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CIVIL PROTECTION IN THE HIGH NORTH AND THE MEDITERRANEAN

Report

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I. INTRODUCTION – NATO AND CIVIL PROTECTION

1. NATO's involvement in civil protection, namely policies for the protection of civilian populations against disasters and other emergencies, dates back to the 1950s, with the establishment of NATO's Civil Emergency Planning Committee. While not a central task for the Alliance, civil protection occupies an important place in NATO's comprehensive approach to security. Over the years, NATO has developed ways of assisting member nations in preparing for and responding to natural and man-made disasters as well as addressing the civil effects of terrorism and of the use of WMDs. Contribution to civil protection has become an important element of the Alliance's "soft power", particularly in relations with NATO partners.

2. The end of the Cold War and NATO's increased focus on out-of-area operations allowed the Alliance to place a stronger emphasis on civil protection policies, especially with regard to disaster response. In 1998, following a Russian proposal to the North Atlantic Cooperation Council (later the EAPC), NATO established the Euro-Atlantic Disaster Response Coordination Centre (EADRCC) to coordinate disaster relief efforts among NATO and partner countries, and in countries where NATO is engaged in military operations. The Centre is active year-round and operates on a 24/7 basis. It involves NATO's 29 Allies and all partner countries. Since 2000, the EADRCC has conducted, on average, one large consequence-management field exercise every year.

3. However, the EADRCC is only used if called upon, and its role is restricted to coordination rather than operational management. In emergency response, member states as well as relevant international organizations, particularly the United Nations, play a primary role, while NATO's role is subsidiary. Military assets, such as NATO's Airborne Warning and Control System (AWACS), the NATO Response Force (NRF) and the Multinational Chemical, Biological, Radiological and Nuclear (CBRN) Defense Battalion have also been engaged in some civil emergencies. The most prominent cases of NATO involvement in disaster response include the responses to Hurricane Katrina in the United States in August 2005 and to the earthquake in Kashmir, Pakistan, in October 2005. It is also worth recalling the EADRCC's role in coordinating the multinational humanitarian assistance effort that supported refugees during the Kosovo war in the late 1990s.

4. In search and rescue (SAR), NATO holds annual *Dynamic Mercy* exercises that alternate between the Atlantic Ocean and the Baltic Sea. The exercise aims to develop inter-regional cooperation and coordination between the civilian and military SAR units of Allied and partner nations. This coordination is crucial for rescuing lives at sea. NATO is also engaged in developing capabilities for rescuing submarine sailors. It regularly conducts submarine escape and rescue (SMER) exercises to improve multinational submarine rescue cooperation and interoperability. The latest SMER exercise—*Dynamic Monarch*—took place in 2017 in the eastern Mediterranean and focused on saving lives rather than warfighting. Allies, including the United Kingdom, France and Norway, also launched the NATO Submarine Rescue System (NSRS), which consists of jointly-owned submarine rescue platforms¹.

5. The NATO Parliamentary Assembly's (NATO PA) Committee on the Civil Dimension of Security (CDS) has developed a strong focus on civil protection. In 2006, it adopted a comprehensive report on this topic, analyzing the complex network of policies and instruments that give NATO a role in civil emergencies. However, several new challenges have since emerged, including the changing geopolitical environment on NATO's eastern, southern and northern flanks.

¹ The NSRS consists of two sub-systems that can be mobilized independently of each other 1) the Intervention Remotely Operated Vehicle (IROV) that can be rapidly mobilized to a distressed submarine in order to provide life support and prepare the site for 2) the Rescue System, which consists of a free-swimming manned submersible, a Portable Launch and Recovery System, a decompression system and other associated support equipment. The NSRS can be deployed anywhere in the world and is designed to maximize the use of any potential aircraft and ship. - https://www.royalnavy.mod.uk/The-Fleet/Submarines/~/_media/Files/Navy-PDFs/The-Fleet/Fighting-Units/Submarines/NSRS%20Factsheet.pdf

6. This report will focus on two regions where the issue of civil protection has become particularly acute in recent years: the High North and the Mediterranean. While very different, these regions present equally daunting challenges for civil protection. Due to climate change, technological advances and renewed competition between Allies and Russia, there is growing civilian, economic and military activity in the High North. These factors, in turn, complicate efforts to protect civilians, the environment and infrastructure – efforts that are already made difficult by the sheer size of the High North, the harsh climate and the lack of infrastructure.

7. The Mediterranean faces a different type of civil protection challenge: the refugee/migrant crisis prompted by turbulence in the Middle East and North Africa (MENA) region. The shocking losses of life at sea have tested the conscience of the world and particularly the Euro-Atlantic community.

8. This report will provide further assessment of these challenges, take stock of the existing civil protection – primarily SAR – capabilities in these regions and discuss ways of improving the multilateral responses to these challenges, including NATO's potential role.

II. CIVIL PROTECTION AND EMERGENCY RESPONSE IN THE HIGH NORTH

A. THE CHANGING ARCTIC

9. The Arctic region² is experiencing rapid transformation due to climate change. In the last 70 years, the Arctic amplification effect has caused the Arctic to warm up twice as fast as other parts of the world. Since 1979, the Arctic ice cap has shrunk about 13% per decade, and the trend is accelerating³. Meanwhile, the thickness of Arctic ice declined by 65% between 1975 and 2012. January 2016 was 5°C warmer than the 1981-2010 average for the region. If current trends continue, experts estimate that the Arctic will be ice-free during the summer months by 2040. Sea ice is becoming less thick and more likely to break apart causing more mobility. This increased mobility may lead to more ice-related hazards. The thawing permafrost is also releasing carbon dioxide and methane into the atmosphere, thus exacerbating the greenhouse effect⁴. Thawing permafrost also causes extensive damage to highways, railroads, airstrips, and other infrastructure. Furthermore, Arctic ecosystems face significant stress and disruption. Even if the Paris Agreement succeeds in keeping the rise of the Earth's temperature well below 2°C above pre-industrial levels, winters in the Arctic are still expected to be warmer by 5-9°C compared to the period between 1986 and 2005 (The Economist, 2017).

10. These warming trends as well as technological advances make the Arctic more accessible for longer periods of the year, offering new opportunities for human activity in the region. New strategic **shipping routes** are gradually opening in the north, namely the Northern Sea Route (NSR) along the Russian and Norwegian coasts and the Northwest Passage (NWP) consisting of several routes through the Canadian archipelago and along Alaska's northern shoreline. The NSR holds particular economic interest. While Russia has introduced high tariffs for transit, the NWP has no fee system (Melia, Haines, & Hawkins, 2017). It also cuts the length of usual routes between east Asia and western Europe by about a third. Recognizing growing interest in this route, Russia has also developed a series of urban centers along the NSR. As the Arctic ice cap shrinks, the Transpolar

² In this report, *Arctic* is used interchangeably with *High North*, which is defined as the area north of the Arctic Circle (66°33'N).

³ The acceleration is attributed to the feedback loop: as the ice cap shrinks, less sunlight is reflected and more of it is absorbed by the water. Warmer ocean water further melts the ice from beneath.

⁴ According to Arctic Council's Arctic Management and Assessment Programme, near-surface permafrost has warmed by more than 0.5°C since 2007-2009 and, by mid-century, the area of near-surface permafrost is expected to decrease by 35%. It is estimated that Arctic soils hold about 50% of the world's soil carbon. While thawing permafrost is expected to contribute significantly to global warming, the amount of greenhouse gas released so far has been relatively small.

Sea Route (TSR) in the central Arctic Ocean may become a third and even more attractive option than the NWP and NSR.

11. There were 71 transits through the NSR in 2013, up from just four in 2010 (transit numbers dropped to 19 again in 2016, likely due to renewed tensions between Russia and the West). Thirty-three vessels crossed the NWP in 2017, up from just five in 2007, including, for the second time, the *Crystal Serenity*, a cruise ship with more than 1,400 passengers and crew on board (Headland, 2017).

12. The Arctic's wealth of **natural resources** has also attracted commercial interest. The US Geological Survey estimates that the region has extensive reserves of up to 90 billion barrels of oil and 1,699 trillion ft³ of natural gas. While the US and Canadian governments have banned offshore drilling in the Arctic⁵, Russia's national oil and gas companies, Rosneft and Gazprom, are expanding their operations and Norwegian authorities have started to issue hydrocarbon exploration licenses. Some observers predict that some USD 100 billion will be invested in non-renewable natural resources and infrastructure construction in the region within the next decade (Geiselhart, 2014).

13. Despite the ban on drilling, Canada and the United States have joined Russia in extracting other natural resources in the North, such as zinc, iron ore and nickel. There is also a discussion in Greenland on whether or not to mine its vast uranium resources using investments from Australia and China. The warming waters also offer new opportunities for fishing certain species, such as cod, in the North.

14. That said, the potential for shorter transportation routes and natural resource extraction should not be overstated. The extent of ice coverage is still largely unpredictable, preventing shipping companies from using Arctic sea routes for regular services. Additionally, interest in natural resource extraction in the Arctic has diminished substantively due to falling global oil prices and the effect of Western sanctions on Russian companies⁶ (Zysk & Titley, 2015). For the time being, commercial activity in the region is likely to grow only modestly.

B. SAR AND EMERGENCY RESPONSE IN THE HIGH NORTH: CHALLENGES AND CAPABILITIES

15. As human activity in the High North increases, so does the probability of incidents requiring SAR operations. Vessels and offshore oil and gas platforms create the potential for accidents, including colliding with ice or catching fire. These incidents can severely threaten not only the environment but human life as well. In terms of shipping casualties, 55 incidents were recorded in 2016, up from just eight incidents in 2006. Particularly worrisome is the increasing presence of large cruise ships carrying over 1,000 passengers. An emergency evacuation of a cruise ship of this size would require a mass rescue operation (MRO), an endeavor that no Arctic country could currently manage on its own. On a smaller scale, helicopters, small private aircraft, and adventure tourists on skis and private boats constitute another growing risk group for emergencies (Ikonen, 2017).

16. Emergency management in the Arctic is a complex and risky endeavor because of turbulent weather, uncertain ice conditions, vast distances, and environmental concerns. The Arctic spans 14.5 million km², which is larger than the European continent (10 million km²), and has a population of about 4 million people. Average winter temperatures are as low as -34°C. The harsh environment makes it difficult to operate aircraft and helicopters while ships face the problem of icing, which can

⁵ According to a recent report, President Donald Trump seems to be re-evaluating this ban. <https://www.cnbc.com/2018/01/04/trump-aims-to-open-arctic-pacific-and-atlantic-to-offshore-drilling-in-ambitious-new-plan.html>

⁶ Due to Western sanctions, transit traffic via the NSR has dropped from 1.18 million tons in 2013 to a mere 39,000 tons in 2015. <https://jamestown.org/program/russian-military-build-up-in-arctic-highlights-kremlins-militarized-mindset/>

lead to the failure of some ship functions. Collisions with icebergs could also create emergency situations, including the abandonment of the ship. During the long Arctic winters, extended periods of 24-hour darkness and restricted visibility due to weather further complicate navigation. Due to the sparseness of the population, infrastructure – such as ports, landing strips and hospitals – is lacking (Steinicke & Albrecht, 2012). These factors can only be mitigated to a very limited extent.

17. In smaller emergencies, authorities in the High North can largely rely on local responders and volunteer resources. However, as activity in the region increases in frequency and scale, advanced SAR capabilities that can handle emergencies of a larger scale and of higher complexity are needed. Responsible emergency-preparedness authorities must extend their seasonal presence (usually limited to the summer months) as well as their overall capabilities, situational awareness and cross-border cooperation. Responsibility for emergency preparedness in the High North is distributed across different national authorities, with the leading SAR authorities being either civilian, such as the Icelandic Coast Guard, or military, such as the Danish Navy.

18. In some nations, such as Canada, search and rescue is a shared responsibility. Due to the country's immense size, range of terrain and unpredictable weather, many partners and jurisdictions are involved in Canada's National Search and Rescue Program, including the civilian Canadian Coast Guard for maritime SAR, the Royal Canadian Air Force for aeronautical SAR, as well as provincial and territorial authorities. In the remote North, the Canadian Rangers – a roughly 5,000-strong reserve force from over 200 different northern communities – can also assist in ground search and rescue efforts. Often referred to as the military's "eyes and ears in the North", many Canadian Rangers are indigenous and bring highly valuable local knowledge to ground search and rescue operations in isolated areas.

19. The Arctic's vast expanse and limited infrastructure make helicopter airlifts extremely difficult. Investing in new helicopter bases is difficult to justify considering the still limited amount of shipping in the region. At this time, other means of rescue are very time intensive, with little ability to rescue large numbers of survivors. **Icebreakers** are especially important to SAR operations. Experts, however, are concerned about the "icebreaker gap" of the littoral Arctic states, which have small and ageing fleets. The US fleet consists of only two operational icebreakers (CRS, 2018). A new icebreaker is planned but limited activity in the region might not justify the costs of USD 1 billion per ship (Fountain, 2017). Canada's Coast Guard has 15 icebreakers, including two heavy icebreakers, but they are reaching the end of their design life. Canada is exploring various options to replace its icebreakers. In June 2018, the Government of Canada announced that it would be acquiring three converted medium commercial icebreakers to support interim icebreaking capability. Nevertheless, increasing demand for icebreaker service support is leaving the fleet stretched (LeBlanc – Senate of Canada, 2018). Russia is the only country to possess robust icebreaker capabilities with over 40-icebreakers, including six heavy polar, nuclear-powered vessels (Charron, 2017).

20. Because communications satellites do not fully cover the Arctic region, **communication technology** in the High North is limited. Building infrastructure for broadband technology is complicated by short construction seasons and difficult maintenance conditions. Since 1999, large ships have been equipped with communications, warning and alert systems within the Global Maritime Distress and Safety System (GMDSS), mainly using the COSPAS-SARSAT⁷ satellite program established in 1979 by Canada, France, the former USSR and the United States. However, due to the gap in satellite coverage, distress alerts can only be detected globally up to about 70-75° north (Steinicke & Albrecht, 2012). SAR officers place high hopes in the new Medium Earth Orbit Search and Rescue (MEOSAR) system, which will become the dominant space-segment capability of the COSPAS-SARSAT program. MEOSAR satellites will pick up the distress signals in near real time with more accuracy than the current system, which can take up to two hours.

⁷ COSPAS (КОСПАС) is an acronym for Space System for the Search of Vessels in Distress in Russian, while SARSAT is an acronym for Search and Rescue Satellite-Aided Tracking.

21. Communication between different SAR stakeholders is another cause for concern. All Arctic states have their own vessel and air-traffic services with different reporting systems (Ikonen, 2017). Information on military units, which are often the most readily available resources for SAR operations, might be considered sensitive by military authorities, further complicating cross-border cooperation. Moreover, language barriers continue to obstruct communication (Sydnes et al., 2017).

22. **Norway** stands out among the Arctic nations in terms of developing adequate SAR capabilities in the High North. In May 2018, members of the NATO PA Sub-Committee on Democratic Governance (CDS DG) visited Bodo, Norway, which hosts the Joint Rescue Coordination Center North Norway (JRCC NN). Bent-Ove Jamtli, Director of JRCC NN, told the delegation that Norwegian SAR services are coordinated by two JRCCs – one in Sola (for southern Norway) and one in Bodo (for northern Norway). SAR services are performed through a cooperative effort involving governmental agencies, voluntary organizations and private companies. All relevant state and municipal institutions and services are obliged to participate with all available resources if asked by JRCC. The Center had to deal with about 3,000 incidents in 2017, most of them in the sea, and this number increases each year. Norway's 12 aging Sea King SAR helicopters will be replaced by 16 new AW-101 helicopters by 2020 with an expanded radius of operation. Norway's SAR capabilities also include a number of other important assets, such as NH-90 naval helicopters, the CGV Svalbard icebreaker and the M/S Polarsysssel expedition and research vessel. JRCC NN cooperates closely with Norway's armed forces, for instance, by occasionally requesting the assistance of the F-16 fighters from NATO Quick Reaction Alert air base in Bodo. Voluntary organizations – such as Norwegian alpine or glacier rescue teams – are instrumental to the success of Norway's SAR operations. One must also note a good level of cooperation between Norwegian and Russian SAR services in protecting human lives and infrastructure in the framework of the Barents Agreement.

23. Finland and Sweden also have adequate SAR capabilities in their part of the High North, however they do not have access to the Arctic Ocean. Therefore, their area of responsibility is less challenging. In **Finland**, responsible authorities for SAR in the High North are the Finnish Border Guard and the Air Navigation Services Finland. Additional authorities and organizations also get involved in SAR operations, such as the Emergency Response Service Administration, the Finnish Armed Forces, the Vessel Traffic Service, with involvement also of the police and custom authorities. The Finnish Border Guard conducts joint exercises with the Swedish Coast Guard. In **Sweden**, the Swedish Maritime Administration (SMA) is responsible for maritime and aeronautical SAR in the Arctic (Ikonen, 2017). According to SMA, its helicopter unit is "fully dedicated to nation-wide airborne search and rescue services". The large fleet of AgustaWestland AW139 helicopters is stationed in five stations: Umea, Stockholm, Visby, Gothenburg and Ronneby. Other actors involved in SAR operations in the Arctic include fire brigades and the Swedish Coast Guard, a civilian authority supervising rescues and providing assistance at sea 24 hours a day, 365 days a year along the entire Swedish coastline.

24. The **United States** keeps most of its SAR assets in southern Alaska, but during summer months the US Coast Guard (USCG) also opens Forward Operating Bases in more remote locations to support economic activities there. In terms of air assets, the USCG mostly relies on helicopters based primarily out of Kodiak Air Station, which stand alert and ready to respond. However, these helicopters do not have refueling or de-icing capabilities, which limits their scope of intervention. Often this leads to dependency on the Alaska Air National Guard's combat SAR squadrons for cases beyond 300 miles. In terms of maritime assets, the USCG's fleet of ships provides platforms, capabilities and resources for marine vessels in distress and for SAR operations in the most remote areas. Vessels are of great value in SAR missions but "response times for cutters in the Arctic are slow" (Smith, 2017). Other partner organizations can also be requested to assist in SAR missions, especially above the Arctic Circle where the USCG and the United States Air Force (USAF) do not have a permanent presence. These include the North Slope Borough Search and Rescue – primarily responsible for "provid[ing] SAR services for the Alaskan Natives that live within the Borough" – and the North Slope commercial operators. Despite the limited capabilities of these organizations, their

presence in the North Slope enables quick response times and their regional expertise is crucial in this dangerous area. However, maintenance issues and the lack of infrastructure on the North Slope often makes it difficult to conduct SAR operations, for aircraft as well as for marine vessels. Practical collaboration between the different actors involved is also a challenge.

25. **Iceland's** Coast Guard operates three vessels, several rescue helicopters and one maritime surveillance aircraft, which can operate from short airfields. Inside the country, there are about 100 SAR teams, consisting of volunteers, that focus mostly on assisting the rapidly growing number of tourists. Since 1985, Iceland operates the Maritime Safety and Survival Training Centre which provides safety and survival training for seamen. According to national law, it is mandatory for all seamen to attend courses there. Nevertheless, a nation the size of Iceland requires international support in major emergencies.

26. Canada and Denmark (Greenland) face the greatest SAR challenges due to the vastness of their area of responsibility compared with the size of the population. Until recently, experts assessed that **Canada** had only limited infrastructure in its northern territories and that “any attempt to mount even a small-scale operation would be difficult” as Canada’s most substantial SAR facilities are located thousands of kilometers away in the south (Steinicke & Albrecht, 2012). However, the current government of Canada has taken important steps to improve the situation. In November 2017, Ottawa launched the USD 1.5 billion Oceans Protection Plan, which, in addition to setting environmental goals, envisages the provision of new capabilities to the Canadian Coast Guard to effectively respond to safety incidents. The Department of National Defence and the Canadian Armed Forces also announced a new policy entitled “Strong, Secure, Engaged” that calls on a military spending increase of 70% over the next decade. Much of this funding aims to improve SAR capabilities and surveillance in the Arctic. The government has reaffirmed its commitment to develop and put into polar orbit a new generation of radar satellites, known as the RADARSAT Constellation, that will enable Canadian forces to see through clouds at night to track vessels.

27. **Greenland**, the world’s largest island, has a population of just over 50,000. SAR platforms are limited to one helicopter operated by Air Greenland. This helicopter is equipped with hoists, so it can rescue persons in distress from ships and water, including fishermen stranded on drifting ice floes. Greenland applies a whole-of-society approach to SAR, involving traditional local fishermen and hunters, recreational boats and hikers. The Danish Arctic Command supports local efforts by stationing one Arctic patrol frigate with an on-board helicopter and two Arctic patrol vessels in summer; it only provides one ship in winter. Experts note that, in the case of a mass rescue operation, local resources would be overwhelmed, while remote locations would hinder a swift arrival of international assistance (Steinicke & Albrecht, 2012). In October 2013, the Danish state auditing agency, *Rigsrevisionen*, concluded that the Danish forces received insufficient funds and equipment to fulfil their Arctic tasks, including SAR and environmental protection (Wezeman, 2016). The Danish Navy is advising cruise ships to sail in pairs in Greenland waters in order to have the necessary capacity to house hundreds of people in the event of an emergency.

28. **Russia** is the source of both problems and opportunities for civil protection in the High North. As noted, Russia has the most developed infrastructure in the region, due to both the economic⁸ and the military significance that Moscow attaches to the Arctic. As part of a wider military modernization program, Russia has engaged in a large-scale military build-up in the High North. In December 2014, Moscow announced the creation of a North Unified Strategic Command based in Murmansk. Russia also established or reopened six military facilities and deployed additional troops in the region. In 2017, President Vladimir Putin and Prime Minister Dmitri Medvedev visited the modern 14,000 m² base in the Franz Josef archipelago, thus reaffirming Russia’s foothold in the Arctic. Furthermore, the Russian Northern Fleet enhanced its capabilities and increased the number as well as the scale of its exercises in Arctic waters.

⁸ According to the Council on Foreign Relations, 20% of Russia’s GDP, including 95% of its natural gas and 75% of its oil, come from its Arctic region.

29. Russia has an extensive network of urban centers and infrastructure along its vast Arctic coast to harvest Arctic mineral resources and provide services to the NSR. In 2015, the Russian government released its Integrated Development Plan for the Northern Sea Route 2015-2030. The plan stresses the importance of providing safer and more reliable navigation on the NSR as well as the strategic importance of the NSR for Russian national security. Russia has five SAR centers along the NSR, manned by some 280 personnel, and the country is building another four (LeBlanc, 2018). Military assets provide an additional SAR cover for the NSR.

30. However, Russia's assets in the region are outdated and in critical condition. The country lacks adequate backup infrastructure, such as repair docks, fueling stations, communication systems and rescue hubs (Dushkova et al., 2017).

31. This brief overview of SAR capabilities in the High North suggests that these capabilities are in short supply and unevenly distributed. Multilateral cooperation is therefore a vital precondition to having adequate civil protection in the area.

C. MULTILATERAL COOPERATIVE FRAMEWORKS IN THE HIGH NORTH

32. Arctic governance is a patchwork of national laws, bilateral treaties and international agreements. Apart from national regulations⁹, the most relevant **international conventions** applied in the Arctic include the 1974 International Convention for the Safety of Life at Sea (SOLAS), the 1979 International Convention on Maritime Search and Rescue (SAR Convention), the 1982 United Nations Convention on the Law of the Sea (UNCLOS)¹⁰ and the 2014 International Code for Ships Operating in Polar Waters (Polar Code).

33. The Polar Code, which came into effect on 1 January 2017, is a major advance in providing guidelines for Arctic shipping. It establishes safety requirements for ships navigating Arctic waters and advances environmental protection by banning all discharge of waste. The Code is mandatory, but its enforcement depends on the member states and it is mute on penalties for noncompliance. Discussions about whether and how to extend the Polar Code are underway at the International Maritime Organization.

34. In terms of **regional cooperation**, the **Arctic Council** stands out as the key organization that involves the governments of Canada, Denmark (through Greenland), Finland, Iceland, Norway, Russia, Sweden, the United States as well as six representatives of indigenous populations. Several countries are recognized as observers, including NATO members France, Germany, Italy, the Netherlands, Poland, Spain and the United Kingdom. Founded in 1996, the Arctic Council has evolved into a regional organization that provides joint analysis on Arctic issues, including SAR, and facilitates legally binding intergovernmental agreements. In 2013, the Arctic Council's first permanent secretariat was set up in Tromsø, Norway. Recognizing the Arctic's global relevance, observer status was extended to countries as far away as China and India. Government officials of the member states meet twice a year, while ministerial summits are held every two years. In May 2018, the Arctic Council launched a best practice web portal, designed to raise awareness of the provisions of the Polar Code and to facilitate the exchange of information and best practices among all those involved in or potentially affected by Arctic marine operations.

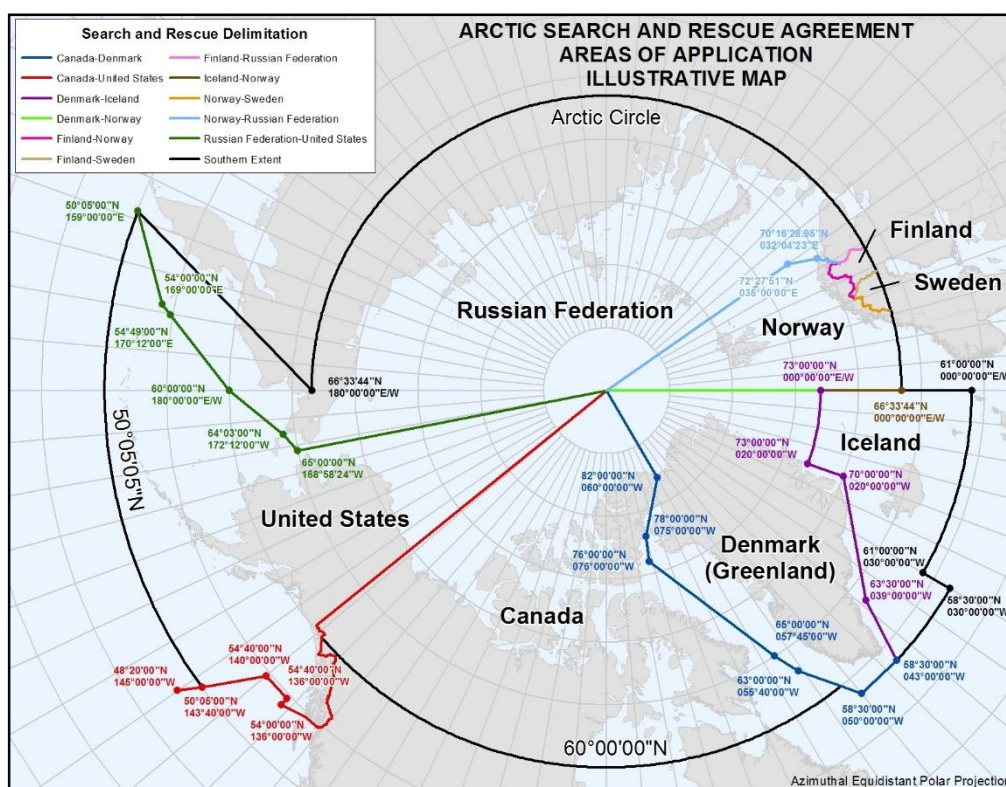
35. Pan-regional cooperation on SAR was not possible until after the end of the Cold War, when, in 1993, Russia, the United States and Canada held the first *Arctic Search and Rescue Exercise* (SAREX) in Siberia to improve SAR interoperability between these countries. Since then, SAREX

⁹ Unlike its polar counterpart in the south, the Arctic is divided by the national jurisdictions of the eight High North states, Canada, Denmark (Greenland), Finland, Iceland, Norway, Russia, Sweden and the United States.

¹⁰ The United States is not an official party to UNCLOS but has engaged in the Arctic according to its standards.

and other bilateral and multilateral SAR exercises, such as the 2016 *Arctic Chinook* exercise, which simulated a MRO from a 200-passenger cruise ship in Alaska, are held regularly.

36. The Arctic Council's major achievement is the signing of the Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic in 2011. Also known as the **Arctic SAR Agreement**, it is the organization's first legally binding document and obligates signatories to delimit zones of responsibility for SAR¹¹. The eight nations agreed to set up an aeronautical and maritime rescue coordination center (RCC) under one command and to bear the costs of SAR capabilities in their area of responsibility. The agreement encourages all parties to cooperate by sharing information and infrastructure and participating in joint exercises and research initiatives, as well as through regular scheduling of reciprocal visits by SAR experts. Notably, the Agreement allows non-Arctic states to be included in the conduct of SAR operations. In 2011, Canada hosted the first SAR tabletop exercise in the framework of this Agreement.



37. While it may be too early to assess the effectiveness of the Arctic SAR Agreement, some experts note that the delimitation of zones of national responsibility is not a silver bullet. The lesson learned from the 2013 SAREX exercise is that any mass rescue operation would necessarily be international, as no one nation has enough resources to conduct such an operation alone (House of Lords, 2015).

38. In addition to the Arctic SAR Agreement, the Arctic Council's second major accomplishment is the 2013 Agreement on Marine **Oil Pollution** Preparedness and Response in the Arctic (MOSPA). The agreement commits signatories to monitor for oil spills within their national jurisdictions, have appropriate equipment and contingency plans to respond to spills in a timely and effective manner, notify all affected parties in case of a transboundary oil spill and provide mutual assistance if an incident exceeds a signatory's capacities. Since the Agreement came into force in 2013, three joint exercises have been conducted under MOSPA.

¹¹ It is important to note that, according to the Agreement, "the delimitation of search and rescue regions is not related to and shall not prejudice the delimitation of any boundary between states or their sovereignty, sovereign rights or jurisdiction."

39. Norway experienced devastating oil rig accidents in 1977 and 1980¹², and hence revisited its policies to emphasize safety and environmental standards and to shift to a risk-based, proactive regime with working legal requirements. Russia, on the other hand, is seen by its Arctic neighbors as the most expansive actor in offshore oil and gas production and as the one with the least regulatory clarity. An oil spill in the Arctic would be particularly damaging given the fragility of the region's ecosystem. Therefore, as Canadian scholar Michael Byers put it, "more cooperation is needed, and quickly, on regional standards for oil spill prevention" (Bouffard, 2017).

40. Other relevant regional frameworks include:

- 1) The Arctic Council's working group on **Emergency Prevention, Preparedness and Response** (EPPR). The EPPR identifies gaps, collects information, develops strategies and facilitates coordination among national emergency preparedness authorities. Since 2015 the group's mandate explicitly includes SAR issues.
- 2) The **Arctic Coast Guard Forum**, which was established in 2015. This forum is held twice a year to foster multilateral cooperation in maritime SAR. Although officially independent from the Arctic Council, it brings together coast guard officers from the Arctic Council member states. Designed to coordinate the pooling of information and resources and the sharing of best practices, the forum held its first joint SAR exercise in Iceland in September 2017.
- 3) SAR issues are also discussed in regular meetings of defense officials in the framework of the **Arctic Security Forces Roundtable**. Russia has not attended these meetings since its relations with the West soured in 2014. Russia's involvement in the activities of the Arctic Council remains unaffected, however.
- 4) Cooperation in the Barents Sea is promoted by the **Barents Euro-Arctic Council** - composed of Denmark, Finland, Iceland, Norway, Russia, Sweden and the European Commission. One of its working groups deals with SAR issues. The group has developed an operational tool, the Barents Joint Rescue Manual, and organizes regular joint *Barents Rescue* exercises.
- 5) In 2011, Canada, Norway and Russia installed a common regional broadcast system for **navigational and meteorological warnings**.

41. While four out of five Arctic littoral states and five out of eight Arctic Council members are NATO Allies, **NATO's** involvement in the Arctic, including in the SAR domain, is limited and *ad hoc*. In 1996, in the framework of the Partnership for Peace Programme, NATO sponsored a SAREX exercise involving military units from Russia, Canada and the United States that focused on common SAR procedures and the delivery of humanitarian assistance (Steinicke & Albrecht, 2012). NATO's regular *Cold Response* exercises focus on improving warfighting skills in Arctic conditions, yet the exercises also involve the local populations and civil authorities, including environmental officers. NATO's Allied Command Transformation also conducts science and technology investigations in the region using unmanned underwater vehicles and a research vessel to study the predictability of ocean and acoustic environments. As noted, NATO conducts annual *Dynamic Mercy* exercises in regions adjacent to the High North, the Atlantic Ocean and the Baltic Sea.

42. NATO currently has no official mandate or presence in the Arctic and views within NATO differ on whether there should be explicit Arctic involvement. For years, the overt involvement of NATO in the Arctic has not been a preferred option for some Allies. Canada, for example, has often characterized the Arctic as a zone of cooperation – not confrontation. While Canada's new defense policy "Strong, Secure, Engaged" suggests that Canada will "[c]onduct joint exercises with Arctic allies and partners and support the strengthening of situational awareness and information sharing in the Arctic, including with NATO", its position continues to prioritize peaceful and cooperative approaches to Arctic concerns over militarization.

¹² The 1980 incident resulted in the deaths of 123 out of the 212 people who were present on the collapsed rig.

43. At the 2017 Halifax International Security Forum, NATO Secretary General Jens Stoltenberg presented the Alliance's plans to create an Atlantic Command covering the Arctic, an initiative broadly supported by Allies, including the five High North NATO members. In June 2018, Allied defense ministers agreed to establish the Atlantic Joint Force Command (JFC) to be hosted by the United States in Norfolk, Virginia. The new Command will ensure that NATO can successfully conduct operations in the northern Atlantic.

III. ADDRESSING THE HUMANITARIAN CRISIS IN THE MEDITERRANEAN

A. THE MEDITERRANEAN: THE WORLD'S MOST LETHAL SEA ROUTE FOR MIGRANTS AND REFUGEES

44. Unlike the Arctic, the Mediterranean Sea is one of the world centers of maritime activity. The high level of marine traffic naturally entails the risk of accidents that require SAR operations. Most vulnerable are the refugees and migrants who embark on perilous sea journeys in search of a better and safer life in Europe. While migratory flows across the Mediterranean are not new, they have gained particular momentum in the past five years, triggered by the outbreak or deterioration of conflicts on Europe's southern flank.

45. In 2015, Europe experienced the largest influx of refugees and migrants since World War II, with more than 1 million arrivals via the Mediterranean, resulting in a humanitarian and political crisis. While the number of sea arrivals has significantly decreased since then, the Mediterranean remains the deadliest migratory sea route in the world. For 2017, the United Nations High Commissioner for Refugees (UNHCR) counted 172,301 migrant arrivals in Europe by sea and another 3,139 that died or disappeared before reaching the shore. According to the International Organization for Migration (IOM), crossing the Mediterranean has claimed about 15,000 lives since October 2013 when the crisis first made headlines. These figures are shockingly high, and, in all likelihood, the total number of actual arrivals and fatalities is much higher.

46. Irregular migration via the Mediterranean takes place along three main routes: the Eastern Mediterranean route from Turkey to Greece; the Central Mediterranean route from Libya to Italy; and the Western Mediterranean route, mainly from Morocco to Spain. The routes vary significantly in terms of the number of sea crossings and the composition of nationalities among sea arrivals, as well as in length and lethality.

47. At the outset of the crisis, most arrivals from conflict-ridden countries in the Middle East came via the **Eastern Mediterranean** route. About 885,000 of the roughly 1 million sea arrivals to the EU in 2015 were registered on Greek islands. In terms of country of origin, the largest group was Syrians, followed by Afghans and Somalis. Although the journey is relatively short, with some Greek islands situated just a few kilometers off the Turkish coast, at least 804 migrants lost their lives along the Eastern Mediterranean route that year (IOM, 2018).

48. The 2016 EU-Turkey Agreement has caused the surge in sea crossings along the Eastern Mediterranean route to ebb as abruptly as it had started. According to the Agreement, Turkey would stem the flow of migrants embarking towards Greek islands, while the EU would accelerate the visa liberalization process for Turkish citizens and mobilize funding to support Turkey's hosting of about 3 million Syrian refugees. Moreover, the Agreement allows for all undocumented migrants arriving in Greece to be deported back to Turkey. For each Syrian being returned to Turkey, another Syrian would be resettled from Turkey to the EU. In the two years since the Agreement became operational, irregular migration via the Eastern Mediterranean has dropped by 97%. In 2017, Greek authorities registered 42,319 undocumented sea arrivals and 62 deaths at sea. However, there has been an increase of sea arrivals from Turkey to Greece since the beginning of 2018.

49. Turkey has shown great generosity in hosting more than three million refugees from Syria and elsewhere. However, while the Agreement has been praised for reducing both irregular migration and the number of deaths in the Eastern Mediterranean, it has also engendered criticism, largely for potentially infringing on human rights and refugee law. In most cases, undocumented migrants have successfully appealed the decision to be returned to Turkey by arguing that Turkey is not a safe country. As of 12 March 2018, a total of 12,489 refugees registered in Turkey were resettled in the EU, but only 2,264 migrants were returned to Turkey.

50. With the enactment of the EU-Turkey Agreement, the **Central Mediterranean** has become the main entry point for undocumented migrants arriving in Europe by sea. Stemming irregular migration from Libya has always been challenging. While Morocco, Tunisia and Algeria adopted legislation criminalizing the exit of undocumented migrants or the facilitation thereof, Libya did not follow suit (Fargues, 2017). With the collapse of the regime in 2011, Libya became a major transit hub for cross-Mediterranean migration. Libyans as well as migrants from across North Africa, the Sahel and sub-Saharan Africa continue to embark on perilous sea journeys to Europe, taking advantage of the porous borders and the weak points in state authority.

51. The Central Mediterranean route is also the most dangerous as the distance from North Africa to Italy is significantly longer than that of the Eastern Mediterranean route. In 2016, the number of sea arrivals in Italy peaked at 181,436, while 4,578 migrants lost their lives on this route. Despite a significant reduction of departures from Libya over the past year, the figures for 2017 remained high with 119,369 arrivals in Italy and 2,873 deaths at sea. On 29 June 2018, at least 100 people died after a boat carrying roughly 123 refugees and migrants sank off the coast of Libya.

52. Some observers argue the EU-Turkey Agreement caused a migratory shift from the Eastern Mediterranean to a longer and more perilous route. While departures from Libya indeed increased in spring 2016, the composition of nationalities shows that the migrants arriving in Europe via the Central Mediterranean route are not those who are stopped in Turkey (Fargues, 2017). Even after the route from Turkey to Greece was barred, the vast majority of sea arrivals in Italy still came from sub-Saharan Africa (UNHCR, 2017).

53. Regarding the **Western Mediterranean**, traversing the Strait of Gibraltar is the shortest possible way to cross the sea. However, cooperation between Morocco and Spain has kept the number of arrivals relatively low. Migratory flows temporarily shifted to the Atlantic, where migrants embarked on long and extremely dangerous sea journeys from Mauritania or Senegal to the Canary Islands. Recently, irregular migration along the Western and Atlantic routes substantially rose again: sea arrivals in Spain more than doubled compared to 2016, with 28,349 arrivals by sea (European Commission, 2018). The similar composition of nationalities among arrivals in Italy and Spain suggests that efforts to stem irregular migration in the Central Mediterranean shifted migratory flows to the West.

B. SAR CAPABILITIES IN THE MEDITERRANEAN

54. Until recently, SAR operations in the Mediterranean were conducted on an *ad hoc* basis, mainly by merchant vessels and coast guards of the Mediterranean littoral states. However, the alarming increase in fatal sea crossings in recent years spurred the gradual formation of a proactive emergency response system in the region, particularly along the dangerous Central Mediterranean route. Today, various actors are involved in the region, including the EU, NATO, NGOs, individual states and merchant vessels, but often with very different approaches and geographical areas of operation. As international law obliges all shipmasters to render assistance to any person in distress at sea, all these actors engage in rescue operations to some extent, even though they might not operate under a primarily humanitarian mandate that focuses on SAR.

55. The wreckage of a migrant boat off the coast of Lampedusa on 3 October 2013, which left 366 people dead or missing, prompted a fundamental change in the region's emergency response

system. Within two weeks of the incident, the **Italian** government launched *Mare Nostrum*, a major rescue and border control operation under the authority of the Italian Navy. With a considerable budget of USD 12 million a month, *Mare Nostrum* saw the deployment of both sea and air assets along the Sicily Channel between Italy and Libya. Before the operation was discontinued a year later, it saved the lives of about 150,000 people in over 400 SAR operations. High operational costs and dwindling public support, however, led to its end on 31 October 2014.

56. To replace *Mare Nostrum*, the **EU's** Border and Coast Guard Agency (**Frontex**) launched *Operation Triton* in November 2014, thereby answering calls from Italy to share the burden. *Operation Triton* ran in parallel to *Operation Poseidon*, a similar Frontex-led operation in the Aegean Sea that started to operate in 2011. Responding to the surge of irregular migration via the Mediterranean and several large-scale accidents, the EU tripled the resources and assets for *Poseidon* and *Triton* in 2015. At the same time, *Triton* also expanded its operational area from 30 to 138 nautical miles south of Sicily. Although the mandates of both operations were focused on border control and surveillance, the participating vessels took part in numerous SAR operations that assisted migrants in distress.

57. On 1 February 2018, Frontex replaced *Operation Triton* with *Operation Themis*, again responding to Italian demands for fairer burden sharing. While *Triton* required those rescued to be taken to Italy, *Themis* leaves this decision to the country coordinating the rescue. However, as Italy's Maritime Rescue Coordination Center in Rome continues to coordinate the overwhelming majority of SAR operations in the Central Mediterranean, the changes under *Themis* serve primarily as a political message from Italy to its Mediterranean neighbors that the country is assuming a more assertive stance on addressing irregular migration (Deutsche Welle, 2018).

58. When addressing the NATO PA Committee on the Civil Dimension of Security at the Spring session in Warsaw in May 2018, Fabrice Leggeri, Executive Director of Frontex, noted that the agency is primarily a law enforcement body, but that it also has other responsibilities, such as risk analysis, capacity-building assistance and SAR. He said that Frontex had assisted with the rescue of more than 34,000 people in 2017 alone and helped save more than 280,000 lives in total since 2015. He noted that the agency has access to satellite images from the European Satellite Centre (SatCen) and regularly exchanges information with other multinational bodies, including Europol and NATO's Allied Maritime Command (MARCOM). He further noted that Frontex has developed a rapid reaction mechanism: if a member state requests support in a crisis situation, Frontex can deploy a rapid reaction force within five days – a capability each member state must contribute to by law. Mr Leggeri also informed the Committee that Frontex is in the process of developing autonomous aerial capabilities, which will allow the agency to engage in SAR without deploying vessels.

59. Further incidents prompted the EU to launch the EUNAVFOR MED, also known as *Operation Sophia*, in 2015. While the operation's initial mandate was limited to identifying, capturing and disposing of vessels and enabling assets used for migrant smuggling and trafficking, it has significantly evolved since then. Legal as well as political obstacles prevented the full implementation of the planned mandate, which provided for the eventual expansion of anti-smuggling operations to Libyan territorial waters. However, neither of the groups claiming to be Libya's government granted the EU permission to enter Libyan waters, nor did the UN Security Council (Tardy, 2017). A 2016 amendment to the operation's mandate added capacity building and training of the Libyan Navy and Coast Guard to its tasks. The mandate was amended again in 2017 to include surveillance activities on illegal trafficking, with the information gathered in this context to be released to competent Libyan authorities. Meanwhile, confined to international waters, *Operation Sophia's* sea and air assets participate in SAR missions when needed. To date, they have been involved in the rescue of more than 40,000 people.

60. EU member states are working bilaterally and multilaterally to stem human smuggling and trafficking in source and transit countries, including Libya, despite the difficulties of operating in such a volatile environment. As part of *Operation Sophia*, the EU trained and monitored about 200 Libyan

Navy and Coast Guard personnel in 2017, and it is planning to train an additional 90 in 2018. With the overall objective of increasing security in Libya's territorial waters, these programs aim to enhance the capacity to conduct SAR activities as well as to disrupt smuggling and trafficking from and to the Libyan shores. Supported with EU funding, Italy is also planning to set up a maritime rescue center in Tripoli in 2018 (Tardy, 2017). While certain aspects of EU and Italian cooperation with Libya remain a concern from the perspective of human rights NGOs, a reduction in the levels of migrant smuggling has been achieved. According to the International Organization for Migration, the Libyan Coast Guard rescued over 20,300 migrants in 2017. Further efforts to disrupt smuggling networks and trafficking should center on providing support and protection to migrants, refugees, and internally displaced persons in Libya.

61. **NATO's Operation Sea Guardian** actively supports the EU's efforts to enhance maritime security in the Mediterranean by providing *Operation Sophia* with information and logistics support. Launched in October 2016, *Sea Guardian* operates under NATO's MARCOM and covers a wide array of duties, with maritime situational awareness, counterterrorism and regional capacity building at its core. Since February 2016, NATO ships and aircraft have also assisted EU authorities in stemming illegal trafficking and migration in the Aegean Sea by conducting reconnaissance, monitoring and surveillance activities and sharing any relevant information gathered in this context with Frontex and the Greek and Turkish Coast Guards. Although NATO's operations and assistance missions in the Mediterranean generally do not focus on SAR, like all ships, they have the duty to help when made aware of people needing rescue nearby.

62. Since 2014, a growing number of **NGOs** conducting SAR operations in the Central Mediterranean have worked to develop a proactive emergency response system. The first NGO to actively pursue rescue operations was the Malta-based Migrant Offshore Aid Station (MOAS). It was later joined by other organizations from across Europe, most notably *Médecins Sans Frontières* (MSF), Sea-Watch, *SOS Méditerranée*, Proactiva, Sea-Eye, *Jugend Rettet*, and Save the Children. Some of these NGOs have large surface vessels, allowing them to carry out entire SAR operations – from picking up people in distress to disembarking them at a safe port. Organizations with smaller capabilities focus on providing emergency medical care, life jackets and water while waiting for larger vessels to arrive.

63. These NGO SAR activities in the Central Mediterranean have spurred tension among the different actors involved. Italian authorities have accused NGOs of colluding with smuggling and trafficking networks. In July 2017, the Italian Ministry of Interior, in consultation with the EU Commission, drafted a "Code of Conduct for NGOs Undertaking Activities in Migrants' Rescue Operations at Sea". Among other things, the code clearly prohibits NGOs from entering Libyan waters or transferring those rescued to other vessels, and it obliges NGOs to allow Italian law enforcement personnel on board their vessels. Some NGOs initially refused to sign the code, arguing it violates international maritime law and reduces rescue capacity. However, Italian authorities made clear that any failure to subscribe to the code would come at a high cost. The NGOs *Jugend Rettet* and Proactiva, for instance, had their vessels confiscated by Italian authorities and are now under investigation for abetting irregular immigration. Except for MSF, all major NGOs involved in SAR in the Mediterranean eventually agreed to sign the code after negotiations with and concessions from the Italian Ministry of Interior.

64. Libyan authorities have also accused some NGOs of operating too close to the Libyan coast, thereby violating the country's sovereignty. In August 2017, the Libyan Navy and Coast Guard started to reassert their authority over the country's SAR zone, restricting the access of NGO vessels to Libyan territorial waters as well as international waters off the Libyan coast. Confronted with a simultaneous clampdown by the Italian and Libyan authorities, most NGOs have suspended their rescue operations.

65. **Merchant ships** have also been involved in SAR operations on an *ad hoc* basis. At the height of the migrant and refugee crisis, merchant shipping was at the forefront of mitigating the loss of life in the Mediterranean. In 2015, the International Chamber of Shipping (ICS) called on EU member states to launch a proper SAR mission to ease the strain on commercial ship operators. The development of the proactive SAR system outlined above resulted in a significant decline in rescues by merchant vessels. However, commercial ships continue to regularly assist SAR operations when called upon by a Rescue Coordination Center. The ICS has expressed concern that many of the seafarers involved are not trained to conduct large-scale rescue operations and sometimes suffer psychological harm from these experiences.

66. The growing number and complexity of actors involved in managing migratory flows in the Mediterranean have prompted the EU to establish certain coordination mechanisms. Under the auspices of *Operation Sophia*, **SHADE MED** (Shared Awareness and De-confliction in the Mediterranean) has been established as a forum aimed at fostering dialog and easing tensions between different actors involved in maritime security operations in the Mediterranean. SHADE MED was held for the fifth time in November 2017, attracting 156 participants from 94 organizations, including NATO as well as relevant NGOs.

67. Under mounting pressure from the Italian government to take “concrete steps” towards better burden sharing, EU leaders agreed – during the last **European Council in June 2018** – on a new migration deal. They agreed to adopt a “comprehensive approach to migration that combines more effective control of the EU’s external borders, increased external action and the internal aspects, in line with our principles and values”. EU leaders decided to create “controlled centers” – i.e. secured refugee camps funded and managed by the EU on EU territory. These centers will aim to provide “rapid and secure processing allowing to distinguish between irregular migrants, who will be returned, and those in need of international protection, for whom the principle of solidarity would apply”. However, member states are free to choose if they want such centers to be set up on their territory. In addition, member states agreed to strengthen EU external border controls by allocating more funds for Frontex and some Mediterranean countries. In line with this, they agreed to launch the next tranche of the Facility for Refugees in Turkey and to allocate an additional EUR 500 million for Africa.

68. The Council also announced plans to establish “regional disembarkation platforms” in third-party countries, most likely in North African countries, to process the asylum applications of people rescued at sea outside the EU. The idea is to separate economic migrants and refugees before they embark on a journey to Europe in order to reduce the number of people trying to reach the EU. The agreement provides for a collaboration with the IOM and the UNHCR on this question, but without further details. The deal also plans to boost EU support for the Libyan Coast Guard.

69. Member state leaders appeared mainly satisfied with this migration deal. “Italy is not alone anymore”, claimed Prime Minister Giuseppe Conte. The agreement was also praised by British, German and French leaders as a “European solution” to what is currently, according to Chancellor Merkel, “perhaps the most challenging topic for the European Union”. In contrast, some leaders, such as Austrian Prime Minister Sebastian Kurz, adopted a more cautious posture, while the prime ministers of the Czech Republic and Slovakia criticized the decision to strengthen Frontex rather than providing more support for member states’ border guards. The agreement has also been criticized for its vagueness in terms of its actual implementation.

70. The migration deal has also been criticized by some human rights NGOs, such as Human Rights Watch, who claim that the reinforcement of border controls will only encourage smuggling while pushing people fleeing violence and determined to reach Europe to take more perilous routes. They also claim that the creation of “controlled centers” contravenes Europe’s founding principle of solidarity and its duty to observe human rights, especially in regard to migrants’ and refugees’ rights to liberty. Furthermore, the externalization of the asylum policy appears as a way to push this responsibility onto other actors, outside Europe. The problem is that these actors often fall short of

meeting international human rights standards in many ways. The Rapporteur is convinced that, while implementing the deal, the EU must insist on a radical improvement of conditions and the protection of human rights in existing facilities on the other side of the Mediterranean.

C. AUGMENTED SAR CAPABILITIES – LIFESAVING OR COUNTERPRODUCTIVE?

71. To a much greater degree than in the Arctic, SAR in the Mediterranean is heavily politicized due to its linkage with the refugee and migration crisis. There is a debate on whether SAR operations encourage more and riskier sea crossings. Some stakeholders, including some EU authorities, argue that augmented SAR capabilities only create the impression of a safer route and help smuggling networks and traffickers achieve their aims at lower costs. These arguments have had tangible effects, causing some member states to withdraw from missions that involve SAR activities. The United Kingdom, for example, had initially refused to participate in Frontex-led operations in the Mediterranean, arguing “they create an unintended ‘pull factor’, encouraging more migrants to attempt the dangerous sea crossing and thereby leading to more tragic and unnecessary deaths” (Benton, 2014). Currently, however, two British Border Force cutters are deployed in support of Frontex operations *Themis* and *Poseidon*. Other actors, including NGOs, argue that migratory drivers are more complex and advocate for a humanitarian approach that focuses on saving the lives of those in immediate distress regardless of the consequences (see e.g. MSF, 2017). During his presentation to the CDS, Mr Leggeri, director of Frontex, stressed that while the agency has a duty to rescue anyone in distress at sea, one must not encourage criminal networks seeking to exploit SAR capabilities.

72. Several studies have examined the relationship between attempted sea crossings and rescue activities along the most frequented Central Mediterranean route (e.g. Heller & Pezzani, 2017; Steinhilper & Gruijters, 2017). In general, comparative analyses of trends in sea crossings during periods with low and high numbers of proactive SAR activities do not support the claim that rescue activities encourage more sea crossings. For instance, Italian authorities reported slightly less sea arrivals from November 2015 to May 2016, when a significant number of state and non-state actors actively pursued rescue operations along the Central Mediterranean route, compared to the same period the year before, when Frontex’s *Operation Triton* was the only proactive SAR mission and had not even been expanded yet (Steinhilper & Gruijters, 2017). In other words, a similar number of people attempted to cross the Central Mediterranean irrespective of the extent of SAR capabilities along the route. While these analyses only demonstrate statistical correlations (or better, the lack thereof), they strongly suggest that augmented SAR capabilities have little effect on the number of attempted sea crossings.

73. Smugglers’ tactics and operations locations have shifted in recent years, leading to riskier crossings in the Central Mediterranean. Namely, since late 2015, smugglers have tended to stay within Libyan waters, using fishing boats or rubber dinghies rather than sailing vessels (which were the preferred means of transportation prior to 2015), with less fuel, water and food on board (European Commission, 2017; MSF, 2017). There are two potential explanations for these changes. Riskier smuggling practices may reflect the expectation that migrants, once they are on the high sea, will be picked up and transported to Europe as part of rescue operations. It is also possible that smugglers prefer to stay in Libyan waters in reaction to the deployment of EU *Operation Sophia* and Frontex forces, whose presence means smugglers can no longer navigate with impunity in international waters (Heller & Pezzani, 2017).

D. POST-RESCUE CONDITIONS

74. Migrant flows have put strain on refugee camps in Greece and Italy as well as on detention centers in Libya. The EU has instituted several “hotspots” in Greece and Italy to speed up the registering, identifying, and debriefing of asylum seekers. However, each hotspot currently exceeds its capacity by at least 2,000 people and camp infrastructure is under strain as a direct consequence of this overpopulation. Poor conditions – such as lack of sanitation, the spread of disease, and lack

of safety for children and women – have been noted by several international organizations working within the camps (UNHCR, 2018).

75. In addition, migrants frequently feel unable to navigate an asylum system that is still slow and overloaded by too many applicants. The ambitious EU plan to relocate refugees and asylum seekers from Italian and Greek camps to other EU countries – should the applicants meet certain conditions – has only relocated around 33,000 people instead of the 100,000 originally planned. Germany took a third of those migrants. However, even Germany's program recently ended, leaving thousands of migrants stranded in camps with deteriorating conditions.

76. The situation is dire in Libya, where regulations for camps or the detention of undocumented migrants are far weaker than EU regulations. Serious human rights violations in migrant camps and detention centers have been reported by international NGOs. For example, there have been reports that detention center guards have sold people into slavery (BBC News, 2018). The Office of the UN High Commissioner for Human Rights (OHCHR) expressed dismay at the EU's decision to assist the Libyan Coast Guard in catching undocumented migrants as Libya has proven incapable of guaranteeing humane conditions for these migrants. The EU has stated that, while it is working with the Libyan government to intercept boats and put in place search and rescue operations, it does so with the understanding that centers in Libya comply with international humanitarian standards.

77. While conditions in camps or detention centers are challenging for all migrants, observers consider women and children to be the most vulnerable. Children, in particular those travelling unaccompanied, require more assistance from host countries, as they are at increased risk of assault or abuse. Similarly, women and girl refugees and migrants experience various forms of gender-based violence. For example, they are vulnerable to abuse – sometimes from coast guard personnel, host country authorities or men in their camps – as well as trafficking and sexual exploitation (Fry, 2016; Shreeves, 2016).

78. The refugee and migration crisis shows that the **Dublin Regulation**, which determines which EU member state should be responsible for examining an application for asylum, requires a serious overhaul. The regulation's provision that asylum applications be processed by the country that first allowed entry has placed a substantial burden on Europe's southern nations. Italy and Greece especially have struggled to provide for their asylum seekers. This situation has led some member states to suspend the enforcement of the Dublin Regulation. For instance, the German government has periodically refrained from sending asylum seekers back to Greece and Hungary and has *de facto* suspended the regulation for Syrian applicants.

79. The European Commission has proposed amendments that the European Parliament has approved, along with some amendments of its own. Key reforms include a shared responsibility of all EU countries towards asylum seekers, so that if a country's capacity to accommodate asylum seekers is significantly overwhelmed, applications to that country will be re-directed to other member states. The reform proposal has been criticized – albeit for different reasons – by several EU states, including Germany, the Czech Republic and Hungary. Without the member states' agreement, it will be difficult for the European Parliament to push forward the proposed amendments.

IV. CONCLUSIONS

80. In the current strategic environment, characterized by blurring lines between war and peace, cooperation is needed between the military, civilian and non-governmental sectors to protect populations from old and new threats. While NATO has provided civil protection for over 60 years, this role is becoming increasingly important for the Alliance as it embraces a more comprehensive approach to security. NATO has developed several niche areas of expertise – including border security, surveillance, early warning, disaster relief and submarine SAR – that could significantly

contribute to the global response to humanitarian crises. NATO's contribution in this area does not only help save lives, it also enhances the Alliance's global standing and bolsters its *raison d'être*.

81. NATO and its members should provide an adequate response to new challenges to civilians which are arising on the Alliance's southern and northern borders. Given that NATO's core mandate is collective defense and that its capabilities are limited, NATO's non-military involvement in the High North and the Mediterranean will remain complementary to the efforts of other actors. However, there are certain areas where the contribution of NATO and its members could be enhanced and expanded.

82. Namely, when it comes to the High North, the Rapporteur would suggest:

- Ensuring that the Alliance's reformed command structure has the capacity to monitor and assess naval activities and contribute to improving situational awareness in the Arctic;
- Contributing to the interoperability of SAR units in the region by holding exercises such as *Dynamic Mercy* in Arctic conditions;
- Offering support to the Arctic Allies in developing adequate SAR assets, including satellite coverage and communications technologies, as well as surveillance and delivery drones in remote Arctic regions;
- Welcoming initiatives to establish jointly-owned bi- or multi-national SAR bases in remote areas, where participating nations would provide SAR capabilities on a rotational basis;
- Encouraging dialogue among all High North nations to clarify the role of militaries in providing disaster relief and SAR, particularly in multilateral operations;
- Urging all Allies to ensure the full and rigorous implementation of the Polar Code and requesting the development of even higher international safety and environmental standards; and
- Promoting best practices, including the requirement for ships to travel in pairs when traversing remote areas.

In addition, the Euro-Atlantic community should continue to lead global efforts to reduce greenhouse emissions. The implementation of the Paris Agreement is paramount in order to stabilize the impacts of climate change on the Arctic.

83. Regarding the Mediterranean, the Rapporteur emphasizes:

- NATO should continue providing logistical and information support to the EU, Frontex and national coast guards through its operations in the Aegean Sea and through *Operation Sea Guardian*, potentially expanding the coverage of NATO assets to the Western Mediterranean and employing new NATO capabilities such as the Sicily-based Global Hawk remotely-piloted aircraft (RPA) as part of the Alliance Ground Surveillance (AGS) initiative;
- The Allies should strongly consider holding *Dynamic Mercy*-type exercises in the Mediterranean;
- The coordination of various actors and operations in the region should be further enhanced through SHADE MED;
- NATO should do more to assist North African states, and particularly Libya, in training and otherwise assisting their coast guard, while demanding that the recipients of this assistance comply with international standards for the treatment of refugees and migrants and provide improved conditions to ensure their protection and well-being;
- The new European Border and Coast Guard Agency should receive sufficient funding, as well as human and material resources, including surveillance drones; and
- The Allies should reform the Dublin Regulation to ensure fairer burden sharing and a collective, rather than strictly national, approach to problems linked with migrant and refugee surges.

BIBLIOGRAPHY

(For further information on sources, please contact the Committee Director)

- BBC News, “Migrant slavery in Libya: Nigerians tell of being used as slaves”, 2 January 2018, <http://www.bbc.com/news/world-africa-42492687>
- Benton, Jon, “Parliament round-up: UK withdrawal from EU Mediterranean rescue operation”, 5 November 2014, <https://www.theparliamentmagazine.eu/articles/special-report/parliament-round-uk-withdrawal-eu-mediterranean-rescue-operation>
- Bouffard, T., *Managing the Barents Sea: Comparing Norwegian & Russian Offshore Oil-Spill Prevention Policies. Arctic Yearbook*, 2017, https://www.arcticyearbook.com/images/Articles_2017/scholarly-articles/16_Managing_the_Barents_Sea.pdf
- Charron, A., *Canada, the US, Russia and the Arctic – A Pragmatic look*. Centre for Security, Intelligence and Defence Studies, 24 March 2017, <https://carleton.ca/csids/2017/canada-the-us-russia-and-the-arctic-a-pragmatic-look/>
- CRS, “Changes in the Arctic: Background and Issues for Congress”, Congressional Research Service, 4 January 2018, <https://fas.org/sgp/crs/misc/R41153.pdf>
- Deutsche Welle, “Frontex launches new EU border control mission Operation Themis”, 1 February 2018, <http://www.dw.com/en/frontex-launches-new-eu-border-control-mission-operation-themis/a-42417610>
- Dushkova, D., Krasovskaya, T., & Evseev, A., *Environmental & Human Impact of the Northern Sea Route & Industrial Development in Russia’s Arctic Zone*, 2017, Retrieved from Arctic Yearbook, https://www.arcticyearbook.com/images/Articles_2017/scholarly-articles/15_Environmental_&_Human_Impact.pdf
- European Commission, “Irregular Migration via the Central Mediterranean. From Emergency Responses to Systemic Solutions”, EPSC Strategic Notes, Issue 22, 2 February 2017, https://ec.europa.eu/epsc/sites/epsc/files/strategic_note_issue_22_0.pdf
- European Commission, “Progress report on the Implementation of the European Agenda on Migration”, Communication from the Commission to the European Parliament, the European Council and the Council, 14 March 2018, https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/com_2018_250_f1_communication_from_commission_to_inst_en_v10_p1_969116.pdf
- Fargues, Philippe, “Four Decades of Cross-Mediterranean Undocumented Migration to Europe. A Review of the Evidence”, International Organization for Migration, 2017, https://publications.iom.int/system/files/pdf/four_decades_of_cross_mediterranean.pdf
- Fountain, Henry, “With More Ships in the Arctic, Fears of Disaster Rise”, *The New York Times*, 23 July 2017.
- Fry, H., *A Gender Sensitive Response to the Migrant and Refugee Influx in Europe is Needed*, OSCE PA, June 2016, <https://www.oscepa.org/documents/all-documents/special-representatives/gender-issues/report-17/3382-2016-annual-session-report-by-the-special-representative-on-gender-issues/file>
- Geiselhart, Michel T., “The Course Forward for Arctic Governance”, *Washington University Global Studies Law Review*, vol. 13, no. 1, 2014.
- Headland, Robert K., “Transits of the Northwest Passage to End of the 2017 Navigation Season”, Scott Polar Research Institute, University of Cambridge, 14 December 2017, <https://www.spri.cam.ac.uk/resources/infosheets/northwestpassage.pdf>
- Heller, Charles; Pezzani, Lorenzo, “Blaming the Rescuers”, Forensic Architecture agency, Goldsmiths University of London, 2017, <https://blamingtherescuers.org>
- House of Lords, *Responding to a changing Arctic*. Select Committee on the Arctic, 27 February 2015, <https://publications.parliament.uk/pa/ld201415/ldselect/ldarctic/118/118.pdf>
- Ikonen, Emmi, “Arctic Search and Rescue Capabilities Survey”, *Finish Border Guard/Ministry of Foreign Affairs of Finland*, 2017, https://www.raja.fi/download/73962_Arctic_Search_and_Rescue_Capabilities_Survey.pdf?861827138740d588

- IOM (International Organization for Migration), “Missing Migrants – Tracking Deaths Along Migratory Routes: Mediterranean”, 2018, <http://missingmigrants.iom.int/region/mediterranean>
- LeBlanc – Senate of Canada, Testimony of Pierre LeBlanc, President, Arctic Security Consultants. Evidence to the Standing Senate Committee on Fisheries and Oceans. The Standing Senate Committee on Fisheries and Oceans, 15 February 2018, <https://sencanada.ca/en/Content/SEN/Committee/421/pofo/53827-e>
- Melia, N., Haines, K., & Hawkins, E. (2017, July). Future of the Sea: Implications from Opening Arctic Sea Routes. UK Government Office for Science: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/634437/Future_of_the_sea_-_implications_from_opening_arctic_sea_routes_final.pdf
- MSF (Médecins Sans Frontières), “Humanitarian NGOs conducting Search and Rescue Operations at Sea: ‘A pull factor?’”, Issue Brief, August 2017, http://searchandrescue.msf.org/assets/uploads/files/170831_Analysis_SAR_Issue_Brief_Final.pdf
- Smith, T., Search and Rescue in the Arctic: Is the U.S. Prepared?, 2017, Retrieved from RAND: https://www.rand.org/pubs/rgs_dissertations/RGSD382.html
- Shreeves, R., Gender aspects of migration and asylum in the EU: An overview. European Parliament, 4 March 2016, [http://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_BRI\(2016\)579072](http://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_BRI(2016)579072)
- Steinhilper, Elias; Gruijters, Rob, “Border Deaths in the Mediterranean: What We Can Learn from the Latest Data”, Border Criminologies, 8 March 2017, <https://www.law.ox.ac.uk/research-subject-groups/centre-criminology/centreborder-criminologies/blog/2017/03/border-deaths>
- Steinicke, S., & Albrecht, S., Search and Rescue in the Arctic. SWP, December 2012, https://www.swpberlin.org/fileadmin/contents/products/arbeitspapiere/WP_FG2_2012_Steinicke_Albrecht.pdf
- Sydnés, Are Kristoffer; Sydnés, Maria; Antonsen, Yngve, “International Cooperation on Search and Rescue in the Arctic”, Arctic Review on Law and Politics, vol. 8, 2017.
- Tardy, Thierry, “Operation Sophia’s world. Changes and Challenges”, EUISS Brief, November 2017, https://www.iss.europa.eu/sites/default/files/EUISSFiles/Brief%2032%20Operation%20Sophia_0.pdf
- The Economist, The Arctic as it is known today is almost certainly gone, The Economist, 29 April 2017, <https://www.economist.com/news/leaders/21721379-current-trends-arctic-will-be-ice-free-summer-2040-arctic-it-known-today>
- UNHCR, “Desperate Journeys: Refugees and migrants entering and crossing Europe via the Mediterranean and Western Balkans routes”, February 2017, <http://www.unhcr.org/58b449f54.pdf>
- UNHCR, “Refugee women and children face heightened risk of sexual violence amid tensions and overcrowding at reception facilities on Greek islands”, 9 February 2018, <https://data2.unhcr.org/en/news/20607>
- Wezeman, S., Military capabilities in the Arctic: a new Cold War in the High North? SIPRI, October 2016, <https://www.sipri.org/sites/default/files/Military-capabilities-in-the-Arctic.pdf>
- Zysk, Katarzyna; Titley, David, “Signals, Noise, and Swans in Today’s Arctic”, SAIS Review, vol. 35, no. 1, 2015.
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