Ref. Ares(2021)4270106 - 30/06/2021

Project Start Date: 1.9.2018

Project Duration: 66 months

Report on ARCSAR 2nd Dissemination Workshop D5.3.

Deliverable details	
Deliverable number	D5.3
Author(s)	Pekka Iivari, Eija Raasakka, Mikel Dominguez, Rob Lynch and Emmi Ikonen
Due date	30.06.2021
Delivered date	30.06.2021
Reviewed by	JRCC N.N./ Tore Wangsfjord
Dissemination level	PU (Public)
Contact person REA	Patricia Elena RISCHITOR

History of Changes			
Date	**Version**	**Person in Charge**	**Description**

24.06.2021	v1.0	Pekka Iivari, Eija Raasakka (LUAS)	First draft
25.06.2021	v1.1	Mikel Dominguez (JRCC NN), Emmi Ikonen (JRCC NN)	Second draft
29.6.2021	v.1.2	Rob Lynch (MTU)	Third draft
30.6.2021	v1.3	Mikel Dominguez (JRCC NN), Emmi Ikonen (JRCC NN), Robert Lynch (MTU)	Final

CONTENT

Key terms

ARCSAR 3rd Innovation and Knowledge Exchange Event & 2nd Dissemination Workshop

The 3rd Innovation and Knowledge Exchange Event & 2nd Dissemination Workshop was an online event (zoom) on 5th of May 2021 at 13.00 – 16.50 CEST (UTC +2), organized by Nord University and Lapland University of Applied Sciences.

ARCSAR Network

Refers to the network of practitioners, academia and other participatory stakeholders of the project.

ARCSAR Innovation Arena

Refers to the web platform or service as a tool that will host the ARCSAR Network and other related links. The ARCSAR Innovation Arena can be accessed: https://arcsar-innovation.eu/

SAR

Search and Rescue

OSR

Oil spill response

ANA

Arctic and North Atlantic

EXECUTIVE SUMMARY

The ARCSAR project has established the first formal Arctic and North Atlantic Security and Emergency Preparedness Network. The ARCSAR network is primarily directed to security and emergency response practitioners operating in the Arctic and the North-Atlantic region. This includes members of the emergency management system such as border and coast guards, police, paramedics, oil spill response (OSR) and search and rescue (SAR) personnel among others.

In addition, the network includes other actors relevant to Arctic and North Atlantic Security and Emergency Preparedness. Namely, academics, industry and Small and Medium Sized Enterprises (SMEs), regional and local actors, local communities, and indigenous peoples.

This document is a summary of the ARCSAR 2nd Dissemination Workshop held online, as part of the 3rd Innovation and Knowledge Exchange & and 2nd Dissemination event, on the 5th of May 2021 between 13.00 – 14.20 CEST (UTC +2).

The purpose of the Dissemination Workshop was to present the achievements of the ARCSAR project to wider audience, especially key stakeholders and to raise awareness of the project, announce the program of forthcoming events, and bring together participants, relevant practitioners and stakeholders into a same arena.

The document describes the project's progress in each work package the feedback gained from stakeholders through padlet online tool.

INTRODUCTION

On the 5th of May, ARCSAR hosted the 3rd Innovation and Knowledge Exchange event and the 2nd Dissemination Workshop gathering 45 participants from academia, the Search and Rescue practitioner field and industry from Norway, Finland, Canada, USA, New Zealand, the UK, Iceland, Italy and the Faroe Islands.

The event started with the 2nd Dissemination Workshop and presentations from the work package leaders: Emmi Ikonen (JRCC North Norway), Prof. Dylan Jones (University of Portsmouth), Robert Lynch (Munster Technological University), Artmir Galica (Laurea University of Applied Sciences), and Auðunn Kristinsson (Icelandic Coast Guard). The participants had a chance to gain an insight to the project and ask questions from the work package leaders in an online tool, Padlet.

The topics for the 3rd Innovation and Knowledge Exchange event covered training and education within pollution and incident control, training and education within mass-rescue operations, and training and education induced by the COVID-19 pandemic. This part of the event also utilized the same online tool.

The use of online collaborative tools proved to be a great opportunity for dissemination and learning about new solutions within emergency management field in the Arctic and North Atlantic.

The aim of this deliverable is to describe the topics covered during the 2nd Dissemination Workshop. This will cover the current state of the project and the activities undertaken during the second year of the project. Furthermore, the document describes the feedback received from the participants.

This deliverable is part of Working Package (WP) 5, led my Munster Technological University. Lapland University of Applied Sciences is the lead beneficiary for this deliverable. In addition, the ARCSAR coordinator and the project Work Package leaders have been evaluating the document and providing contributions to the content.

1   ARCSAR in the virtual world

The 3rd ARCSAR Innovation and Knowledge Exchange Event & 2nd Dissemination Workshop was one of the key events in the project in 2021. Due to the Covid-19 pandemic, all events in ARCSAR have been planned as virtual events in 2021, thus making it important to find ways to communicate with the consortium and the extended network utilizing new tools. The opinions and ideas of the extended network and stakeholders is of utmost importance for the ARCSAR project's progress and results, as their feedback guides the project forward, but also new innovations, concepts and policy initiatives are found during these events. The events feed into the ARCSAR deliverables, results and milestones.

The participants of ARCSAR 3rd Innovation and Knowledge Exchange Event & 2nd Dissemination Workshop represented a variety of different stakeholder entities varying from academia and governmental representatives to SAR practitioners, public safety authorities and industry representatives (including cruise operators and satellite service providers among others). The theme for the whole event was "*Training for innovations and innovations for training in the Arctic and North Atlantic*". The idea was to map current innovations in education and training within the field of search and rescue and oil spill response, as well as to engage the participants to contemplate what kind of innovations, tool and new solutions exists due to the pandemic and more time spent online.

The event was organized in the Zoom platform, hosted by Nord University. With this whole event, the ARCSAR project was able to gather a large extended network online to disseminate results, collect feedback and discuss new innovations for education and training, also induced by the Covid-19 pandemic. A larger audience was reached for dissemination due to the event being virtual than what would have been possible with a physical event. The virtual arena should be taken consideration in the future as well for wider dissemination alongside physical events.

2   Participants

The following partners participated in the ARCSAR 2nd Dissemination Workshop:

- Joint Rescue Coordination Centre North Norway

- Joint Rescue Coordination Centre Iceland (Icelandic Coast Guard)

- Nord University

- Laurea University of Applied Sciences

- University of Portsmouth

- Lapland University of Applied Sciences

- MRCC Torshavn

- U.S. Coast Guard Academy

- Maritime New Zealand (RCC NZ)

- Halpin Research Group at Munster Technological University

- Association of Arctic Expedition Cruise Operators (AECO)

- Admiral Makarov State University

- E-geos

- Maritime and Coast Guard Agency (UK)

- Norwegian Coastal Administration (NCA)

- Memorial University

- Norwegian Ice Service (Norwegian Meteorological Institute)

- Norwegian Coast Guard

- MRCC Bremen

In addition there were participants from AnsuR, Antarctic Support Contract, British Antarctic Society, Canadian Coast Guard, CKA, Confederation of Norwegian Enterprises, DEA Aviation Ltd., Det Norske Veritas (DNV), Emergency Prevention Preparedness and Response working group of the Arctic Council, Governor of Svalbard, In Situ Inc., MedSSIS, Miko Marine AS, Northern Arctic Federal University, Northern Norway Health Authority, Norwegian University of Science and Technology, Petroleum

Safety Authority (Norway), Research Executive Agency, Norwegian Maritime Authority, Smith Myers, St. Francis University, UiT The Arctic University of Norway, University of Iceland, University of Maryland, and the World Maritime University.

3   ARCSAR 2nd Dissemination Workshop: 2020-1st half of 2021

The overarching goals of the ARCSAR dissemination workshop are to promote the ongoing project activities, increase stakeholder engagement, secure additional network membership and interactions, while also facilitating interactions between ARCSAR researchers and key external participants. These overarching objectives have been achieved by delivering a highly publicized event in which key ARCSAR leaders disseminated completed and ongoing research innovation activities to a broad and diverse range of stakeholders. While this was a virtual event, the format was designed and delivered in a manner that fostered active engagement and participation from stakeholders through traditional discussion means, while also making use of virtual discussion tools in order to ensure a holistic and comprehensive range of engagement.

In terms of practicalities, the 2nd Dissemination Workshop commenced with an opening welcome address from the event moderator, providing an overview of the session itself, and some practical guidelines for using the virtual discussion tool padlet, the virtual resource was utilized throughout to facilitate interaction among participants, Work Package leaders, and to capture key knowledge/discussion points from network participants.

The following presentations from ARCSAR Work Package leaders were then delivered to the network:

- WP1, Project Management and network support, JRCC NN, Emmi Ikonen
- WP2, Fast tracking innovation and knowledge, University of Portsmouth, Professor Dylan Jones

- WP3, Future needs for innovation and knowledge, Laurea University of Applied Sciences, Artmir Galica

- WP4, Priorities for security and standardization, Auðunn Friðrik Kristinsson, Director of Maritime Operations at the Icelandic Coast Guard

- WP5, Dissemination and communication, Munster Technological University, Robert Lynch

3.1 WP1 Project Management and Network Support

This presentation provided an overview of the project, outlining critical milestones and key upcoming events. Initially, a short introduction to the project was provided for new network participants, introducing the partners within the consortium, goals and objectives, the EU funding overview, project structurers, and key outputs delivered to date.

The presentation also broadly outlined the effects and influences of the COVID-19 pandemic, outlining some of challenges experienced by the network, while also highlighting some of the strategies developed and implemented to overcome these issues such as the 6-month extension in order to ensure that the project continues to meet the goals and objectives of the funding call and network stakeholders.

With regards the milestones themselves, the presentation outlined where the project was in terms of timeframes [Month 33], while also briefly noting the following key events delivered thus far:

- The project kick-off meeting, Bodø, Norway, September 2018.
- Stakeholder engagement workshop, Portsmouth, UK, December 2018.
- Network high profile launch, Rome, Italy, February, 2019.
- SAR practitioner table top exercise (TTX), Reykjavik, Iceland, April 2019.
- Innovation and Knowledge Exchange Event, Reykjavik, Iceland, October 2019.
- Innovation and Knowledge Exchange Event, Wellington and Auckland, New Zealand, February 2020.

- Virtual Joint Arctic SAR TTX, December 2020.

- Upcoming virtual TTX scheduled for November 2021, which will be held in partnership with the Norwegian Coastal Administration.

3.2   WP2 Fast Tracking of Innovations and Knowledge

Professor Dylan Jones, University of Portsmouth, delivered outcomes from WP2. The WP2 presentation initially provided a broad overview of key outputs delivered to date, while also showcasing the broad and diverse range of input received thus far from global stakeholders.

Initially, the focus was on ARCSAR deliverable D2.1, prioritization and collaboration for ANA SAR needs, outlining the 6 categories [figure 2.1 refers] defined by engagement with Maritime safety and security stakeholders from the ANA region. In order to maximize potential impact across a multi-stakeholder realm, the globally regulatory framework of the IMO Polar Code was used a mechanism through which to present these categories.
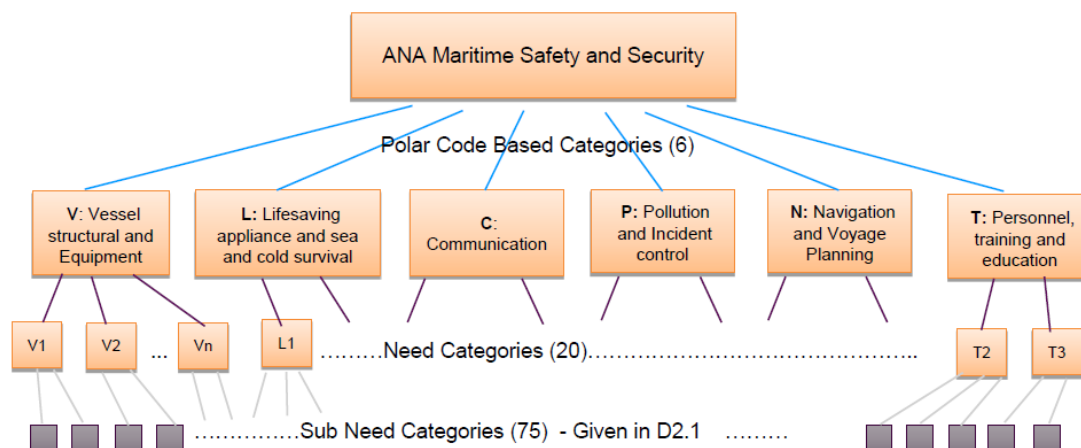
Figure 2.1 ARCSAR ANA Maritime Safety and Security Categories

Beyond the broad categories, the presentation illustrated and discussed efforts to further identify and define categories and sub-needs within these broader focuses, showcasing the 20 need categories and 75 sub-need categories delivered in ARCSAR

D2.1. Figure 2.2 outlines prioritized sub-needs determined within D2.1 and presented during the WP2 session.

Prioritization	Selection with balance of goals			
Sub-Need	Brief Description	Category	Importance	Difficulty
V2A	Ensuring accessibility of lifeboats/rafts at all times	Implement	8.346	4.522
V2B	Standardisation of requirements (including maintenance schedules) for life saving equipment	Implement	8.524	3.277
V3D	Enhanced collaboration between vessel owners and SAR and industrial stakeholders	Implement	7.930	4.020
L2B	Technologies to combat heat loss	Implement	7.521	3.722
L3C	Collaboration on how to meet "5 day" requirement of polar code	Possible	6.160	3.984
C1A	Ensuring sufficient satellite coverage of ANA region	Challenge	8.434	6.073
C1B	Communication Technology to ensure satellite data is accessible within required timescale	Challenge	8.879	6.214
C3A	Need for enhanced batteries with longer life for usage in ANA region	Challenge	8.963	6.840
P2A	Standardised regulations for prevention of oil spill	Implement	8.769	4.704
P2F	Ensuring all vessels covered by Polar Code or similar regulations	Implement	8.434	4.820
P3A	Skills assessment of new competences needed to deal with Arctic pollution incidents	Challenge	7.591	6.207
N1B	AI and data analytic tools and apps for advanced ice and route condition forecasting	Challenge	9.146	6.781
N1C	Technology to ensure systems are not weather affected	Challenge	7.414	5.966
N2B	Creation of (electronic) platform for sharing past and current ship and route information	Challenge	7.634	7.207
T3C	Standardised protocol for incident investigation and implementation of lessons learned	Challenge	8.516	6.034
T4B	Enhanced sharing of results of ongoing SAR projects within ANA SAR community	Implement	8.516	2.551
T4C	Enhanced liaison with hospitals for emergency incident planning	Implement	7.591	3.017
Knapsack Size = 15*5.732 = 85.987 Maximum Importance (no balance goals) = 154.561		Total	85.941	138.37

Figure 2.2 ARCSAR D2.1 Prioritized Sub-Needs

Presentations of D2.1 concluded with an outline of how identifying research innovation opportunities to address the challenges associated with these sub-needs was a critical focus for security and emergency preparedness within the ANA.

The next focus presented within WP2 was D2.2 – the ARCSAR Innovation Arena. The Innovation Arena is a social idea management platform designed to facilitate opportunities to share ideas and challenges, advertise solutions, collaboration and networking. The virtual and agile nature of this platform ensures that these opportunities can be delivered on a continuous basis.

In practical terms, ANA challenges, gaps, ideas and needs that the project gathers from research innovation, workshops or other forms of stakeholder engagement are

captured within the Innovation Arena. ARCSAR partners, the extended network, and other stakeholders are afforded the opportunity to sign up to the arena, facilitating a mechanism through which the project can engage with the wider public and discover innovative solutions to the mapped gaps and needs. The platform itself has been conceptualized primarily from a practitioner/user-centric perspective, ensuring that these challenges, gaps, and solutions can be seamlessly shared and discussed throughout. The social idea management functionality of the Innovation Arena provides a social platform mechanism, which enables the network to collaborate and grow.

In addition to discussing objectives and functionality, the event was used as an opportunity to showcase the latest version of the Innovation Arena. As part of the ongoing innovation and management process of the arena, a number of additional functionalities were deemed necessary in order to facilitate a more collaborative and knowledge sharing arena. Functionalities of the latest version were therefore also demonstrated, highlighting new capabilities such as allowing users to create more personalized content, add expert views and opinions, follow threads, and filter information more efficiently. The new version of the Innovation Arena is now operational.
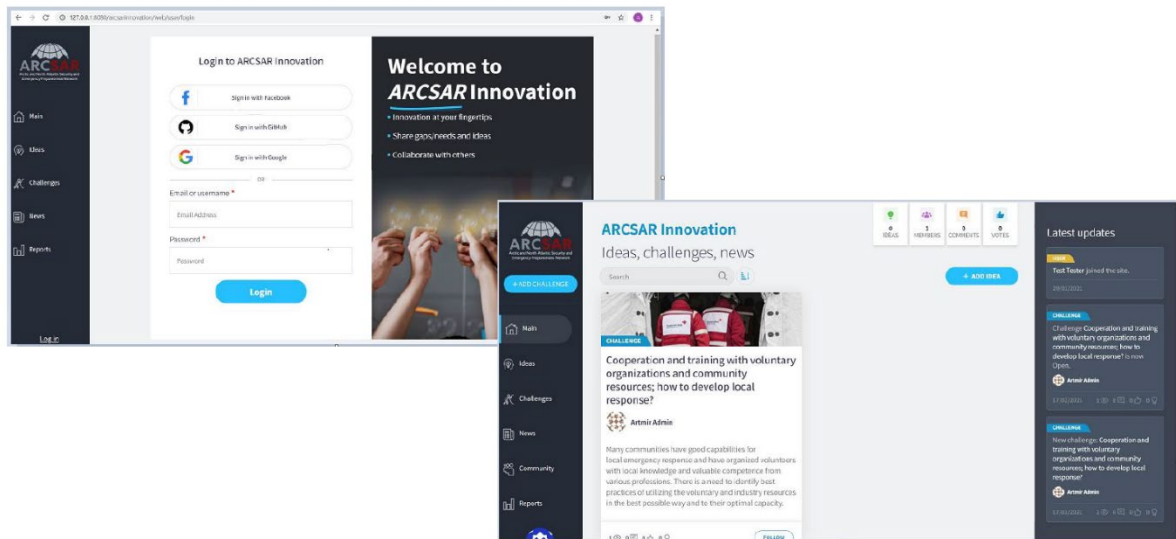
Figure 2.3 ARCSAR Innovation Arena Showcasing Efforts

Finally, the WP2 presentation focused on efforts associated with D2.3 – Interim Report on uptake of innovations and knowledge. The presentation provided a description of the multi-stakeholder and mixed methodology [figure 2.4 refers] approach used to complete the efforts, while also presenting key findings.
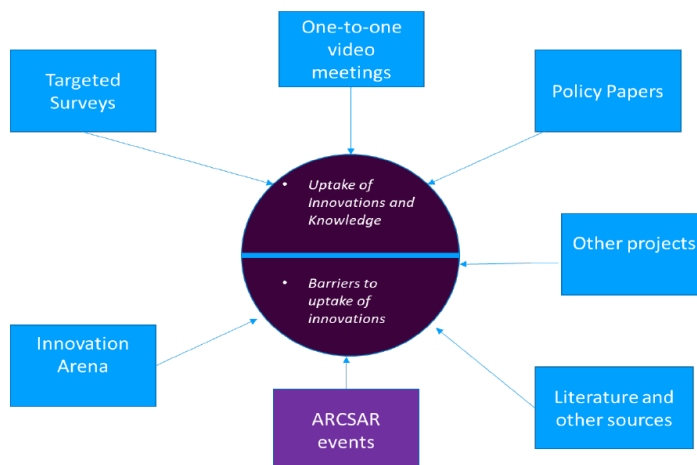
28 Respondents, 11 Nations, 50% Practitioner, 32% Academic, 18% Industrialist

Figure 2.4 ARCSAR D2.3 Multi-Stakeholder Mixed Methodology Approach

In terms of key findings, the deliverable discovered and presented 101 distinct sources of innovation and knowledge over the past five years, suggesting that communications and pollution and incident control were the most frequent innovation focuses. The primary barriers associated with fully implementing innovations where as follows:

Regulatory: Lack of adequate regulatory enforcement and approval

Technological: Primarily in relation to a lack of knowledge in terms of available technology, or a lack of training

3.2.1 WP2 Feedback Comments

The primary discussion points/feedback in relation to WP2 focused on the need for regulatory developments, which would facilitate a certain level of enforcement which would in turn influence the technology considerations. It was highlighted that significant developmental efforts are taking place within the southern hemisphere in relation to the next phase of the Polar Code. These developments will potentially result in a more defined and prescriptive approach to regulatory drivers as opposed to the traditional goal-based approaches. It was suggested that efforts should be made to collaborate with southern hemisphere stakeholders through New Zealand network contacts with a view to learning from these developments, while also increasing the potential impact factor associated with ARCSAR WP2 efforts.

3.3 WP3 Future needs for innovation and knowledge

Artmir Galica, Laurea University of Applied Sciences, presented work package 3. The WP3 presentation provided an overview of the future needs for innovation and knowledge research efforts. The purpose of the WP3 is to identify critical barriers and gaps in capacities, competence and infrastructure in close interaction with emergency and response practitioners across operational areas and identify future needs for innovation and knowledge.

ARCSAR D3.1, foresight analysis was discussed, presenting methodologies, scope and key findings. This report deliverable defines and characterizes potential seaborne disasters, catastrophes, incidents and security threats in the ANA region. The report was delivered by University of Portsmouth and it presents a summary of literature review on disasters, incidents and potential threats, and applies risk assessments and methods to seaborn case studies. The deliverable is therefore an in-depth report which presents a number of comprehensively researched tools and methodologies which can be practically applied within a research innovation and practitioner analysis context. These efforts will also pave the way for future research efforts, informing the tasks and efforts associated with upcoming activities such as ARCSAR tasks 3.2., 3.3. and 3.4.

In relation to the tools themselves, the deliverable makes use of real-life incidents, six case studies in order to maximize the opportunity for lessons learned and impact. These cases could have had major consequence to both human life and environment. One of the largest disasters that happened in 1989 was EXXON Valdez oils spill in Alaska that devastated the marine life and the environment around it. The second one is BP Deep Water Horizon oil spill disaster in the Gulf of Mexico. The third is the MS Estonia ferry incident in 1994 in Baltic Sea. The fourth one is Norilsk City oil spill disaster in Russian Arctic, the fifth the Viking Sky cruise ship incident in the North Sea, and the sixth is the Boreal cruise ship accident.

The tools delivered within these efforts are designed to provide a mechanism through which major accidents/incidents can be analyzed through use of a comprehensive decision-making grid. In order to maximize impact and facilitate more preventive strategies, the decision-making grids outlined in figure 2.5 can also be applied to learning from disasters contexts, allowing organizations to develop routines and approaches from these lessons learned.
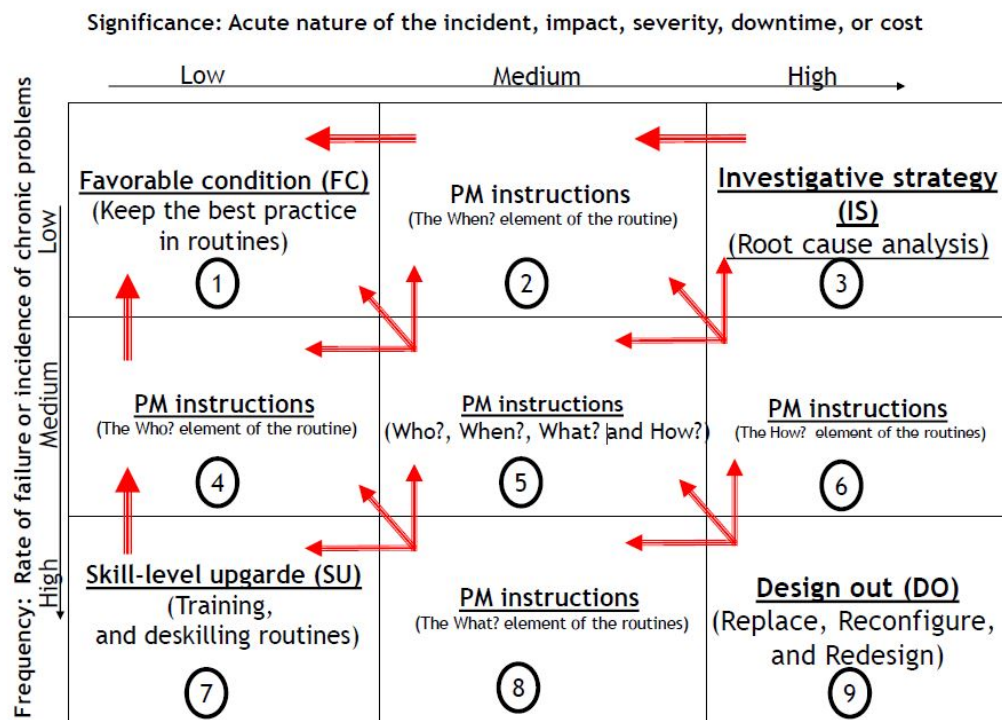
Figure 2.5 D3.1 Decision Making Grid

In order to further improve the effectiveness of the decision-making grids, the deliverable has also investigated nine main incidents or threats, their likelihood and severity potential. As this deliverable is still not available for public dissemination a comprehensive presentation was not possible, however key findings such as those outlined in table 2.1 were presented during the event.

Order of Priority	Incident/threat	Category	Likelyhood of Occurrence	Severity of Potential Outcome
1	Cruise ship accident	Seaborne disaster/catastrophic incident	Low	High

2	Oil spill and environmental accident	Seaborne disaster/catastrophic incident	Low	High
3	Collisions	Seaborne disaster/catastrophic incident	Low	Medium-High
4	Groundings	Seaborne disaster/catastrophic inciden	Medium	Medium-High
5	Danger from small vessels	Seaborne disaster/catastrophic incident	Medium	Medium-High
6	Waste dumping at sea	Seaborne disaster/catastrophic inciden	Medium	Medium
7	Icebreaker breakdown	Seaborne disaster/catastrophic inciden	Low	Medium-High
8	Asymmetric threats	Security threat	Low	Low
9	Emergence of Military Concerns	Security threat	Low	High

Table 2.1 ARCSAR D3.1 Potential Seaborne Disaster Catastrophic Incident and Security Threat Overview

Another critical component of WP3 presented within this event are the various planned exercises. Last year we had the 2nd table top exercise conducted by the search and rescue sector, Arctic cruise operators and academia together. The exercise was a two-day event in December 2020 with 130 participants in total, including 21

AECO members and participants from Canada, Iceland, Greenland, Faroe Islands, Svalbard, mainland Norway, USA, Finland, UK and New Zealand.

The participants were invited to play out a scenario, in which an expedition cruise vessel temporarily loses steering and grounds on a submerged shelf in a remote part of the Arctic. As the scenario progressed, the players were challenged to evacuate the unstable ship and establish a beach camp on shore. The 175 passengers and 120 crew and staff were to be kept safe while awaiting rescue, initially by an expedition cruise vessel and eventually by professional search and rescue (SAR) responders. The participants were asked to consider procedures and means of communication, collaboration and coordination, abandon ship procedures, crowd management techniques, efficient use of equipment, survival strategies, camp layout, and much more. Groups consisting of SAR responders, rescue coordination centre staff, ship officers, expedition staff, and the cruise operator home office collaborated to determine the challenges, constraints and opportunities involved. The academic audience was invited in the exercise as observers. The report from the TTX will be published soon.

The next ARCSAR TTX is going to take place in November 2021 and more information can be found on ARCSAR website in due time.

This WP also includes the task to arrange the ARCSAR live exercise. Planning of the live exercise is led by JRCC Iceland together with the JRCC North Norway. The exercise was originally planned for May 2021 however due to the Covid-19 restrictions, it has been postponed to August 2022. The four-day exercise will take place in Svalbard. First two days will cover smaller exercises and the main exercise will be on the third day. More information will be clarified later on as the planning proceeds.

3.3.1 WP3 Feedback Comments

In terms of future needs for innovation, the primary focus of the feedback/discussion from participants focused on satellite coverage in relation to safety within the ANA region. The discussions highlighted the need to immediately activate satellites in the event of incident occurring within the ANA. It was highlighted that these technologies would be particularly useful during environmental incidents, as the monitoring capabilities provide a mechanism through which practitioners can accurately quantify the extent of pollution related damage, while also informing decision making in relation to incident response. Participants also highlighted that a lack of satellite coverage can at times limit capabilities within these contexts, and should be considered during incidents.

Additionally, a number of participants were interested in the potential to adapt knowledge garnered from lessons learned and applying them to organizational learning contexts, highlighting the potential interest from stakeholders in D3.1 and impact factor.

3.4 WP4 Priorities for Security and Standardization

Auðunn Friðrik Kristinsson, Director of Maritime Operations at the Icelandic Coast Guard, presented work package 4. WP4 has two deliverables and will both start later on in the project.

D4.1 The ARCSAR International Conference has been postponed to August 2023. The Conference will be held either in Brussels or Iceland. D4.2 Final Report on priorities, best practices and action plan for security and standardization regarding common platforms or interfaces among capabilities for practitioners and other actors, is due February 2024. As the outputs associated with WP4 will feature at the later stages of the ARCSAR project, there were no critical comments or feedbacks from participants.

3.5 WP5 Dissemination and Communication

WP5 was presented by Robert Lynch, Munster Technological University. The WP5 presentation focused on providing an overview of the three associated tasks, while also outlining key milestones/outputs to date.

The presentation highlighted the global reach of the project and the potential to maximize impact through global stakeholders. The presentation outlined the major impact that Covid-19 has had on WP5, highlighting that an inability to travel and host events has somewhat limited potential impact/reach. Examples of events which were planned included hosting a joint Arctic Innovation Day throughout the ARCSAR network and a breakout session with the EPPR during the Arctic Circle Assembly in Reykjavik, 2020. WP5 had also planned on delivering video productions of SAR practitioner exercise efforts which were also postponed as a result of Covid-19. The consortium does however plan to host an innovation event targeted at students within the various university partners once this becomes possible from a global pandemic perspective. Additionally, the joint EPPR breakout session can still be completed once live events resume within the Arctic stakeholder event calendar.

While COVID-19 has in some instances hampered progress, the switch to more targeted virtual dissemination and communication efforts has however had a major positive impact on reaching stakeholders. As outlined in table 2.2, ARCSAR has delivered a broad and comprehensive array of dissemination and communication activities to a multi-stakeholder audience.

Audience Type					
	Number of Events	Researchers	Industry	Public	Policy
Organization of a workshop	10	Y	Y	N	Y
Press-release	3	Y	Y	Y	Y

Non-Scientific Publication	2	Y	Y	2	Y
Flyer	4	Y	Y	Y	Y
Training	1	Y	Y	N	N
Social Media	Yes	Y	Y	Y	Y
Website	Yes	Y	Y	Y	Y
Participation in a conference	19	Y	Y	Y	Y
Participation in a workshop	4	Y	Y	N	Y
Participation in events other than above	4	Y	Y	N	Y
Video/Film	2	Y	Y	Y	Y
Pitch Event	2	Y	Y	N	Y
Collaboration with other H2020 projects	3	Y	Y	Y	Y

Table 2.2 ARCSAR Dissemination and Communication Activities

In relation to T5.1: ARCSAR Dissemination and communication plan, a major aspect of recent developments has focused on delivering exploitation driven dissemination. As outlined in figure 2.6, by adopting a more customer centered approach to these efforts, the potential impact and likelihood of knowledge/technology uptake will increase significantly.
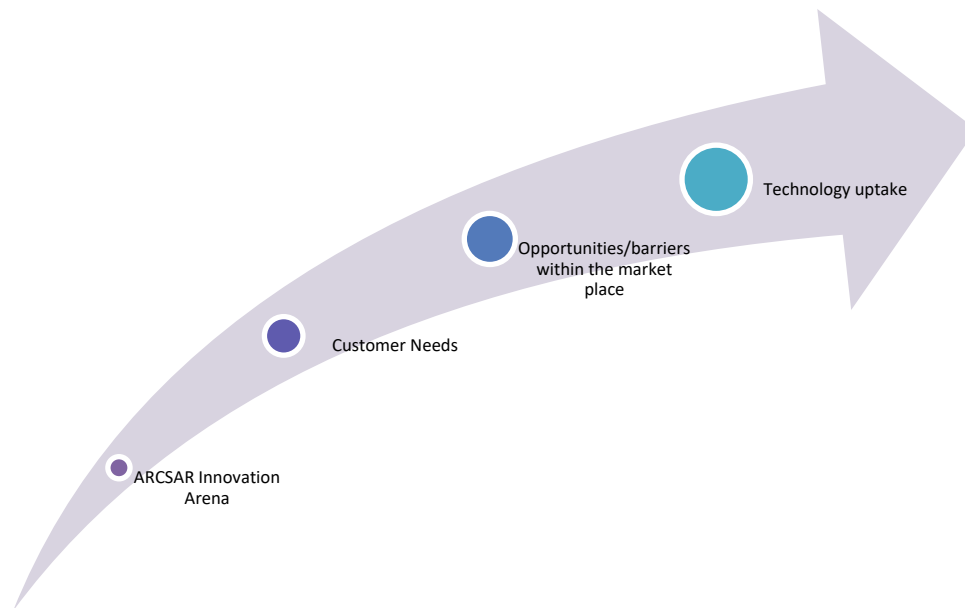
Figure 2.6 Customer Centered Dissemination and Communication Strategies

With regards T5.2, the consortium has continued to maintain an active online and social media presence in providing commentaries and updates, not only concerning Arctic but Arctic related matters. Newsletters are available on our websites to gather comprehensive overview on what we have been doing. The consortium has been active in engaging in the context of the EU-funded Arctic research and our stakeholders have also contributed to disseminating our efforts. Examples of such engagement include EU H2020 funded efforts such as the EU Polar-Net, Kepler, and SEDNA, while also being an active participant in the EU Polar Cluster, a group of 11 ongoing EU funded projects focusing on broad range of Arctic research and policy related matters.

3.5.1 WP5 Feedback Comments

There was no feedback or comments from participants in relation to WP5.

4   From dissemination to participation

One of the highlights of physical events is the possibility for informal interaction between participants, presenters and among participants, be it during breaks, lunch/dinner or after the event. One could even argue that getting to know other stakeholders, networking and information sharing are as important as the topics covered during the formal event.

Although the sector has shown resilience during the pandemic and events have been held using online platforms, the social aspect of these types of events have not lost its relevance.

During the dissemination event, ARCSAR attempted to bring the more informal aspects of events to the forefront by using padlet. Although the original idea was to enhance communication between participants and presenters, we quickly saw that, sparked by the presentations, conversations among participants emerged regarding specific topics.

Briefs regarding available technologies, offers to share data between different agencies, requests for reports and studies conducted by other organizations present in the event and invitations to be included in ongoing international projects were registered.

In what regards the communication between participants and presenters, the organizers of the event noticed that it was not unidirectional (participants asking and presenters responding) but that the use of padlet allowed for meaningful exchange of ideas where participants proposed alternative lines for future work, provided references to relevant literature and projects and offered to act as gatekeepers regarding organizations that were not present in the event. The organizers noted in a hot-wash up meeting after the event, that the padlet tool is worth utilizing in future

events as an option for commenting and expressing opinion alongside the physical event.

5   Closing words

We believe that the dissemination was useful in three different ways: first, it served the purpose of informing stakeholders about the current state of ARCSAR; second, it served as an arena to receive feedback on the work done, new inputs for future work, and ideas that will be taken into consideration to make the network more productive; and third, it served to reinforce the network as the event became a platform for discussions and conversations between participants about a variety of topics that might not have aroused if the event were not to take place.

Despite the COVID 19 pandemic the continuous close dialogue maintained between the project's coordination team and the WP-leaders, as well as the regular online meetings to discuss the work plan and how to deal with the delays and the challenges with hosting events in the network, have allowed to reach the goals set around the dissemination activities. The discussion with stakeholders about the ARCSAR project's second year results and future plans highlighted this as well.

The ARCSAR Innovation Arena is currently being migrated to a new version of the platform, with more advanced security upgrades, better compliance with the GDPR and numerous functionality upgrades. This work had been ongoing since January 2021 and has been finalized at the moment the deliverable was written.

ARCSAR has launched monthly topical posts based on the prioritized gaps and needs in the project as an effort to maximize the outreach during the pandemic and produce more content for project's followers in social media. Every month the followers will get to read about a gap or need and be able to engage in discussions. In addition, all these gaps and needs can be found from the ARCSAR Innovation Arena. The innovation arena is accessible from the official ARCSAR webpage.

6   Appendix

6.1   Figure 1. – Program of ARCSAR 3rd Innovation and Knowledge Exchange Event & 2nd Dissemination Workshop

6.2 Figure 2. – Padlet summary of the Dissemination Workshop

Figure 2. – Padlet summary of the Dissemination Workshop

work? — ANONYMOUS

Espen Olsen, Svalbard; please inform us when the new version is ready and we will contribute. Good work!
— ANONYMOUS

How can we take lessons learned from forum exercises and turn them into Standard Operating Practices? Industry and organization wide. — ANONYMOUS

Emmi to Peter: University of Portsmouth has done a lot of work and research on mechanisms for lessons identified and learning from them/transferring to policy recommendations. We can ask UoP to share their work both in the Innovation Arena and send to Peter from Canada :) We have also a project with EPPR called Arctic Lessons Learned Arena where we are currently developing a database for incident and exercise reports. — ANONYMOUS

For the person interested on ice sparse monitoring in Antarctica, I confirm that there is no coverage problems for all the major Radar satellites providers. If you provide your e-mail with coordinates or shape file of the area of interest we can easily show it to you. — ANONYMOUS

From Emmi to Espen: We will, thank you! :) — ANONYMOUS

Greg Johnston - JRCC New Zealand, thankyou for this information regarding sparse ice and satellite radar coverage, I will follow up with NZ subject matter experts to check if they are aware of this and happy to feedback any findings.
— ANONYMOUS

Hi Espen, When the new IA is available, you will receive an e-mail. You will then be asked to set your password. Thanks for the quesiton and looking forward to seeing you there!
— ANONYMOUS

We will transfer all the current users to the new IA. but we cannot transfer the passwords unfortunately. — ANONYMOUS

EIJA RAASAKKA MAY 04, 2021 07:14PM

WP4, Priorities for security and standardization, JRCC I, Anton Örn Runarsson

Add your comments/questions below

EIJA RAASAKKA MAY 04, 2021 07:14PM

WP5, Dissemination and communication, Munster Technological University, Robert Lynch

Add your comments/questions below

Jaqui: Thank you Rob for the recognition of our report! Anyone who might be interested in reading the report Rob referenced, it is linked here (titled The Future of Shipping in the Arctic: New Perspectives on the Next Frontier) https://www.uscga.edu/casp-research-and-scholarship/
— ANONYMOUS

✳✳✳✳✳✳