

Chapter 4

Search and Rescue at Sea: Do New Challenges Require New Rules?



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Abstract Search and rescue (SAR) at sea has been always carried out under principles of the customary law of the sea obliging vessels and states to help persons whose ships are in distress at sea. International treaties define more detailed conditions and obligations to provide adequate SAR. The rationale of all these principles and rules, as well as of the associated duties affecting the obliged persons/states to carry out and organize SAR activities, was that of increasing safety at sea and taking care of seafarers and fishermen (or passengers on board vessels) who were at sea mainly for the purpose of work.

The safety of ships has increased enormously in recent decades. Therefore the number of classical SAR operations has become a minimal fraction of those actually carried out to rescue, for example, leisure yachts, migrants and cruise ship tourists that venture into dangerous waters (including the Arctic) in pursuit of adventure.

Thus, the original SAR rationale has drastically changed. We need to consider whether the obligations set at the international level for rescuers and affected states should be updated to deal with current rescue missions. To deal with the migration problem in the Mediterranean, the normal SAR schemes – while not being abandoned – have been largely supplemented by other forms of international cooperation. This chapter investigates these new forms of cooperation and presents some proposals for updating the SAR international regime to meet the new challenges posed by persons venturing to sea.

Keywords Arctic navigation · Beneficiaries of search and rescue · Cruise and leisure ships · Immigration · Search and rescue · Search and rescue regime update

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4.1 Introduction: The Rationale for the Customary Rule to Save Lives in Danger at Sea

For centuries, ships in distress have been assisted; this is not only a well-rooted solidarity principle among seafarers but also corresponds to a very old customary rule in the international law of the sea, being linked with an obligation to assist vessels in danger and to offer salvage and rescue to persons on board (ILC 1956, 281; Reuter 1975; Trevisanut 2012, 56; Pallis 2002, 334; Papanicolopulu 2016; Barnes 2010, 134; Oxman 1997, 415; Nordquist et al. 1995, 170; Treves 1985; Scovazzi 2014). Such a customary rule was established when sailing was a perilous activity. People (including seafarers) ventured to sea mainly because they needed to for various reasons: fishermen to catch fish and make their living thereof; merchant mariners to bring cargo to its destination and receive a salary or at least food and shelter; warships and other state ships to obey their sovereigns; finally, even ordinary people, when passenger vessels were the only long-distance transportation means, to move across the seas mainly to seek jobs at a time when migrations were not only tolerated but also often encouraged to inhabit and “exploit” the newly “discovered worlds”.

At that time, and indeed until not very many decades ago, the dangers of navigation brought about frequent loss of lives at sea, and such a risk was de facto implicitly accepted by seafarers and their families. This danger was compounded by poor technology in building, maintaining and operating ships, which were therefore unable to deal with bad weather conditions and storms. At the same time, state presence at sea was scarce; aside from a much less populated earth, coastal states devoted few resources to patrolling their waters. Further, interest in enforcing their jurisdiction and powers in their (territorial) seas was certainly unrelated to enhancing safety of navigation and saving lives in danger of being lost.

In essence, it can be reasonably argued that, at the time in which the customary rule was formed, persons going to sea were a separated community from their nation state. This community knew the perils each of its members was facing on a daily basis and was prepared to offer solidarity in case of distress at sea, because this solidarity would be reciprocated among all the community’s members. This was the rationale of the duty to save lives at sea that developed over the centuries as a customary rule of international law: reciprocity and solidarity were the backbone of this rule, under the assumption that persons at sea are almost per se in danger, with no one else but another vessel to help them in case of distress. This situation has gradually changed over time. In general, states developed systems to protect persons from any danger (wherever it may occur), but among mariners the duty to save lives in danger at sea has always remained.

In recent years, there has been a radical change of this perspective. This chapter begins by examining the progressive implementation and codification into treaty law of the customary rule relating to the duty to save lives at sea. It explores solutions imposed on sovereign states that have been traditionally found at the treaty level to implement the specific duty to organize SAR operations and the possible

rationale of this (vertical) approach to the duty to save lives at sea. The evolution of the customary rule of international law as embodied in Article 98 of the United Nations Convention on the Law of the Sea (UNCLOS 1982) and, in parallel, the general increase of safety and security of maritime navigation when international standards are complied with are also considered. This is followed by analysis of the new type of situations in which rescue of vessels is needed today and how international bodies have tried to cope with these new situations. Finally, the chapter addresses specific problems connected with SAR in particular situations and concludes with proposals for recasting existing international rules in order to restore the balance of interests that initially founded the international SAR regime.

4.2 The Search and Rescue at Sea Regime

4.2.1 *From Customary Law to Treaty Law*

As it is often the case in international law, customary law is supplemented by treaty law. However, the progressive implementation and codification of search and rescue at sea custom into treaty law followed different paths, depending on the specific international convention.

Indeed, the customary rules were captured by the Geneva Convention on the High Seas (1958). Article 12 codified the duty of every state, *inter alia*, to require the master of a ship sailing under its flag, insofar as possible without serious danger to the ship, the crew or the passenger, to assist persons at sea in danger of being lost and proceed to rescue persons in distress under reasonable circumstances. Further, Article 12 introduced the duty of coastal states to promote the establishment and maintenance of a search and rescue service and to cooperate with neighbouring states for this purpose. These obligations were maintained in UNCLOS, whose Article 98 is identical to Article 12 of the Geneva Convention (Treves 1985, 886; Nordquist et al. 1995, 169ff; Treves 1990, 44).

But much earlier than this, states already had agreed on rules to reduce perils at sea, taking different lines of action. The oldest treaty concerning rescue and salvage was not focused on human beings, but rather on cargo. Salvage was (and sometimes still is) a dangerous task. States decided to lure salvors into undertaking this task through the adoption of a convention, the 1910 Brussels law of salvage. The aim of the convention was to provide a reward for salvors of a ship who were able to avoid totally or partially the loss of cargo of another ship in distress and meanwhile discourage piracy (Attard et al. 2016, 475; Tetley 2002; Reeder 2011; Rose 2017; Brice 1993; Hill 1992, 2003; Lefebvre D'Ovidio et al. 2016; Carpaneto 2017; Kerr 1990; Ferrarini 1964). This convention was re-crafted in 1989, mainly in order to introduce compensation when environmental pollution is prevented (International Convention on Salvage 1989). The Salvage Convention does not provide any compensation for salvors that save lives, and therefore at-risk individuals benefit from

the international regime on salvage only indirectly and as a “by-product” of salvage operations at sea (Hill 1992, 336).

An outcome of the *Titanic* tragedy was a fundamental thrust towards reducing the dangerousness of sea-going. In 1914, 2 years after the sinking of the ship, the first version of the International Convention for the Safety of Life at Sea (SOLAS) was adopted. SOLAS (ultimately recast in 1974 and in force since 1980) has always had as main goal to specify and update at the international level minimum standards for the construction, equipment and operation of ships, compatible with their safety. While the oceans remained a place where the possibility to help people in need was substantially lower than on land, states agreed that rules ought to be adopted at the international level in order to prevent accidents and loss of lives, as well as to reduce the “inherent” dangerousness of going to sea.

SOLAS and its implementing instruments have been undoubtedly successful: indeed, with the exception of the Second World War, SOLAS implementation caused a gradual and constant decline in the number of vessels (and persons) lost at sea, which impressively improved with the adoption of SOLAS 1974 (see below; Allianz 2019). With the important exception of migrants by sea, which is discussed below, one can hardly doubt that, progressively, the safety of navigation has increased significantly and the number of accidents and sinking of vessels truly has diminished, even if at the same time transportation by sea has grown hugely.

In combination with enhancing vessel safety standards, another important measure to improve navigation safety has been to increase the training and education of seafarers. Under the auspices of the International Maritime Organization (IMO), the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW 1978) was adopted and over the years modified (IMO n.d.-b; Vallario 1986; Rizzo and Ingratoci 2014). STCW has contributed to building capacity and education in seafarers, creating uniform standards at the global level to supplement national legislation and introducing relevant rules to enhance professionalism on board vessels, especially in states where seafarers have been carrying out their jobs on board foreign flag vessels. This approach is clearly based on prevention of accidents. States agree on the necessary tasks at the international level and then introduce at the domestic level statutes to discharge these obligations. Such statutes could oblige seafarers to acquire relevant professional qualifications and maintain them with training throughout their working life, while shipowners could be required to hire exclusively skilled personnel and comply with relevant STCW obligations.

These evolutions in treaty law can be considered as the first-best solution implemented by states to cope with the need to avoid the loss of lives at sea: enhanced safety standards for ships and training of seafarers would (enormously) reduce situations of distress at sea. However, over the decades, other rules have been established to work as a second-best solution: by the end of the 1970s, states agreed on a set of rules implementing the customary (but inevitably vague) rule as now codified by Article 98 of UNCLOS concerning search and rescue in order to further reduce ship losses and consequent casualties.

The 1979 International Convention on Maritime Search and Rescue (SAR Convention) was adopted with the aim of developing an international SAR plan so that, no matter where an accident occurs, the rescue of persons in distress at sea would be co-ordinated by a SAR organization in co-operation with neighbouring SAR organizations (IMO n.d.-c; Button 2018). Under the SAR Convention, contracting states are required to ensure that arrangements are made for the provision of adequate SAR services in their coastal waters. Further, they are encouraged to enter into SAR agreements with neighbouring states to establish SAR regions (SRR), to pool facilities, to establish common procedures and to facilitate training and liaison visits.

In fact, the pace of implementation of the SAR Convention was very slow, a situation that might be connected to the delay in UNCLOS entering into force (1994). In any case, in 1998, a revised technical annex clarified governments' responsibilities and put greater emphasis on a regional approach and coordination between maritime and aeronautical SAR operations. Chapter 3 of the annex (cooperation between states) requires parties to coordinate SAR organizations and, where necessary, search and rescue operations with those of neighbouring states, including allowing immediate entry into or over its territorial sea or territory for rescue units of other parties. In 2004, a second revision of this annex, *inter alia*, added a new paragraph in Chap. 3 of the Convention relating to coordinating the provision of assistance to the master of a vessel in delivering persons rescued at sea to a place of safety.

The parallel and converging goals of these treaties have had substantial results. Indeed, as far as the merchant marine is concerned, even in the face of steady growth of maritime traffic, recent data show that, even if collisions at sea continue to occur, severe casualties involving merchant vessels have remained low in number (EMSA 2017). During 2018, the loss of ships decreased by 50% relative to 2017 and by more than 50% over the past decade. In short, over millions of voyages by merchant marine vessels recorded in a year, total ship losses account for only a few dozen (46 in 2018, Allianz 2019).

4.2.2 The Enhanced Solidarity for Seafarers Generated by the SAR Convention

A remarkable innovation of the SAR Convention, which actually substantiates the general principle stated in Article 12(2) of the 1958 Geneva Convention on the High Seas as replicated in Article 98(2) of UNCLOS, is the involvement of coastal states as the main actor in organizing, coordinating and implementing SAR operations. The creation of SAR regions under the (quasi) exclusive jurisdiction of the coastal state has replaced the customary law "horizontal" scheme (from vessel to vessel) with a "vertical" one (from coastal state to vessel in distress).

Yet, within the “traditional” situation of vessels in distress, this change of perspective does not alter fundamentally – and indeed enhances – the solidarity rationale embodied in the obligation to save lives in danger at sea: vessels in distress often navigate the coastal waters of their flag states or at least are leaving or directed to their ports. This is true – with limited exceptions – for fishing boats and merchant marine ships, that is, those categories of vessels for which the rules and principles have been created and implemented over the centuries.

Solidarity thus extends from the seafarers’ community to a broader community that includes coastal state citizens who benefit from navigation. As long as transportation by sea or fishing activities “serve” the needs of a coastal state’s population, it seems equitable and fair that, together with other first-best instruments to reduce perils for persons at sea, coastal states also organize SAR operations for those vessels and seafarers somehow “connected” with it, for example, those engaged in domestic maritime trades (Brooks 2018).

If we look at this phenomenon from an economic analysis viewpoint, we can further add that – in its original rationale – the SAR Convention tends to reduce externalities of navigation: in order to decrease risks to lives at sea, coastal states are obliged to organize, coordinate and implement their SRR and pay the consequent burdens. In turn, these burdens are shifted to taxpayers, that is, the individuals living in the coastal state who are requested to contribute to the “costs” arising out of the sale and purchase of products carried by sea or harvested in the seas in their interest.

4.3 The Changing Framework of Persons in Danger at Sea

4.3.1 *The New “Beneficiaries” of Rescue Operations at Sea*

The enormous decrease in losses of merchant marine and fishing ships (and their crew), arising out of the combined force of the conventions discussed above, shows beyond any doubt that, if the 1979 SAR Convention did not exist, almost certainly the customary obligation to rescue vessels in distress would be implemented in ways not resembling the complex and expensive system elaborated by the Convention. Possibly, the customary law enshrined in Article 98(2) of UNCLOS would be reset into an “obligation” onto states to maintain an adequate organization to provide safety at sea along their coasts, and citizens would demand that their governments guarantee such safety as it happens on land. Yet, considering the trend to reduce public spending, not much more would be required to provide such measures. As discussed above, for merchant marine vessels, going to sea is no longer such a dangerous activity and the risks do not appear to be higher (and are probably much lower) than most other work.¹ However, even if safety standards are

¹The ILO records around 2,300,000 fatal accidents at work and many more nonfatal injuries and illnesses (ILO 2014). These figures are double compared to the beginning of this century (ILO

improving, fishing remains a dangerous profession (ILO 1999b; Windle et al. 2008), especially in geographic areas characterized by extreme conditions (Rezae et al. 2016). Generally, however, the achievement of adequate safety standards in fishing probably is hampered by the fact that it is often carried out under sub-standard (if not illegal) conditions, and, because of that, enforcement of existing laws can be very weak (Petursdottir et al. 2001). For instance, the number of contracting parties to the treaties increasing safety standards for vessels and training for fishermen is substantially lower than for SOLAS and STCW.² By contrast, as far as salvage of ships is concerned, in many instances, and not only because of the 1989 Salvage Convention, salvage has transformed into a business or at least into a service that is offered against a reward (Parent 2006, 91; Kilpatrick and Smith 2016; Coppens 2013).

This being the situation, one would expect a sharp decline of SAR at sea. And yet, this is not the case at all: there continue to be a high number of search and rescue operations. As statistics show, the US Coast Guard carries out thousands of rescues each year, with thousands of lives saved (USCG 2016). The situation is the same in Canada where 56,769 SAR cases were recorded in the period 2012–2018, with 6250 cases reported with life at risk for 20,523 passengers on board, out of which 1338 were assisted before their boats were lost and 18,883 people were saved.³ In the seas surrounding Italy, the area where SAR probably reached a peak in 2016, there were 2269 SAR operations, with total rescued persons numbering 4605 individuals. These Italian SAR operations are exclusive of those concerning migrants, for which, in the same year, an additional 1424 missions were coordinated by the Italian Coast Guard, with the rescue of the amazing number of 178,415 migrants (Italian Coast Guard 2016, 5).⁴

These data show that lives continue to be at risk at sea. However, these dangers are now little connected with navigation for working reasons or with a solidarity principle established among the members of the seafarers' community (or the coastal communities and seafarers serving their needs). At present, the main SAR activities carried out worldwide have a different nature than those on which search and rescue obligations arose in international law and practice and which justified the adoption of the SAR Convention.

If going to sea for professional seafarers is no longer very dangerous, then we must ask who are endangered at sea nowadays. Quite probably, most of these persons are migrants, who are not seafarers, and find themselves on board a boat for the

1999a), when it recorded around 1,000,000 mortal accidents/sicknesses at work. In industrialized countries, the European Union, for example, averages a little less than 4000 casualties at work per year, which represents a ratio of approximately 830 nonfatal accidents for every fatal accident (Eurostat 2018).

²The 1995 STCW-F Convention (where "F" stands for fishing personnel) has been ratified by 31 states only, and the 1993 Torremolinos Protocol relating to the Torremolinos International Convention for the Safety of Fishing Vessels 1977 is not yet in force (IMO 2019, 424, 492).

³Canadian Coast Guard statistics, personal communication, Robert Brooks, Director, Incident Management, Canadian Coast Guard

⁴Fortunately, these figures have been decreasing since 2017.

first (and last) time in their life, a boat that has standards of safety that are totally inconsistent with basic conditions as established by international conventions. Moreover, their movement by sea has little to do with navigation in its traditional sense: they embark on a desperate journey by sea – invariably being exploited by transnational criminal organizations – since there are no alternatives for them to reach their country of destination, and they leave their boats as soon as possible. Further, such migrations at sea and the circumstances in which they take place can give rise to a “new” danger for other navigators.

Another important category of beneficiaries of search and rescue are people going to sea for leisure. Yachtspersons (this category includes whoever goes by sea in pleasure boats) benefitting from SAR operations amount to three quarters or more of all missions in many areas (as noted in the statistics presented above). And even if, so far, only a relatively few accidents have occurred with cruise vessels and their passengers,⁵ the growth of this sector very probably will become an important source for SAR operations, especially if one considers the thrust to offer customers increasingly “exciting” destinations.⁶

Against the backdrop of present perils at sea, one should therefore evaluate whether the first-best (SOLAS and STCW) and second-best solutions (SAR regime) are still adequate international legal instruments to reduce accidents. More precisely, two more questions are worth posing: Are the solidarity and reciprocity rationales behind the search and rescue rules still working? Can the SAR system alone successfully and equitably constitute a response to the “new” perils at sea?

4.3.2 *Differences and Analogies Between Past and Present Perils at Sea*

Given that, in most instances, present beneficiaries of SAR are no longer those on which the international legal regime has been developed and progressively set up, then we should question whether these differences may imply also a modified approach vis-à-vis the existing rules.

Considering migrants, there are no doubts that enormous differences exist: migrants are often packed on board vessels breaching all SOLAS and related standards, with the vessels being furthermore manned by migrants alone or by persons with little or no professional skills. Hence, the entire set of rules depicted as the first-best solution to avoid dangers at sea is not applicable. In fact, if we consider

⁵The latest accident, however, involved the rescue of hundreds of passengers on board *Viking Sky* off the Norwegian coasts in March 2019 (DW 2019; BBC 2019; CruiseMapper n.d.). The *Costa Concordia* accident attracted substantial interest in the media, even if the closeness of this accident to the Italian coast made the search and rescue operations somehow “atypical” compared to the traditional groundings.

⁶The possible expansion of cruises in polar areas is discussed in Chap. 9 by Joseph Loot in this volume. The consequent risks of this are discussed further below.

exclusively the maritime/law of the sea perspective, no individual solidarity or reciprocity principle even comes into play, because migrants are not seamen and do not belong to the community of seafarers that developed the traditional obligation to help and rescue persons in danger at sea. Further, these migrants do not even serve any need of the “coastal community”: indeed, the contrary is true, at least if we leave aside any considerations based on human rights law.⁷ Of course, coast guards and seafarers will certainly (and rightly) continue to consider any SAR operation their duty, no one discusses that SAR is not applicable to migrants, and NGOs are increasingly operating at sea to rescue migrants, as do yachtspersons sometimes. However, such a duty is based on humanitarian concerns, not on ancient solidarity principles among seafarers.

Yachtspersons have some – and occasionally even high – skills in navigation, but are not subject to the STCW rules and standards. The craft they use are normally much smaller and less resistant to bad weather and sea conditions than merchant or fishing vessels and – with limited exceptions – are not subject to the SOLAS regime.⁸ In addition, their ability to avoid dangers at sea is reduced because they are amateurs, not professional seafarers, and they are not (or are less) able to anticipate the risks of adverse weather and sea conditions. In a certain way, they are part of a “maritime community”, but such a community goes to sea for leisure, not for necessity or work reasons. Again, this makes the first-best set of international rules established to reduce dangers at sea nonapplicable. Yachtspersons may share some solidarity with other persons at sea in distress, but often their boats are unfit for the purpose of rescue.

The final confirmation that going by sea is (and is perceived) as not being a dangerous activity comes from the cruise industry, the third category of actual and prospective beneficiaries of search and rescue operations. These persons have a lot in common with people going to sea for pleasure, with some additional upsides, but also downsides as far as search and rescue is concerned. On the one hand, cruise vessels (i.e., passenger ships) are subject not only to SOLAS and STCW but also to an enhanced set of regulations established by the IMO, including the obligation to ensure safe return to port for passenger ships in damaged condition (IMO n.d.-d).⁹ In addition, the IMO has adopted specific rules to enhance the standards for ships navigating in polar regions, which clearly encompass passenger ships.¹⁰

⁷However, there exists an interstate obligation, especially within the European Union, to implement migratory policies based on solidarity principles (Munari 2010, 2018; Morano-Foadi 2017).

⁸Some aspects of Chapter V SOLAS apply to pleasure craft under 150 GT and are (relatively) implemented at the domestic level (UK Maritime and Coastguard Agency 2014; Small Vessel Regulations 2010 (Canada)).

⁹SOLAS (1974) Regulation V/7.3 provides: “Passenger ships ... shall have on board a plan for co-operation with appropriate search and rescue services in event of an emergency. The plan shall be developed in co-operation between the ship, the company as defined in regulation IX/1, and the search and rescue services. The plan shall include provisions for periodic exercises to be undertaken to test its effectiveness. The plan shall be developed based on the guidelines developed by the Organisation”.

¹⁰The IMO Polar Code (IMO 2017) focuses specifically on safety measures (including special training for seafarers) and pollution prevention measures (Kirchner 2018; Byers and Baker 2014;

On the other hand, however, the number of persons involved in case of distress of a cruise ship is at least one to two orders of magnitude higher than a merchant marine vessel. Moreover, all the passengers and hotel crew members of a cruise ship are not seafarers, and many or most of them have no confidence at all in dealing with the sea (and certainly with the potential evacuation from a ship in distress). Finally, business and market forces push cruise lines to venture into remote and dangerous areas, such as Antarctica and the Arctic, which present not only high environmental risks but also produce a tremendous impact on the SAR organizations of coastal states in the polar regions.¹¹

Cruise ships generally comply with the highest safety standards. Yet, passengers are so numerous and so poorly trained that, in the event of an accident, the second-best solution offered by the SAR regime may become totally inadequate and in any case is extremely expensive. While arguably the SAR regime obliges coastal states to organize their SRR in order to be able to respond to distress situations contemporaneously involving a few persons, and very occasionally a few hundreds, it is virtually impossible and beyond the implied scope of the Convention to assume that coastal states should be able to face accidents at sea involving many hundreds – or even thousands – of (largely untrained) people.

4.3.3 *The New Search and Rescue Challenges and the IMO*

Given the role played by the IMO in shaping international rules on navigation, including those discussed above, it is useful at this stage to consider its current initiatives. Indeed, the IMO has not remained idle in respect of the “new” risks at sea. However, the IMO has a confined mandate; it can neither encroach on other international conventions nor on the sovereign powers of states. The results that can be expected from the IMO – even if remarkable – are limited to enhancing the existing pillars on which it works, namely, safety, environmental protection, working and training conditions of seafarers and therefore are not sufficient.

Molenaar et al. 2013; Rothwell 2013; Lalonde and McDorman 2015; Moiseev 2016; Vestergaard et al. 2018; Franckx 1993; Pharand 1988). The IMO is studying a Polar Code “Phase II”, in order to include noncommercial ships (i.e., fishing boats and yachts) within some of the Polar Code provisions (see Chap. 15 in this volume).

¹¹ In 2007 a small cruise ship, the *Explorer*, hit an iceberg and sank during a voyage in Antarctica, with about 150 persons having been rescued and no victims. The flag state’s competent authority, the Liberian Bureau of Maritime Affairs, issued a report on the accident (Republic of Liberia 2009). In 2009 the *Ocean Nova* grounded off the Antarctic coasts with a few dozen passengers and a similar number of crew on board (Attwooll 2009). In 2010 the *Clipper Adventurer* grounded in the Arctic waters, with 128 passengers and 69 crew members (TSBC 2012). The present size of cruise ships and the number of tourists they can host on board cast in doubt the possibility to repeat nowadays the successful rescue of the *Explorer*’s passengers.

As far as the rescue of people on board pleasure boats is concerned, only very limited attention has been paid to this category of persons at the IMO.¹² More has been done for rescuing migrants at sea. Since the vessels on which they are boarded are unfit for addressing any “first-best” maritime solution (as discussed above), these persons are clearly – albeit not exclusively – within the SOLAS and SAR Conventions’ scope of application. Thus, the IMO has adopted several recommendations, resolutions, guidelines and other instruments to adapt the existing regime to this phenomenon (IMO 2001, 2004a, b, c, 2009), and has also agreed to enhance migrants protection under the SAR Convention. However, it is widely recognized – even within IMO documents – that the IMO must coordinate its work with other international organizations as well as with states. Rescuing migrants at sea is strictly intertwined with other areas of international law, and even if the IMO continues to work on SAR of migrants, it has clarified that “issues other than rescue relating to asylum seekers, refugees and migratory status are beyond the remit of IMO, and beyond the scope of the SOLAS and SAR Conventions”, implying awareness by states

of assistance that international organizations or authorities of other countries might be able to provide in such cases, be able to contact them rapidly, and provide any instructions that their RCCs may need in this regard, including how to alert and involve appropriate national authorities. States should ensure that their response mechanisms are sufficiently broad to account for the full range of State responsibilities. (IMO 2004c, § 6.21)

The IMO has adopted specific measures for passenger ships. For instance, SOLAS Regulation V/7.3 adopted guidelines concerning additional exchange of information between these ships and interested coastal states before and during the passage of the vessel in certain areas (IMO 2003, 2006) and recommended the adoption of a more complete voyage passage plan for these vessels, compared to the “standard” documents required by the IMO Guidelines for Voyage Planning (IMO 1999, 2007). In addition, with regard to navigation in polar regions, the Polar Code offers a further tool to prevent accidents (Polar Code 2014/15). However, the impression remains that the existing rules and standards are limited in scope and unsatisfactory and that additional or improved solutions should be considered.

4.4 Tackling the Present SAR Challenges

Having briefly summarized how the SAR Convention works and what is required by contracting states for implementing its provisions, it is now relevant to consider the existence of cooperation schemes among neighbouring states to enhance the network of assets capable of offering organization, coordination or implementation of

¹²Reference can be made to the IMO Basic Safety Guidance for Yacht Races or Oceanic Voyages by Non-Regulated Craft (IMO 2012), whose application is limited to the case of yacht races and oceanic voyages. But see note 14 above and the potential of Polar Code “Phase II”.

SAR activities. Indeed, these cooperation schemes are in place in different sea areas, for instance, the agreement in place among Arctic Council members (Arctic Council 2011). As far as the Mediterranean is concerned, Italy, France and Spain have entered into a technical agreement (SARMEDOCC) for SAR of airplanes in distress (European Commission 2017). Bilateral agreements also exist between Mediterranean countries, such as the Italy-Croatia treaty for SAR in the Adriatic Sea. In general, these agreements provide for the establishment of joint operations to improve performance. These arrangements in the Mediterranean area and the Arctic are explored further below.

4.4.1 A Holistic Approach to SAR in the Mediterranean

Currently, SAR in the Mediterranean is largely a by-product of migrations. Shortcomings and tension have arisen when rescue of migrants has been dealt with exclusively using traditional SAR instruments. It has become clear that new approaches and solutions are needed. Since safety of human life in the Mediterranean is no longer a pure maritime affair, the matter is no longer confined to maritime law or law of the sea. Other sectors of law and policy come into play, such as immigration and refugee law, human rights and humanitarian law, criminal law, foreign and external policies, the fight against transnational criminality and terrorism, and national security.

For the European Union (EU), the changing legal environment for saving lives in the Mediterranean area is confirmed by the fact that the problems arising out of movement of persons at sea are no longer governed by autonomous legal instruments and implementing measures, and by no means are they exclusively maritime in nature. Rather, they are treated within a catch-all programme that was strengthened in June 2018 through the EU Maritime Security Strategy (EUMSS) Action Plan revision by the EU Council (i.e., the member states' governmental representatives) (Council of the European Union 2018).

The EUMSS Action Plan pulls together various EU policies and law, *inter alia*, the Common Security and Defence Policy; the EU Global Strategy and the Internal Security Strategy 2015–2020; maritime multilateralism and rule of law on the sea; cooperation with the United Nations, the IMO, the North Atlantic Treaty Organization, the Association of Southeast Asian Nations and other international organizations; information sharing on maritime security and surveillance, as per the EUCISE Project 2020; and mobilization of all financial facilities existing at the EU level (Council of the European Union 2018; Schiano di Pepe 2019; Ippolito and Trevisanut 2015). The ultimate goal of this new approach is to implement multipurpose surveillance of the seas that is capable of contemporaneously satisfying different, but converging, policy and legal priorities. While safety at sea and SAR are still implemented, they are only a portion of the much more encompassing policies and programmes involving “actors” and institutions beyond the SAR contracting parties and their maritime administrations. In this vein, new alliances and cooperation

schemes are expected; partnerships are no longer (exclusively) between coast guards. Navies, other military forces, the European Border and Coast Guard Agency (EBCGA, formerly known as Frontex) and NATO are also participating. The modalities of SAR have changed, and the traditional agreements with neighbouring states have lost their importance vis-à-vis other forms of cooperation involving prevention of human trafficking and assistance by land-locked states where migration flows originate and satellite observations through the multipurpose Copernicus programme (European Commission [n.d.](#)). This improved strategy for coping with a “non-traditional” SAR problem suggests that there is a need and an opportunity to evaluate new legal and policy instruments in other areas of “new” SAR circumstances.

4.4.2 SAR in the Arctic Region

The example of migration in the Mediterranean can help us advance evaluation of proposals for coping with navigation in the Arctic. Of course, there are substantial differences between the two regions, but similarities exist and an analogous methodological approach might be considered. The main similarity has to do with an altered relationship between the coastal state and persons on board vessels in distress.

Arctic coastal states do not enjoy substantial benefits from international navigation in the Arctic; on the contrary, ships encroaching these delicate waters threaten both the environment and coastal communities (Anderson [2012](#)). These threats can be justified when vessel traffic is domestic, but not when it is international. Merchant vessels considering the “trans-Arctic” use of the Northwest or Northeast Passage seek to save time and money to transport goods to destinations beyond the coastal Arctic states. Similarly, yachtsmen and cruise ships venturing into the Arctic do not serve any specific need of coastal residents. In fact, these vessels cause a free-riding problem, exploiting the reduced length of their voyage and enjoying the magnificent beauty of the Arctic without providing many advantages to the affected coastal states and people.

Whether commercial vessel traffic, yachtsmen, cruise ships or migrants by sea, neither solidarity nor reciprocity can be expected to play any role as far as SAR in the Arctic is concerned: the rationale of the SAR Convention obligations is thus not met. The business reasons for international navigation in the Arctic are the push factor for much traffic in this region; like in the case of migrants by sea, certainly merchant vessels would prefer a less risky alternative than polar navigation, if such an alternative would reduce voyage time as well. However, in general, commercial vessels in Arctic waters are crewed by experienced seafarers, which allows for the establishment of legal frameworks to regulate navigation in these remote areas.

Such being the background, it seems that a disproportionate and non-equitable burden for coastal states arises with respect to setting up and maintaining operations of an SRR in the Arctic vis-à-vis this new vessel traffic: “classical” SAR operations

meant patrolling Arctic coasts for the benefit of coastal navigators and sporadic fishermen venturing in these waters for work reasons, but not much more. If this is true, it is appropriate to evaluate whether the current SAR schemes should be accompanied by other measures, along the lines of the holistic approach that is being pursued in the Mediterranean to cope with migration by sea.

Aside from the precautionary measures set out in the Polar Code (which is, however, limited to merchant ships), a first solution to be considered is the establishment of specific corridors for navigation in the Arctic, already anticipated in Canadian waters (Brooks 2018; Abou Absii 2018). This would limit the freedom of the seas, but would ensure more efficient SAR services and limit environmental risks. Such corridors might be the first step towards more ambitious goals to reduce or exclude altogether leisure or merchant navigation in some waters in order to preserve and protect delicate areas from human intrusion. From this viewpoint, it can hardly be contested that navigational constraints also can be imposed at the international level when the environment is at risk (Schiano di Pepe 2007). Such limitations are also in conformity with Article 25 of the UN Declaration on Rights of the Indigenous People (UNDRIP 2007; Idlout 2018).

A second focus should be on how to avoid the free-riding problem. While coastal states can be required to organize their SRR under equitable and reciprocal conditions with all contracting parties to the SAR Convention (or with regional agreements implementing it), the situation seems different when considering the extreme conditions of navigation that are willingly accepted by commercial vessels venturing into polar waters. In this case, coastal states should be somehow compensated for their increased efforts. Perhaps navigation should be conditional on ensuring that adequate economic or financial securities are put in place before passage through polar waters and that there is a contribution to the coastal state(s) providing SAR services. Both measures would require amendments to the SAR Convention; however, these amendments seem to be in line with the evolution of the current situation and with the changing patterns of SAR outlined above. At the least, requiring financial securities would satisfy other paramount needs such as environmental protection. For example, following the grounding of the *Clipper Adventurer* (TSBC 2012), the shipowner was ordered to reimburse the Canadian government for the costs and expenses incurred in dealing with the environmental damages. The Federal Court rejected the shipowner's claim to be reimbursed for alleged lack of information provided for by Canadian authorities.¹³

¹³The Court of Appeals established that “[t]he *Clipper Adventurer* was the author of her own misfortune by recklessly proceeding at excessive speed in largely unknown waters” (Ryan 2018).

4.5 Conclusion

In maritime law and the international law of the sea, upgrading of international instruments is frequent, and an update of the SAR Convention to better cope with the new perils at sea should be carefully considered by lawyers and policy-makers. As long as we are not able to control and limit apparently unbeatable market forces, law should at least restore the balance of interests that – as shown – initially founded the international SAR regime.

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