



ARCSAR project consortium during the kickoff meeting.

The ARCSAR project started 1st of September 2018 and it is comprised of 21 partners from 13 different countries: Norway, Iceland, Faeroes, United Kingdom, United States, New Zealand, Russia, Canada, Germany, Finland, Sweden, Ireland and Italy, with a raising number of associated partners as the project progresses.

The increasing human activity in the Arctic, mainly in the form of cruise vessels, tourism, transport, expedition and so on, is raising concerns for many Arctic countries. Especially as such vessels are growing in size, numbers of passengers are increasing as well, and shrinking sea ice is opening up the Northern passages. There has been a 36% increase of activity in the last 2 years in the Arctic region alone as cruise ships regularly take passengers to see Arctic nature, wildlife and Northern Lights.

This rise in activity has placed more

demands on search and rescue practitioners who are facing technology, capacity and extent challenges. Especially considering the Arctic's uncharted waters, its difficult weather conditions and long distances to the nearest aid.

ARCSAR is the first project of its kind to establish an international network that brings together in cooperation search and rescue practitioners, authorities, industry and academia and other organizations in order to identify gaps and opportunities and develop further capabilities to face the increasing demands in the Arctic and North Atlantic region.

Six months into the project, several planned events have taken place as part of the ARCSAR project. Furthermore two recent incidents: the grounding of the Northguider trawler and the Viking Sky Cruise ship, for which ARCSAR partners and associated partners were first on the scene responders, further

provided for a closer look to the reality with regards to capabilities and gaps that need improving.

Kick-off meeting in Bodø, Norway

The first of the events marking the start of the project, the ARCSAR kick-off meeting, took place on 11-13 September, 2018, in Bodø, Norway, at the Joint Rescue Coordination Centre North Norway. The aim of the kick-off meeting was to launch the ARCSAR network and go through the overarching goals and tasks within the project together with the ARCSAR project partners. The kick-off meeting was a success and covered all the priority areas and administrative topics set in the Grant Agreement. Arctic poses a challenge that requires all bordering countries to overlook boundaries and support one another in order to improve safety and security of the region. The consortium's enthusiasm and willingness to cooperate left little to desire more.

Participatory workshop 1 – part 1, 12 – 13 September, 2018 in Bodø, Norway

Second in the planned events was the first participatory workshop, facilitated by The University of Portsmouth. The workshop developed around the increase of our understanding of target areas for improvement, to map current gaps and needs in technology and innovation related to requirements in the International Maritime Organisation (IMO) Polar Code, and

to identify barriers and innovation to uptake.

The workshop started with a keynote address on Meeting the IMO Polar Code by Mr. Mejlænder-Larsen from Det Norske Veritas - Germanischer Lloyd (DNV-GL). Specific topics related to the Polar Code and to other issues in the Arctic and North Atlantic (ANA) region were then later discussed in the workshop.

The workshop group sessions focused on technology and innovation in the following topics:

1. Vessel structural and equipment issues
2. Lifesaving appliance, sea, and cold survival
3. Communication
4. Pollution and incident control
5. Navigational and voyage planning
6. Personnel, training and education



Participatory workshop 1 attendees

Participatory workshop 1 – part 2, 27 – 28 November 2018, in Portsmouth, UK

The second part of the first ARCSAR workshop was held at the Portsmouth Guildhall, on 27 – 28 November, 2018. The workshop was organized by the University of Portsmouth and moderated by Professor Ashraf Labib.

The workshop attracted participants from a range of search and rescue, coastguard, industrial and academic organisations from various countries including Norway, Iceland, Faroe Islands, Italy, New Zealand, Russia, Ireland and the United Kingdom. In addition, participants from Northern Norway Regional Health Authority, Nordland County Council, Greenland Oil Spill Response and Governor of Svalbard were present.

The aim of the workshop was to examine and exercise methods to learn from failures and introduce techniques for decision analysis with emphasis on the use of advanced operational research techniques. These techniques were applied to cases of major failures and disasters and the workshop participants learnt to use these techniques for various cases on their own.

The main take-away for the ARCSAR project was to highlight methods in terms of risk assessment and decision-making, need for advanced root cause analysis techniques, risk-assessment concepts, analysis of scenarios of vulnerability, and selection of appropriate response policies and decision-making.



H.e. Margit F. Tveiten, Norwegian Ambassador in Italy during her opening remarks in the High Profile Launch of ARCSAR Network

High Profile Launch of the ARCSAR network and participatory workshop 2, 26 – 28 February, 2019, Rome, Italy

The second ARCSAR workshop and the High Profile Launch of the



Hon. Prof. Lorenzo Fioramonti, Vice-Minister of Research, Italian Government, During his opening remarks.

Network was held at Leonardo SpA company premises in Rome, Italy. It was hosted by the e-GEOS and organized together with the University of Portsmouth.

Among the participants there were academics, government representatives, SAR practitioners, public safety authorities, satellite industry representatives and cruise operator representatives.

The aim of the workshop was to map technology needs and improvements on satellite based services, IMO Polar Code requirements under Arctic and North Atlantic (ANA) conditions, cold climate tests of rescue equipment and techniques in a simulator or



<http://arcsar.eu>

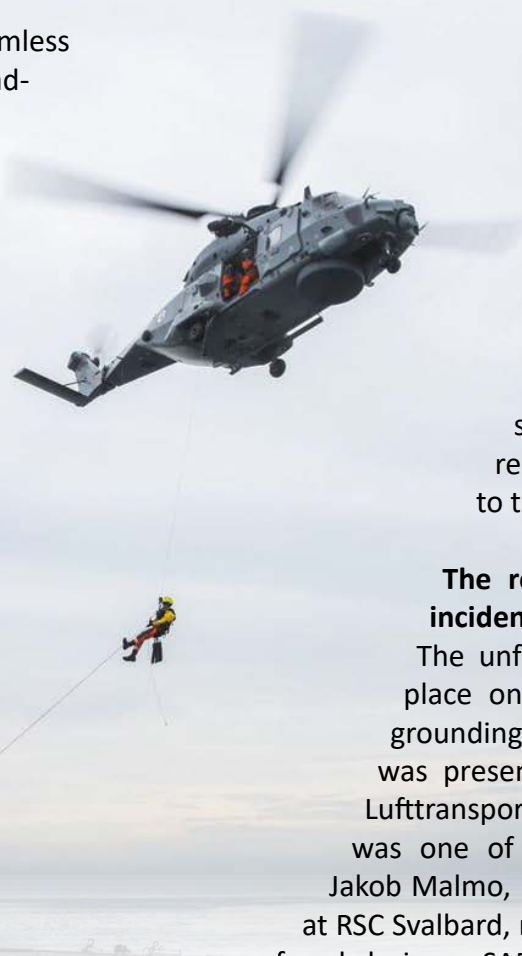


laboratory, cold climate oil spill response, seamless sharing of situational awareness, and broadband communication in the polar areas. Another important goal was to highlight the engagement of indigenous peoples and volunteers for local search and rescue and safety in the ANA region.

The first part of the workshop was dedicated to the high-profile launch of the ARCSAR project. It included participants from the Italian government, Leonardo, Norwegian and Finnish Ambassador to Italy, official representation from the Inuit community and the local media. The opening remarks highlighted the need for cooperation between research, industries and practitioners, preparedness in the High North and the need for satellite based technology and services for safe and secure operations in the Arctic. The value of local knowledge and experience from the people living in the Arctic was also emphasised with an inspiring testimony from the former Chairman of the Inuit Circumpolar Council. Ms. Okalik Eegeesiak. The “high ways” of the Inuit are the land and the waters of the high Arctic. They need and wish to be engaged in the discussion of the use of marine environment and water ways in this area.



Opening remarks during high profile launch of ARCSAR network.



Involvement of local communities especially the indigenous people is seen as strong asset when it comes to preventing or responding to emergency situations. They possess extensive knowledge of the surrounding area and can reach areas much faster due to their close proximity.

The recent Northguider trawler incident in Svalbard.

The unforeseen incident that took place on the 28-th December, the grounding of the Northguider trawler, was presented by SAR Chief Pilot of Lufttransport AS, Mr. Snorre Hagen who was one of the respondents and Ole Jakob Malmo, Police Chief Superintendent at RSC Svalbard, revealed that the difficulties faced during a SAR mission are very evident. They were able to share detailed experience including videos of the operation, illustrating the weather conditions, communication and psychological condition of all those involved during the operation. The data is being analyzed and is serving as case study for improving SAR capabilities. The second part of the first day concentrated on plans and technologies for implementing satellite based broadband in the Arctic, new communication solutions, Earth Observation and geo-information services and data, and results from the HIGH NORTH 18 mission.

Overall the workshop raised questions and discussion about survival in cold climates, the availability of satellite based services and working with local communities. All participants seemed to agree on the need to have various stakeholders involved so that different views can be raised on the relevant topics. A total of 68 participants were present at the network launch and/or the following workshop.

ARCSAR officially part of the EU Arctic Cluster

Early 2019, ARCSAR became a member of the EU Arctic Cluster network of Horizon 2020 and Framework Programme 7 funded Arctic projects. The network currently comprises eleven projects: APPLICATE,



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Participants during the Fourth Arctic SAR workshop & TTX, 2019

ARCSAR, ARICE, BLUE-ACTION, EU-PolarNet, ICE-ARC, iCUPE, INTAROS, INTERACT, KEPLER and NUNATARYUK. The cluster thus merges a broad spectrum of research and coordination activities - ranging from the most up-to-date findings on permafrost and sea ice, from enhancing observation to improving predictions, and from networking research stations to coordinating access to icebreakers.

Fourth Arctic Search & Rescue (SAR) Workshop & Table-Top Exercise (TTX) 9-10 April, 2019, Reykjavik, Iceland

The Association of Arctic Expedition Cruise Operators (AECO), the Icelandic Coast Guard (ICG) and the Joint Rescue Coordination Centre in Northern Norway (JRCC NN) organ-



Þórdís Kolbrún R. Gylfadóttir, Icelandic Minister of Tourism, Industry and Innovation during the opening remarks at the fourth Arctic SAR workshop & TTX.

ised the fourth Arctic search and rescue tabletop exercise and workshop. Among the participants there were more than 80 representatives from Arctic expedition cruise industry, search and rescue sector and academia.

The event was kick-started with a

keynote from Þórdís Kolbrún R. Gylfadóttir, Icelandic Minister of Tourism, Industry and Innovation.

The goal of this year's exercise was to determine the challenges, constraints and opportunities for passengers and personnel to survive a period of time stranded on land in a remote area away from the expedition cruise vessel and to evaluate and execute options for self and assisted rescue. Full press release can be found from ARCSAR webpage: <http://arcsar.eu/publications> and <https://www.aeco.no/events/>

Upcoming events

ARCSAR General Assembly Meeting, Innovation and Knowledge Exchange 1, Dissemination workshop 1, Reykjavik, Iceland, 8 - 10 October 2019.

<http://arcsar.eu/events/arcsar-general-assembly-meeting-innovation-knowledge-exchange-1-dissemination-workshop-1/>

Arctic Circle Assembly ARCSAR Breakout Session, 10 – 13 October 2019 Reykjavik, Iceland.

<http://arcsar.eu/events/arctic-circle-assembly-arcsar-breakout-session-reykjavik-iceland/>

For more information and to stay up to date with the events visit ARCSAR website.



<http://arcsar.eu>

