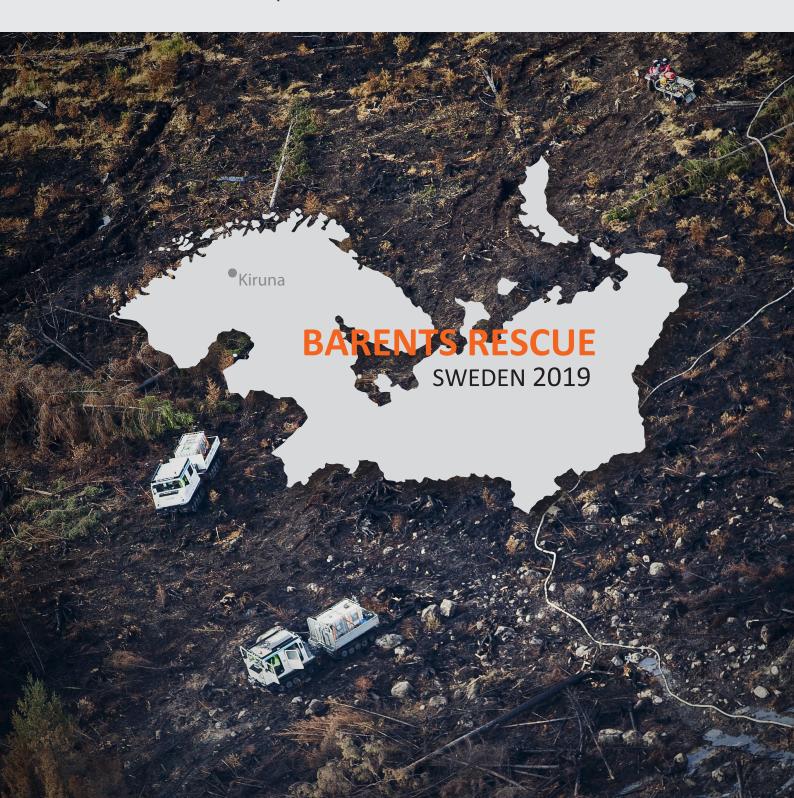




Barents Rescue 2019

International report



Barents Rescue 2019 – International Report

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Main messages

The Barents Euro-Arctic Region is one of the worlds' most vulnerable regions in terms of environment degradation and climate change impacts. The region is characterized by its harsh climate, large natural resources, long distances, rural areas and limited rescue personnel and equipment. As the region is becoming more accessible for activities on land and sea, the risk patterns in the region is changing. In the light of these challenges the Barents Cooperation and joint exercises becomes increasingly important in the future to ensure the living conditions of the people in the region. The Barents Cooperation is unique with stakeholders at national, regional and local levels, including societies of indigenous peoples. The cooperation provides an important opportunity to work jointly to take stock of previous lessons identified from complex emergencies and exercises while looking at the opportunities and common challenges that lies ahead.

Barents Rescue 2019 was implemented based on new directives from the Joint Committee, with a greater focus on learning and networking between international colleagues from operational and strategic emergency authorities' to political level.

RECOMMENDATIONS

Corrective measures

Consider reviewing procedures in Barents Joint Manual to strengthen the collaboration in emergencies.

Planning process

Consider developing information management during the planning process to improve preparation for participants and facilitate the implementation of the exercise.

Organisation of future Barents Rescue Exercises

The exercise demonstrates the value and continued need for exchanging common methods for on-site cooperation and evaluation to improve the collaboration in complex emergencies.

The exercise concept developed for Barents Rescue 2019 taking stock of common methods and research provides a good basis for future exercise concepts.

The capability of emergency response collaboration can be strengthened through improved communication between Barents countries for command and control purposes and exchange of safety procedures.

The Barents Rescue Exercises should continue to take into account the climate change impact and changing risk patterns in the region as a basis for developing the response to complex emergencies.

Lessons identified in the exercise are largely reoccurring in previous evaluations of Barents Rescue Exercises (2013, 2015 and 2017). The Barents Rescue Cooperation should therefore focus on these identified gaps and shortcomings in the planning of future exercises and joint ventures within the exercise cycle.

Executive summary

Sweden (MSB and the County Administrative Boards) hosted the ninth Barents Rescue Exercise 2019. In total 600 persons took part in Event Week in Kiruna Sep 23-26, 2019, of which 350 participated in the exercise. Sweden was the first country to develop an exercise concept based on the new directives of the Barents Joint Committee. The Concept had a greater focus on improving the outcome of the exercises by broadening the exercise concept and learning perspective.

The Barents Rescue is a civil international crisis management exercise within the framework of the Barents Cooperation under the Barents Agreement. The exercise aim is to improve the ability of the contracting parties (Norway, Sweden, Finland and Russia) to provide rapid and effective assistance in the Barents Region.

The core capabilities identified in the Barents agreement and the Joint Manual was formulated as exercise objectives;

- Test the capability to handle alarms and request for assistance.
- Explore the capability to execute an efficient border crossing.
- Explore the capability to establish command and control over resources and actors.
- Explore the capability to establish joint command and control for collaboration to achieve direction by liaison at the incident site.

The scenario for the exercise was developed and anchored with experts in natural hazards and climate change at national authorities in Sweden. The choice of scenario (extended heat wave and major forest fires) is linked to the type of geological and environmental and climate related challenges faced in the region.

Exercise Concept

In the process of developing an exercise concept, the Action Plan for climate adaption and the effect on the Barents Region as well as experience from previous Barents Exercises were considered. The main purpose of the concept was to create a platform with a framework of activities to improve learning from exercised core capabilities and to support interaction and networking between different countries, sectors and actors. The concept included various knowledge-enhancing activities to increase emergency preparedness such as practical training and exercises for first responders and commanders, seminars and networking between political level, Director Generals and other strategic representatives. The concept also emphasised sharing of methods to improve joint rescue operations. For this purpose, Sweden invited international colleagues to attend training in After Action Review to improve learning after completing a rescue operation or exercise, and training in Joint Command and Coordination.

Planning process

The joint planning process included four conferences during the period of Feb 21 2018 until May 7-9, 2019. Additional meetings were arranged between Point of Contacts (POC) and in the different working groups. Throughout the planning process, the Joint Committee and the Planning Working Evaluation Group were regularly informed and consulted by the Project Management.

Evaluation

The overall purpose of the evaluation of Barents Rescue 2019 is that the evaluation result will be used to contribute to continued development of the capability to conduct joint cross-border operations in the Barents Region.

The Evaluation organisation during Event Week consisted of approximately 30 individuals with expertise in several sectors; police, rescue services, health care, regional and national crisis management authorities and researchers. All Barents countries were represented and working in joint teams to gather information linked to the exercise objectives. Data was collected primarily using After Action Review, Evaluation reports from evaluators observing the exercise, questionnaires, interviews and documentation produced during the exercise.

Exercise Performance

Test the capability to handle alarm and request for assistance

The objective was performed in a generally effective and complete manner. Many procedures were completely performed in a fully effective manner. The majority of the established alarming procedures according to the Barents Joint Manual were followed and proved adequate for achieving the exercise objective. Identified development areas can be used to further improve the alarming procedure.

Explore the capability to execute an efficient border-crossing

The objective was performed in a partially effective manner, with the need for improvements. The majority of the established border crossing procedures and requirements according to the Barents Joint Manual were followed and proved adequate. The requesting country need to ensure that necessary personnel (Customs, regional authorities) from the requesting country are present at the border crossing to meet-up with the assisting countries convoys.

Explore the capability to establish command and control over resources and actors

The objective was performed in a partially effective manner, with the need for improvements. The exercise participants were able to establish command and control over resources and actors through the establishment of On-site Operations Coordination Centre (OSOCC). The management was reactive and a more long-term perspective in the planning and projection of resources could make OSOCC more capable. The pre-exercise on Sep 24 proved to be a good learning opportunity to prepare the exercise participants on roles and responsibilities, work procedures, communication and alarm routines.

Explore the capability to establish joint command and control for collaboration to achieve direction by liaison at the incident site

The objective was performed in a generally effective and complete manner, with minor needs for improvements. The exercise actors were able to establishing joint command and control to achieve joint direction by liason at the incident site. Resources arrived timely at the various sites and on-site command were set up and regular meetings were held for SITREPs, division of work and prioritisation of resources. The absence of basic information on the scenario, exercise conduct and safety regulations, created some uncertainties for the exercise participants.

General Conclusions

The Exercise Concept developed for Barents Rescue 2019 provides a good basis for future Barents exercises to build on. Exercise participants had the opportunity to take part in different activities to increase learning, exchange of joint working methods and current knowledge and research related to exercised core capabilities while networking with different countries, sectors and actors.

The result of the evaluation assess the exercise objectives and pinpoints lessons identified and recommendations. Lessons identified in the exercise are largely reoccurring in previous evaluations of Barents Rescue Exercises (2013, 2015 and 2017). A main conclusion is that the collaboration should focus on preventing the same shortcomings from being repeated in upcoming exercises or rescue operations. It is through working jointly to take stock of previous lessons identified from emergencies and exercises that the joint capability in the region can strengthen and develop to allow for a well-coordinated collaboration in case of a complex emergency.

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Introduction

Barents Rescue 2019 was the ninth exercise within the Barents Cooperation. The main part of the exercise was conducted during an "Event Week" in Kiruna municipality Sep 23-26. More than 600 people participated of which 350 participated in the exercise. The exercise was jointly planned and conducted by the Swedish Civil Contingencies Agency (MSB) and the County Administrative Boards of Norrbotten and Västerbotten Counties.

Background

Barents Rescue is a civil international crisis management exercise within the framework of the Barents Cooperation. The exercise was initiated and conducted in Sweden for the first time in 2001 in the Partnership for Peace format. In December 11, 2008, the governments of Finland, Norway, Russia and Sweden signed an agreement on cooperation within the field of emergency prevention, preparedness and response to emergencies in the Barents Region. Within the framework of the agreement, joint exercises and training are undertaken with the aim of improving the ability of the contracting parties to provide rapid and effective assistance.

Barents Rescue Exercises

2001 Boden, Sweden

2005 Lakselv, Norway

2007 Levi, Finland

2009 Murmansk, Russia

2011 Luleå, Sweden

2013 Lyngeln, Norway

2015 Levi, Finland

2017 Karelia, Russia

2019 Kiruna, Sweden

Joint Committee directives

In 2016, the Joint Committee made the following decisions (from Joint Committee Minutes Apr 16th 2016, Luleå);

"A three years cycle for the main event, starting from 2019. A main event should at least include practical training and/or an exercise for First Responders. A main event will also include other activities such as conferences, table-top exercise as appropriate.

To extend the scope for the Exercise Working Group and rename it to Planning and Evaluation Working Group (PEWG) with the aim to assist the JC in its work. PEWG should represent the JC in a planning process for main events and report to the JC. JC tasks PEWG to present a detailed list of responsibilities for PEWG to be approved during the JC meeting in autumn 2016."

The Barents Rescue 2019 should also take into consideration the Action Plan on climate change for Barents Cooperation as well as experiences from previous Barents Exercises.

Lessons from previous exercise

In the process of developing the actor's joint objectives', the outcome from the Barents Rescue Exercise in Russia 2017 (INTERNATIONAL EXERCISE REPORT "Barents Rescue 2017", Republic of Karelia (Russian Federation) September 5-7 2017) were considered and implemented accordingly;

- Complicated procedure for clarifying composition of force grouping and means when responding to request for assistance.
- Corrective measures For the entrance of resources it is necessary to arrange for the relevant intergovernmental agreement.
- Pay special attention to management of international fire and rescue forces during the preparation of the Exercise Barents Rescue 2019 to organise radio communication (to provide separate radio channels, call signs etc.), to include representatives of all countries into headquarters.

Aim and Goals

The overall purpose of Barents Rescue 2019 is to contribute to the development of a common working method at the incident site, and strengthen the ability to work together. The core capabilities are identified in the Barents agreement and the Joint Manual as; Alarming procedure, Border Crossing, and On-site cooperation in emergency situations. Each core capability was formulated as an exercise objective. Sub elements in each of the Exercise objectives are derived from the findings in previous evaluation of Barents Rescue Exercise.

Barents Rescue 2019 has four actors' joint objectives. These objectives have a systemic perspective and relates to the common knowledge and understanding that exercise participants need to achieve the aim and goals of the exercise.

- Test the capability to handle alarms and request for assistance.
- Explore the capability to execute an efficient border crossing.
- · Explore the capability to establish command and control over resources and actors.
- Explore the capability to establish joint command and control for collaboration to achieve direction by liaison at the incident site.

Scenario

The scenario has been developed and anchored with experts in natural hazards and climate change at national authorities in Sweden. The choice of scenario is linked to the type of geological and environmental and climate related challenges faced in the region.

The summer 2019 is an exceptional forest fire season in Sweden. The weather is very hot and dry with an extended heat wave. The number of forest fires across the country is unusually high with several major forest fires. With the assistance from the EU the major fires are brought under control. Due to very extensive forest fires in the Mediterranean Region European resources have to be redirected. Without assistance from the EU, the national firefighting resources are becoming increasingly scarce. At this moment there are a number of minor on-going forest fires in Norrbotten County. These fires affect major transportation routes in the region. Some roads are blocked due to falling trees and some roads have been shut down by the authorities due to public safety. To facilitate coordination of emergency response needs the County Administrative Board of Norrbotten assumes control and responsibility for the Rescue services in the affected municipalities. A large number of people have been affected and seek hospital care due to smoke inhalation injuries. The extended heat wave period in Sweden causes additional health problems especially for the elderly and vulnerable citizens with pre-existing health issues. The health system is backlogged due to the high number of injured people. At this point Sweden decides to activate the Barents Agreement. On the Sep 19 an Early Warning is issued to the Barents countries.



The concept of Barents rescue 2019

The exercise concept for Barents Rescue 2019 was a first step in the new direction from Joint Committee, shifting focus from traditional large-scale field exercises towards improving the outcome of the exercises by broadening the exercise concept and learning perspective. The main purpose of the concept was to create a platform with a framework of activities to improve learning from exercised core capabilities and to support interaction and networking between different countries, sectors and actors. The concept for Barents Rescue 2019 consisted of various knowledge-enhancing activities to increase emergency preparedness such as practical training and exercises for first responders and commanders, seminars and other forms of educational training as shown in the activity list below;



The exercise also provided a platform for networking on Ministry level, State secretary level, Director Generals, TETRA Communication representatives and other important actors within the sector related to the Euro-Arctic Barents Region.

The V.I.P and Visitors Program consisted of networking events; field visit to different sites, activities, presentations and activities related to cultural heritage of Norrbotten. Within the visitors program five different seminars conducted by researchers, experts and practitioners, were conducted on the following themes;

- Climate change in the Barents Region.
- Cross border communication through Nordic Inter System Interface.
- · Cross border cooperation during emergencies.
- Barents Cooperation in historical context.
- Presentation of the Barents Rescue Concept.

During Event Week a Media and Information centre was established and national and international media was invited to take part in a media programme.

Joint Methods

According to the Barents Agreement (Article. 2.), the Barents countries shall further develop such actions and methods, which increase the efficiency of international cooperation in emergency prevention, preparedness and response.

For that purpose Sweden invited international colleagues to participate in training in the After Action Review method to improve learning after completing a rescue operation or exercise, and in Joint Command and Coordination in common staff methodology including; Common situational awareness, Common goal for the operation, Joint alignment for the operation and a fall back plan.

During Training Day Sep 23 training in various other methods were offered to prepare exercise participants in the Field Training Exercises, such as; High Altitude Rescue, Commander Insignias, Communications Systems for First Responders, Disaster Victim Identification, Geographic Information Systems, Hypothermia, Crush Syndrome, Landslide and Vehicle Line-up.

Planning process

The joint planning process included four main planning events. Additional meetings were arranged between point of contacts (POC) and in the different working groups.

- Concept Development Conference, Stockholm, Feb 21, 2018: Anchoring the overall purpose of the exercise with the exercise actors and determined on the framework for the continued planning process.
- Initial Planning Conference, Gimo, May 29-31, 2018: Initiate the joint planning process and present exercise aim and overall and joint objectives.
- Main Planning Conference, Umeå, Dec 3-5, 2018: Present and discuss the results of the planning process and determine the level of ambition and participation as well as delimits for the exercise.
- Final Planning Conference, Kiruna, May 7-9, 2019: Establishing an agreement regarding the exercise conduct, plan and coordinate the last details before AlarmEx and Event Week.

During the planning conferences working groups were established for; AlarmEx, Border Crossing and Host Nation Support, Command Post Exercise, Field Training Exercise, Evaluation and Communication.

The main hub for information sharing during the planning process was the Barents Euro-Arctic Cooperation website, barentscooperation.org. Some of the information was translated into Russian and the Swedish minority languages in the region, even if the official language used in Barents Cooperation is English. Each point of contact and local exercise leaders from participating organisations were assigned to redistribute and inform relevant national actors.

Throughout the planning process, the Joint Committee and the Planning Working Evaluation Group were regularly informed and consulted by the Project Management. Other ongoing operations within the region have also been considered, such as Swedish chairmanship in the Barents Council, Baltic Sea cooperation, Nordic Ministers of Council, The Arctic Council working group on Emergency Prevention, Preparedness and Response and the Haga Cooperation.



The evaluation design

The overall purpose of the evaluation of Barents Rescue 2019 is that the evaluation result will be used to contribute to continued development of the capability to conduct joint cross-border operations in the Barents Region. The scope of the evaluation is based on the Barents Rescue Project logic (programme theory) which identifies three outcomes to be evaluated; Actors' Joint Exercise objectives, Exercise concept and Learning effect.

The assessment ground for the evaluation of Barents Rescue 2019 is based on the common values and grounds for the Barents cooperation as specified in the Barents Agreement and the Barents Joint Manual. These guiding standards provide a baseline for how to analyse and evaluate Barents Rescue 2019. The assessment of strategic and emergency response collaboration in emergency situations is based on Swedish legislation and common guidelines for collaboration and command.

Organisation

The evaluation of Barents Rescue 2019 was conducted in a way that promotes learning and participation throughout the planning process and the implementation. During the planning process an international Evaluation Syndicate was established with participants from Norway, Sweden and Finland. The Evaluation organisation during Event Week consisted of approximately 30 individuals with expertise in several sectors; police, rescue services, health care, regional and national crisis management authorities and researchers. All Barents countries were represented and working in joint teams to gather information linked to the exercise objectives.

Preparations for evaluators was made between the Final Planning Conference and Event Week. AAR training was offered to all Barents countries in connection to the Final planning conference. Evaluation staff present during Event Week received hands on training and inbriefs on evaluation procedures, data collection plans and supporting technical systems.

Data Collection and Analysis

The primarily methods for collecting data related to the exercise objectives was through observations by evaluators who followed the exercise at the various sites and through After Action Review (AAR) with exercise participants. The selected methods for collecting data contributes to an analysis based on different perspectives; the AAR is providing an inside-out perspective while the use of evaluators observations provides and outside-in perspective. In addition, data was collected from questionnaires, interviews and documentation produced during the exercise. Evaluation forms and questionnaires were developed through operationalising the different exercise objectives using validated processes and methods. The sub questions in the AAR-process were adjusted to correspond with the actors' joint objectives.

The infrastructure for data collection and analysis was built using the Exonaut software. Each team had access to tablets or computers installed with the Exonaut Application

After Action Review, AAR

AAR is a structured approach for reflecting on the work of a group and for identifying strengths, weaknesses, and areas for improvement. The method is scalable and can be applied within an emergency response or exercise. The AAR dialogue process is led by a Dialogue Leader. The process revolves around five questions;

- 1. What was expected to happen?
- 2. What actually happen?
- 3. Why did it turn out as it did?
- 4. What can be improved and how?
- 5. What can we share with others?

The AAR process is conducted in two steps; Firstly, each participant conduct their individual AAR based on question 1-4, Secondly, the group conduct an AAR dialogue together with question 1-5. Based on the result from the common AAR the group categorise the most important learning points into: continue to do, stop doing and start doing.

Evaluation Forms and Questionnaires

Evaluation questions was developed on the basis of each actors' joint objectives and linked to each exercise activity. The sub-objectives were assessed using a scale for scoring the effectiveness of interventions in the exercise developed by Parker et al (Measuring Crisis Decision Making for Public Health Emergencies. RAND Corporation, Technical Report 712, 2009, Parker A,

Nelson C, Shelton SR, Dausey DJ, Lewis MW, Pomeroy A, Leuschner KJ). For assessment purposes, "effectiveness" means that the action or intervention in question is both sufficient and timely enough so that the task to which it pertains can be accomplished. The scale is designed to provide an adequate number of categories to capture variation among ratings;

0 Should have been done, but was not/ Failure to act. 1 Inadequate/did not function. The action or activity was started but was so incomplete or poorly performed as to be ineffective. 2 Somewhat adequate/did function, but needs major improvement. The action or activity was started and was partially complete and/or performed in a partially effective manner. 3 Mostly adequate/did function, needs minor improvement. The action or activity was performed in a generally effective and complete manner. Completely adequate/did function well. The action or activity was 4 completely performed in a fully effective manner. N/A Not applicable. The action or activity was not appropriate or necessary for this operation. Not able to determine N/D

Quality Assurance

The assessment ground for the exercise was anchored and quality assured by participating actors in the planning process. In addition, the international evaluation syndicate was regularly informed and consulted. Assessment criteria's for the actors' joint objectives was jointly developed by MSB and The Centre for Teaching and Research in Disaster Medicine Traumatology in Linköping (KMC). Instructors in the Joint Command and Coordination methodology from KMC participated in collecting and assessing data during the field exercises. All AAR dialogue leaders participating in the exercise was educated in the AAR concept developed by MSB.



Exercise performance

In this chapter the exercise performance is presented and analysed in relation to the actors' joint objectives of the exercise. Each exercise objective is presented in a separate section in this chapter and begins with a description of the prerequisites of the exercise, followed by the results of the exercise objectives. The evaluation assessment is based on nine conducted After Action Reviews, 17 Evaluation Reports, the Alarm Exercise Questionnaire and the Exercise Concept and Individual learning – End of exercise Survey.

Alarm Exercise

The exercise was conducted on 28-30 August 2019 during office hours at the respective participating emergency agencies. When the exercise began, the County Administrative board in Norrbotten County has made a request for activation of the Barents Agreement to MSB and an Early Warning has been sent to appointed points of contact in all Barents countries.

The assessment ground for the AlarmEx is based on the Joint Manual, the operational tool for implementing the Barents agreement. The alarming procedure for notification of emergencies and request of assistance is outlined in the manual as well as what is expected of the country that gives support. In case of a full activation of the agreement the alarming procedure includes the following steps:



Figure 1. Process for alarming procedure, Source: Barents Joint Manual

For the implementation of the Barents cooperation each country have appointed point of contact (POC), in accordance with Article 5 of the Agreement. The POC: s maintain an uninterrupted, 24-hour per day preparedness with respect to notification and transmission of requests for emergency assistance.

The actor's joint objective in the exercise

Test the capability to handle alarms and requests for assistance according to routines for cooperation under the Barents agreement. This includes the following sub-objectives;

- · Send the notification of emergencies.
- Initiate request for assistance.
- Receive and handle incoming request for assistance.
- Interpret the incoming request.
- Submit an offer for international support and proposed terms.
- Analyse received responses and transform them into a final request, including the formal acceptance of the proposed terms.
- Provide guidance to assisting countries regarding entry points, the Reception/Departure Centre, special conditions for border crossing and the geographic location for the emergency response operation.

The data presented is based on a questionnaire to the exercise leaders at each of the point of contacts participating in the exercise, observations made during the international conference and a AAR dialogue with Swedish actors.

Evaluation Results

The objective was performed in a generally effective and complete manner. Many procedures were completely performed in a fully effective manner. The exercise actors proved to have a good capability to handle alarm and request for assistance according to routines for cooperation under the Barents agreement. The majority of the established alarming procedures according to the Barents Joint Manual were followed and proved adequate for achieving the exercise objective. Identified development areas can be used to further improve the alarming procedure.

Send the notification of emergencies

The notification was submitted at 2019-08-27 08:04 in English to the national point of contact according to the Joint Manual Attachment 2 format for Telefax. The notification included information about the location, nature and character of the emergency. The notification was followed up by the requesting country through phone calls to the national point of contacts. Some contact details for Telefax were outdated resulting in minor delays in the initial alarming procedures before a work around by using e-mail was established. During the exercise the assisting countries gave feedback to the requesting country that they prefer email communication. One assisting country confirmed that they received the notification over both phone and telefax. The other two countries gave their receipt of notification over email after the requesting country phoned them to make sure they had received the notification.

Initiate the request for assistance

The request for assistance was submitted at 2019-08-28 08:05 in English to the national point of contacts and according to the Barents Joint Manual Attachment 2 format for Telefax. The request was sent both over telefax and e-mail. The notification included information about the location, time, scale, character of the emergency and the kind (type, amount) of emergency teams and resources needed.

Receive and handle the incoming request for assistance

The notification of request of assistance was followed up by the requesting country within 15 minutes through phone calls to the national point of contacts. The assisting countries acknowledged that they had received the request for assistance within 40 minutes, but not all used the Barents Joint Manual Attachment 4 format for Acknowledgment of request for assistance. Instead the acknowledgment was delivered over telephone or email.

Interpret the incoming request

The interpretation of the incoming request seemed to function well. No deeper analysis was made of the participating countries national processes. Although it later became clear that the requesting country experienced some difficulties with understanding and analysing all of the offered support. The reason for this could be that the request for assistance by the requesting country was unclear in some areas or that it allowed for different types of interpretations of the requested support.

Submit an offer for international support and propose terms

The offers of assistance were all submitted by 2019-08-29 10:59 in English to the national point of contacts and according to the Barents Joint Manual Attachment 5 format for Initial offer of assistance as well as the extra attachment, "Attachment A".

Analyse received responses and convert them into a final request, including the formal acceptance of the proposed terms

The analysis of received responses posed challenges for the requesting country as it was not clear what capabilities the offered assistance had and each country described their offered resources differently. This was especially the case for the offered medical resources as it was not clear what manning and equipment was included and it differed significantly among the Barents Countries. The requesting country needed to involve more national medical actors in order to analyse the offered medical assistance. A further aspect was the challenge of analysing and understanding specific Host Nation Support requirements for the offered resources. The Host Nation Support perspective could be enhanced through revising the capability reporting format. Although the capability reporting format worked in most cases and for most resources, it could be revised to include more detailed and precise information about offered capabilities (medical especially), as it could enhance the analyse of both the matching of resources and the Host Nation Support.

Provide guidance to assisting countries regarding entry points, the Reception/Departure Centre, special conditions for border crossing and the geographic location for the emergency response operation

This objective was exercised during the International Coordination Conference where a formal acceptance was made, followed by the requesting country describing the terms of assistance. The operational information shared during the conferences was border crossing procedures (Valid travel documents), Logistics and transportation plan (entry points) and other Operational information. According to the requesting country information on host nation support was shared. However, according to the assisting countries no information was received about host nation support. It seemed to differ in the opinion about what guidance was provided regarding Host Nation Support. One possible explanation for the difference in understanding of what guidance was provided could be the technical issues during the international conference which may have caused some minor information loss. Some of the assisting countries suggested that the form of the conference could be revised to include opportunities to discuss practical issues regarding the different resources, border crossing procedures and communication systems (Tetra).

Border Crossing Exercise

The Border Crossing exercise was performed live at the border stations Sep 22-23th.

The assessment ground for the Border Crossing exercise is based on the procedures and requirements outlined in the Barents Joint Manual. It is about applying the most simplified border crossing procedure that is possible. Participants need to hold valid documentation describing the operation and the composition of the forces and providing complete lists of the members of the response teams and emergency response resources. Special permissions (for government or military personnel, aircraft, ships or vehicles) must be issued and valid before crossing the border. The legal aspects governing border crossing procedures differ for Norway, Finland and Russia, due to the different forms of cooperation (EU, Schengen Agreement, and Barents Agreement). The preparations for the border crossing were a part of the planning phase for the exercise and were also integrated in the Alarm Exercise, during the international conference.

The actor's joint objective in the exercise

Explore the capability to execute an efficient border-crossing. This includes the following sub-objectives;

- Ensure a quick and simple border-crossing of emergency response teams and resources.
- Have prepared certificates (issued by the requesting country), permits, inventory of equipment and travel documents to enable border crossing without delay.

The data presented is based on an AAR dialogue with point of contacts representing assisting teams and evaluation forms from designated evaluators.

Evaluation Results

The objective was performed in a partially effective manner, with the need for improvements. The majority of the established border crossing procedures and requirements according to the Barents Joint Manual were followed and proved adequate for achieving the exercise objective. The requesting country need to ensure that necessary personnel from the requesting country are present at the border crossing station to meet-up with the assisting countries convoys.

Ensure a quick and simple border-crossing of emergency response teams and resources

Before the border crossings the assisting countries convoy commanders were in contact with the requesting country's meet-up teams in order to report estimated time of arrivals at the border stations. This process was facilitated by the fact that most countries chose to travel in one convoy instead of several. The border crossings went quick and simple mainly due to the fact that a simplified procedure were applied, no restricted equipment were declared and the fact that there was a limited control of the assisting countries convoys. However, in order to ensure a quick and simple border crossing and movement into the emergency area, the requesting country need to ensure that necessary personnel from regional authorities are present at all border stations to meet-up with the assisting countries and escort convoys upon entry and exit.

Have prepared certificates (issued by the requesting country), permits, inventory of equipment and travel documents to enable border crossing without delay

The border crossings went quick and simple due to the fact that the custom stations were applying simplified procedures. In addition permits and travel documentation were well prepared during the planning phase of the exercise. This means that the assisting countries were not stopped and controlled for firearms, food, pharmaceuticals, etc. which in a real situation could delay the rescue operation. However, the requesting country should strive to apply equivalent border crossing procedures at the border crossing stations.

Command Post Exercise

The Command Post Exercise (CPX) was conducted Sep 24-25 in Kiruna at the local Fire Station. The exercise was designed in two steps; a pre-exercise Sep 24 aimed at establishing On Site Operations Coordination Centre, OSOCC, and a main exercise Sep 25 where CPX interacted with the field exercise according to a set time line;



Figure 2. Exercise timeline for Command Post and Field Training Exercises.

The assessment ground for the CPX is based on Swedish legislation and the United Nations standardised concept for OSOCC. The Barents Agreement and the Joint Manual does not include directives or guidance for cooperation when international assistance is received. The core aspects in the exercise is about exploring how an OSOCC within the Barents Cooperation can be organised and designed to enable timely and adequate response to the incident sites. How the OSOCC is organised and designed to provide command and collaboration at the incident site through joint working methods and the ability to coordinate international emergency response teams and resources to support rescue operations.

The actor's joint objective in the exercise

The capability to establish command and control over resources and actors. This includes the following sub-objectives;

- Establish On-site Operations Coordination Centre (OSOCC).
- · Communicate and share Situation Reports.
- Common operational picture.
- · Shared situational awareness analysis.
- Provide joint direction to the incident sites.
- Collaborate to prioritise and coordinate emergency response resources to incident sites.
- Evaluate and follow up decisions and actions taken.

The data presented is based on four AAR dialogues with OSOCC Management and team members from the clusters and evaluation forms from designated evaluators following the exercise in OSOCC.

Evaluation Result

The objective was performed in a partially effective manner, with the need for improvements. The management was reactive and a more long-term perspective in the planning and projection of resources could make OSOCC more capable. Available technology was not utilized to support OSOCC command post E.g. positioning of tetra terminals and live stream from helicopters or drones. The pre-exercise Sep 24 proved to be a good learning opportunity to prepare the exercise participants on roles and responsibilities, work procedures, communication and alarm routines. There were different perceptions between international and Swedish participants on the scope of the exercise e.g. if the focus was international cooperation or conducting efficient rescue operations. This initially caused confusion and gaps in expectations. These gaps in expectations could be delimited in future exercises in the planning phase of the exercise and through extended inbriefs and pre-exercises (E.g. distributed or table top exercises).

Establish On-site Operations Coordination Centre

The overall impression of the establishment of OSOCC was that the chosen strategy was to integrate international assets to the Swedish response system which initially caused much confusion as the international terminology of OSOCC sets certain expectations. Usually international deployments are complementing local authorities' by conducting independent tasks.

The performance of the established OSOCC improved throughout the exercise and functioned well by the end. The exercise participants were not given a situation or scenario inbrief and had to establish OSOCC under unclear conditions without instructions. The exercise participants however accepted the situation and managed to establish OSOCC even though they lacked critical information. The OSOCC was established during the first meeting on Sep 24. There were initially major communication, information structure and technical issues. As soon as the issues were resolved the technical systems were sufficient enough to accommodate the needs of command and communication.

The OSOCC was organised into four clusters; Rescue, Health, Police and Others (civil defence and traffic). International teams were assigned in clusters and OSOCC management office was manned by the requesting country only. International exercise participants felt that more time could be given in forming the clusters and that they could have been more involved in OSOCC activities. Tetra channels were assigned and OSOCC management instructed the clusters to the command and communication system after a test alarm that revealed several failures in communication structure that could be revised. However no communication charts were displayed.

The working methods and main form for information sharing were repetitive meetings and continues communication with established clusters. The meetings were held every second hour. In addition meetings were held every time new incidents occurred. The agendas of the meetings followed the same structure; overall situation followed by updates about ongoing activities. The documentation (minutes, log book), tracking of the activities and follow-up on previous meetings and actions taken could be improved. Other tools used were ESRI mapping and a One Note platform which proved to be a good practice, Tetra was mainly used to inform outgoing teams.

Communicate and share Situation Reports

No communication plan was identified and even if Situation Report (SITREP) was mentioned in the coordination meetings, they were seldom used during the ongoing exercise and were not required from the international teams. Consequently, SITREPs from the different clusters were not given on a regular basis and lacked structure and adequate information. SITREP lacked a short and long-term perspective and did not include assessment of the capability development in the next hours or days. After incident management there was oral reporting, but not in written form. Some of the units and international teams kept their own SITREPs, without sharing and forward the information. The cluster that had the most developed way of producing SITREPs were the Police that were up and running early-on. The Rescue Services cluster had some difficulties regarding this process and did not have an operational picture done until the afternoon.

Establish and maintain a common operational picture

The vast complexity of the exercise and the large number of relocated resources made it difficult to establish and maintain a common operational picture (COP). OSOCC had a table displaying responding resources and SOS Alarm maintained situation picture of rescue units, whereas police, health and others all had a situation picture of their own. There was insufficient coordination and information sharing of operational pictures. Consequently, the clusters lacked the overall picture and information also got stuck in the clusters. Common operational picture was shared during meetings. Digital maps and coordinates was not used in reporting. The situational picture lacked the long term perspective of the available and needed resources. It was also observed that capability inventory was done over again after every incident. This was due to a lacking capability matrix and the fact that assessment of needs was not discussed properly.

Perform and share situational awareness analysis

The analysis was reactive and short-term and due to the limited interaction with local emergency management agency, the overall picture remained unclear. There was no discussion on the sustainability and forecast of the capabilities. Implementing the recommended SOPs regarding communication plan and structure and content for SITREPs and improved coordination among clusters could improve situational awareness analysis. One of the issues making an analysis was that the SITREP lacked a short and long term perspective.

Provide joint direction to the incident sites

The sites received needed response, and often even more than was needed. The exercise provided a good opportunity for all participating units to respond to the different sites. The chain of command differed between the clusters and different authorities worked in silos which occasionally was a challenge for providing a joint direction to the incident sites. By developing standardised procedures for coordinating resources this could be improved in future exercises.

Collaborate to prioritise and coordinate emergency response resources to incident sites

Conducting the OSOCC exercise all of the exercise participants took joint responsibility. By trying to share the common operational pictures and conducting SITREPs the exercise participants were able to coordinate and prioritizing emergency response resources to the incident sites in a good manner. Although the positioning on the vehicles were missing which made it hard to get an overview of the resources. Another aspect highlighted by the exercise participants was that the labelling of resources could be improved by using ability and competence instead of call names.

Evaluate and follow up decisions and actions taken

The overall picture of the situation was fragmented to the clusters. There were no clear structure for evaluating and follow up decisions and actions taken. Teams were not instructed to report back on the completed actions. Consequently the evaluation and follow up was minimal.

Field Training Exercise

The main Field Training Exercise (FTX) was conducted Sep 25 at three incident sites; Loussavara Mountain and cave, and Torne River). The accident sites consisted of different environments (mountain, river and cave) with different scenarios and sub-exercises focusing on international collaboration. In total 100 figurants were used to make the exercise more realistic. Prior to the field exercise, a preparatory Training Day was held for the exercise participants.

Luossavaara Mountain

A work place accident with an explosion causing a collapsed building and a landslide. Approximately 20-30 persons are affected, some are trapped in the building and in the surrounding terrain. When emergency resources arrive to the site a traffic accident involving a fire truck has occurred.

Torne River

Bus crash on a bridge with mini bus and a tourist bus involving many passengers. The tourist bus has turned over to the side and is blocking the road. A second accident occurs on the river during a river rafting tour involving a school class. A third accident occurs, a house fire on one of the islands in the river.

Loussavara Cave

The landslides caused by the explosion at Loussavara Mountain during the morning has caused landslides in the area. A group of youths hiking the area are trapped inside and nearby Loussavara Cave.

The assessment ground for the FTX is based on Swedish legislation and common guidelines for collaboration and command.

The objective in the exercise is about exploring how the emergency actors work to achieve command and collaboration at the incident sites through joint working methods for emergency response collaboration and to facilitate conditions for international assistance to operate.

The actor's joint objective in the exercise

The capability to establish joint command and control for collaboration to achieve direction by liaison at the incident site. This includes the following sub-objectives;

- Initiate liaison with other emergency response actors.
- Ensure safety and resource management at the incident site.
- Communication and Situation Reports from the incident site to strategic (OSOCC) level of command according to a set communication plan.
- Establish on-site command and ensure that officers are pointed out with correct tabards.
- Continuously share information for a common joint operational picture.
- Share situational awareness analysis.
- Establish an operational joint direction and coordination on-site.
- Evaluate and follow up decisions and actions.

The data presented is based on three AAR dialogues with commanders, evaluation forms from designated evaluators following the exercise at each of the sites.

Evaluation Results

The objective was performed in a generally effective and complete manner, with minor needs for improvements. The exercise actors were able to establishing joint command and control to achieve joint direction by liason at the incident site. Resources arrived timely at the various sites and on-site command were set up and regular meetings were held for Situation Reports, division of work and prioritisation of resources. The absence of basic information on the scenario, exercise conduct and safety regulations, created some uncertainties for the exercise participants.

Initiate liaison with other emergency response actors

Liason was initiated through Tetra devices and followed up by face to face meetings at the incident sites. The initial liason worked well thanks to the initial organisation of the command and teams. The different services arrived at different times and in different orders at the incident sites. When arriving on-scene the various commanders tried to identify where the different command posts had been established. Because everything was established more or less at the same time proper liason was usually first established when all commanders were present on scene and could initiate a situation report meeting in order to create a common operational picture. Shortcomings in the ability to establish liaison and information sharing are linked to the communication plan not being adequately communicated and anchored, that exercise participants were given incorrect information about which channels to use resulting in occupied radio channels and that English was not used as the primary working language which resulted in Finnish and Russian exercise participants losing important information.

Ensure safety and resource management at the incident site

Initially safety was planned for and executed according to the commanders decisions and proved to work well. Shortcomings in safety is linked to the Barents countries different safety culture and safety routines at the incident site as well as the excessive amount of rescue personnel that were to be distributed to only three sites. The different methodologies of how to assess safety was overcome thanks to the well-functioning cooperation among countries and organisations.

In general the resource management worked even though there were too few medical resources available. It could have been further improved through quicker reinforcement between the different units depending on what tasks that where to be solved. The resources came to the sites fast and were ready to act when needed by command. Occasionally the radio channels became too occupied with the result that some resources had to wait to be activated.

Communicate and share Situation Reports from the incident site to strategic (OSOCC) level of command according to a set communication plan

Communications and Situation Reports were made regularly from the incident site to the different clusters in OSOCC over radio in a generally effective and complete manner. Although the reporting of geographic positions were lacking. The exercise participants didn't fully understand what channel they should use and also had problems to name their own units and other units, which hampered the communication. Occasionally some actors worked in silos, which resulted in information not being passed on to other actors.

Establish on-site command and ensure that officers are distinguished with correct tabards

At the incident sites the exercise participants established command posts and timely initiated coordination meetings with close cooperation between services and countries. The command posts worked well and could have been further improved with clear sub-functions with supporting staff, as this put a lot of strain on commanders. In most cases the officers were distinguished by the correct tabards, but at several occasions this was not the case.

Continuously share information for a common joint operational picture

Information was shared continuously for a common joint operational picture (COP), for this purpose a helicopter from the Swedish Police was used. Updated information from the helicopter and plotting was made on a white board at the command post. After the meetings the police shared information to the OSOCC by radio. However, the utilisation of available resources could be improved, E.g. live views from the helicopter, the information on the white board could be more informative in terms of; plotting, joint aim, current threats to own personnel and COP. The ability of information sharing between services and the monitoring and updating of COP as well as principles of Joint Command and Coordination, seemed to decrease as the exercise went on.

Perform and share situational awareness analysis

The lack of a joint procedure for providing information sharing and visualising information at the command post affected the information available on which situational analysis was based. The command post did not make use of available resources to produce current common operational pictures to support situation analyses. The strain on commanders due to lack of supporting sub-functions contributed to commanders being reactive and not having time to analyse the situation. Consequently, no deeper situation awareness analysis was made.

Establish an operational joint direction and coordination on-site

Joint direction and coordination were performed in a generally effective and complete manner. Initially it took some time to achieve the joint direction when the different actors arrived on-site as the first focus was to establish command posts. The commanders however quickly organised coordination meetings in order to achieve joint direction and coordination. The decided joint direction was followed in most cases.

Evaluate and follow up decisions and actions

The capability of evaluating and following executed actions was performed in a generally effective and complete manner. Sometimes the commanders needed to follow up with different teams in order to ensure actions that the teams could have executed without the involvement from commanders. Some actions weren't followed up sufficiently. Because of the short timeframe of the exercise not many long term evaluations were made.

Exercise Concept and Individual learning

At the end of the exercise (ENDEX) the short term effects of the exercise; the exercise concept and individual learning, were evaluated through a survey. The data collection was conducted on two leads; at Base Camp a survey station was set up and tablets were used to collect data, the link to the survey were also posted in an email sent out to all functions in the exercise to get as big a reach as possible. The questions in the ENDEX-survey were based on: Participant type, Gender, Management position and work service. Related to this earlier-and years of experience were added.

Evaluation Results

As only 22 % of the exercise participants were able to answer to the ENDEX-survey, it is not possible to draw extensive conclusions on the data. Although trends are evident in the data, complementary interviews or additional surveys are needed in order to generalise the result. The result is likely biased due to language barriers. Other factors that may affect the respondents' tendency to answer the questions in a meaningful way are related to cultural differences, technical literacy, attitudes towards evaluation and the timing of the survey.

The number of respondents were significantly low which makes it difficult to draw fixed conclusions. The number of respondents could increase aiming at a greater population, using additional technical means for conducting the survey and by extending the time frame of the deadline for the survey. Another approach could be to verify data through interviews or making the survey in all four languages.

Respondent break down

The total population, constitution of exercise organisation and exercise participants, were 600 individuals. 130 individuals submitted answers to the ENDEX-survey, 22 % of the population. The majority of the respondents was from the exercise organisation although the answers revealed that they belonged in the exercise participants. This may be explained by language barriers as the survey was in English. Gender distribution among the respondents was 57 % men and 43 % women.

Exercise Concept Assessment

A majority of the respondents expressed a high level of satisfaction connected to; safety and security arrangement, real life support and technical support systems and infrastructure. About one third of the respondents stated that they experienced mental stress and physical strain repeatedly during the exercises which shows that the practical and physical events had the desired effect.

By using AAR as a method for collecting data directly after the exercise the evaluation team could get a good idea of the sentiment of the exercise participants, while providing a learning opportunity for the exercise participants. The added value of AAR as an evaluation tool was partly verified by the ENDEX-survey which showed that there are some links between the following deliverables;

- Participants in AAR.
- Management/Leadership.
- Own preparations.
- How well the exercise completely or partially met their expectations.
- Irrespective of participating country.
- Irrespective if the participant was from the exercise direction or exercise participants.

One conclusion can be that AAR is a factor for an increased learning effect, however needs to be isolated against management/leadership and own preparations as these variables may affect the perception of AAR.

Learning effect assessment

A majority of the participants stated that the exercise offered a high level of learning conditions. This can especially be discerned in the Field Training Exercise were the events including Crush Syndrome and Hypothermia stand out in the preparation phase of the exercise.



Lessons Identified and recommendations

This chapter presents a collation of lessons identified from the exercise linked to each exercise objective and recommendations to strengthen the Barents Cooperation.

Lessons Identified

Capability to handle alarm and request for assistance

- Need for procedures to ensure updated contact lists and reporting formats. The preferred way of communication is email. If telefax is no longer the preferred way of communication this should be revised in the Barents Joint Manual.
- Evaluate if the capability reporting format can be used in future exercises and if it should be revised to improve the analysis and matching of resources (especially medical) and Host Nation Support needs.
- Evaluate if the international conference also could be used by assisting
 countries to confirm resources and materials participating in the
 exercise and to discuss practical issues regarding resources, border
 crossing procedures, communication system procedures and Host
 Nation Support needs.
- Procedures can be developed to verify that the operational guidance (permits, border crossings, operational information, etc.) from the requesting country has been received and understood by the assisting countries.

Capability to execute an efficient border crossing

- Develop a joint border crossing communication plan with specific timings and locations for Situation Reports (SITREPs).
- A Border Crossing Guidance document was established which facilitated
 the procedures for preparation of certificates, permits and inventory of
 equipment and travel documents during the planning process. Evaluate if
 the Barents Joint Manual should include procedures for preparing Border
 Crossing guidance documents for each Barents country accessible through
 the BEAC website.
- Need to ensure that necessary personnel from Regional authorities from the requesting country are present at the border crossing to meet-up with the assisting countries to escort convoys upon entry and exit.

Capability to establish command and control over resources and actors (OSOCC)

- Conducting small exercises to test different procedures in the OSOCC during the establishment was a good practice that should be considered in future exercises.
- The chain of command and working procedures were unclear. If the OSOCC is not established according to the United Nations standards then Standard Operating Procedures describing roles, expectations, procedures and tools for establishing and maintaining an OSOCC have to be developed and shared in advance. Furthermore, there is no common view or procedures related to collaboration and organisation of an OSOCC in the Barents context.
- Involve more Host Nation Support Staff Functions that can support the assisting countries and help them to understand everything from technical systems to the design of the chain of command.
- Developing common capacity inventory procedures by defining and labelling capacities rather than resources and material could increase the understanding and help facilitate the analysis of necessary capabilities at the incident sites.
- Improve efficiency in coordination and monitoring of resources through better use of technical systems for positioning.
- Develop and anchor information on the exercise and conduct in advance and improve preparations through pre-exercises and extended Inbriefs with information such as; the exercise and expectations, scenario, joint communication plan, standard operating procedures and roles etc.

Capability to establish joint command and control for collaboration to achieve direction by liaisons at the incident site

- The initial organisation of the command post and teams proved to be a good practise.
- The initial Situation Reports worked in a generally effective and complete manner. Although working methods to increase information sharing after the initial phase needs improvements to avoid different services working in silos.
- Ensure that a communication plan is communicated and anchored in advance to avoid misunderstandings, since communication is key for the ability to operate in the field.
- Ensure that officers are distinguished by the correct tabards to create clarity for the services operating at the sites.

- Participating actors should strive to use English as a working language even more to improve communication between countries and teams.
- A better understanding in the participating countries risk and safety assessment procedures could increase the safety management further.
- Resource management on site can be handled more efficiently, especially the medical resources that were few. This is especially of importance in the Barents Region were resources are scares.
- The command posts worked well and could be further improved with clear sub-functions with supporting staff. More emphasise should also be given to encourage a proactive approach from all involved teams to relieve the commanders and ensure that they have sufficient time to conduct their tasks at the command post.
- Need for a procedure for providing information sharing and visualising information that is structured and easy to use at the command post. The Joint Command and Coordination concept provides a method for this purpose and could be applied to a greater extent.
- Joint direction and coordination on-site was performed in a generally effective and complete manner. The joint working methods with regular coordination meetings proved to be a good practise.

Recommendations

The recommendations are clustered into key areas and presented in terms of corrective measures, planning process and organisation of future Barents Rescue Exercises.

Corrective measures

Consider reviewing procedures in Barents Joint Manual to strengthen the collaboration in emergencies

Evaluate if the Barents Joint Manual should be reviewed to strengthen the collaboration in emergencies. The result from the exercise highlights some areas to be considered; procedures for alarm and request of assistance, border crossing procedures as well as the absence of procedures related to cooperation and organisation of an OSOCC which can be made clearer as it is dependent on the legislation of each country.

Planning process

Consider developing information management during the planning process to improve preparation for participants and facilitate the implementation of the exercise

Improve procedures for anchoring the exercise aim, expectations and conduct instructions to all involved exercise audience. The exercises planning process emphasised the importance of developing communication structures and redundancies to overcome bottlenecks in forwarding information to exercise participants. The redistribution of information and coordination between and within national, regional and international sectors and agencies need to become more efficient. This was especially prominent in the Command Post Exercise and the Field Training Exercise as the exercise audience had divergent perceptions on the purpose and conduct of the exercises, which affected the experience and the exercise performance. National point of contacts (POC) might need support from POC communicator to support the anchoring and communication to the national organisations. Furthermore, all involved parties need to pay respect to deadlines set by the host nation to get the best possibilities to plan for the reception of teams and materials and their needed support.

Organisation of future Barents Rescue Exercises

The exercise demonstrates the value and continued need for exchanging common methods for on-site cooperation and evaluation to improve the collaboration in complex emergencies

Continue the exchange of joint methods for evaluation and working methods on-scene to increase the knowledge and understanding between the Barents countries to allow for a well-coordinated collaboration in case of a complex emergency. After Action Review proved to be an efficient method for collecting data and involve the exercise participants in reflecting and learning from their own performance. In future exercises Disaster Victim Identification could be a future area for improving the knowledge and working methodologies for all involved services on-scene.

The exercise concept developed for Barents Rescue 2019 taking stock of common methods and research provides a good basis for future exercise concepts

The exercise concept could emphasise the learning process even more by revising the order of activities during Event Week (Eg. Traing Day, Station Training and Main FTX). There should also be a larger focus on Inbriefs and pre-exercises (E.g. discussion based exercises) for the exercise participants, in order to make better use of the exercise opportunity during Event Week. Because of the changed planning cycle this type of preparations could be conducted during the second year of the planning in order to create continuity and maintain the preparation for all involved parties.

Capability for emergency response collaboration can be strengthened through improved communication between Barents countries for command and control purposes and exchange of safety procedures

The Barents Exercise is an international exercise and there is a need for stressing English as the working language. Lessons identified in the exercise demonstrate the need to; improve communication between Barents countries for command and control purposes; increase knowledge of command structures and safety assessment procedures.

The Barents Rescue Exercises should continue to take into account the climate change impact and changing risks patterns in the region as a basis for developing the response to complex emergencies

The Barents Euro-Arctic Region is one of the worlds' most vulnerable regions in terms of environment degradation and increasing climate change impacts. At the same time the region is becoming more accessible for activities on land and sea. Together these factors change the risk patterns in the Region. In the light of these challenges, Barents cooperation and joint exercises will become an increasingly important forum for developing joint response capabilities for managing these new risks in the region.

The evaluation results and lessons identified should be considered in the planning of future exercises and joint ventures within the exercise cycle

Lessons identified in the exercise are largely reoccurring in previous evaluations of Barents Rescue Exercises (2013, 2015 and 2017). The Barents Rescue Cooperation should focus on these identified gaps and shortcomings in the planning of future exercises and joint ventures within the exercise cycle. The collaboration should focus on preventing the same shortcomings from being repeated in upcoming exercises or rescue operations. This demands a joint effort by all Barents countries as well as the participation of all sectors.



General conclusions

The Barents Rescue Exercise 2019 was a first step in the new direction from Joint Committee in developing an exercise concept, with a greater focus on learning and networking between international colleagues from operational and strategic emergency organisation to political level. From the planning process to the implementation of the exercise, international colleagues were invited to participate in the joint planning and development of the exercise and evaluation process. Training was offered in After Action Review and in Joint Command and Coordination in common staff methodology.

During Event Week, exercise participants had the opportunity to take stock of different activities to increase learning, exchange of joint working methods and current knowledge and research related to exercised core capabilities while networking with different countries, sectors and actors.

The Exercise Concept developed for Barents Rescue 2019 provides a good basis for future Barents exercises to build on. It is through exercising jointly and cooperating that the joint capability in the region can strengthen and develop to allow for a well-coordinated collaboration in case of a complex emergency.

The exercise result highlight the need for a continued exchange of joint working methods to improve the knowledge and understanding between the Barents countries to increase the efficiency of the international cooperation at an incident site.

Lessons identified in the exercise are largely reoccurring in previous evaluations of Barents Rescue Exercises (2013, 2015 and 2017). A main conclusion is that the collaboration should focus more on these shortcomings in future exercises and joint ventures.

The Barents Rescue Cooperation is an important opportunity to work jointly to take stock of previous lessons identified from emergencies and exercises while looking at the opportunities and common challenges that lies ahead.

