Procedures for the Coordination Help Maritime Rescue Mission, established by the Society of Rescue Maritime Safety and propose the implementation of a protocol decision with which the authorities finally decide what to do with the ship may have technical criteria as a basis for deciding whether it is or is not the most appropriate from a technical point of view.

We have divided the emergencies that can endanger a ship at sea in five groups, each lead to different decisions to make chains. The five groups are:

- Mechanical failure or shifting cargo heeling.
- Collision (with another ship or a floating object).
- Hull fracture.
- Fire or explosion on board.
- Grounding

Let's see now what our work proposes for each of these groups with regard to emergency ship.

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Figure A.1: Broadcast Distress at Sea

