



Swedish Civil
Contingencies
Agency

Exercise Barents Rescue 2011



**BARENTS
RESCUE**
Sweden 2011

Exercise

Barents Rescue 2011

Planning

Performance

Evaluation

Exercise Barents Rescue 2011

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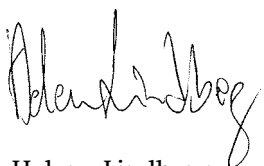
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Preface

The exercise described and evaluated in this report is the fifth exercise within the framework of Barents Rescue, and it is the second time Sweden is responsible for the planning and realisation of a Barents Rescue exercise. The Barents Rescue 2011 is so far the largest international exercises conducted in the Barents region. The aim of the exercise was to improve the preparedness, make better prerequisites for handling consequences of a major catastrophe – a dam collapse in the Lule River in the northern part of Sweden. In order to manage the situation assistance from neighbouring countries in the Barents region were needed. Therefore it is important to cooperate and learn to know each other and each others cultures.

The exercise extended over a long period of time: from the first Table Top exercise in April 2011, via a number of exercises, to the Field Training and Command Post Exercises in September 2011. Around 60 organisations and 2 500 persons participated in the exercise.

This report describes this exercise and addresses lessons learned from the start of the planning process in February 2010 to the end of the exercise in September 2011. The report also presents recommendations for improving the Barents Rescue exercises and cooperation in the future. The base for the presented evaluation is the overall objectives for the exercise, agreed by the participating organisations. It is of great importance that the lessons learned are dealt with so that the ability to handle crisis and disasters in the Barents region can improve.



Helena Lindberg
Director General MSB

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Summary

Barents Rescue 2011 is the largest international exercise conducted in Sweden thus far. Traditionally the Barents Rescue exercises have had an operational focus on field training exercises. This year the intention was to involve strategic parts on different levels (from local to international level) more fully. This ambition led to the decision to spread the exercise parts over a longer period of time, starting with Table Top Exercise 1 in April and finalised with the Field Training Exercise/ Command Post Exercise in September.

The aim of the exercise was to improve cooperation and coordination between countries in the Barents region during an emergency situation in accordance with the Barents agreement. This aim was generally fulfilled. Given a possibility to meet, learn to know each other and work together creates a better understanding for each others different cultures and working methods.

Even if the general aim for the exercise is fulfilled, the evaluation also point at things that can be improved. One important example is the planning process. During such a long planning process there are good possibilities to learn just from planning. Of course the expectations on the participants shall be as clear as they possibly can be from the beginning, but there must be space and flexibility for changes made during the planning. It is important to have trust in the process and to be open for learning and achievement during this period.

Another example important for the Barents Rescue exercises is to request and receive international assistance. During the exercise requests were made but the receiving was not really tested.

Since Sweden is not used to receive and handle international assistance some problems occurred on how to use the international teams arriving. Since there was no function with the aim to coordinate these assets (as eg. OSOCC) it took too much time for the rescue leader at the sites to coordinate the teams. This also caused that competences in the teams were not fully used. Despite these problems the cooperation at the sites worked out well and the teams learned a lot from each other.

Even if there are many things to improve to make the cooperation better and more efficient, much has been achieved during the exercise Barents Rescue 2011 and steps are taken in the right direction towards a safer and better prepared Barents Region.

1. Background – general framework for Barents Rescue 2011¹

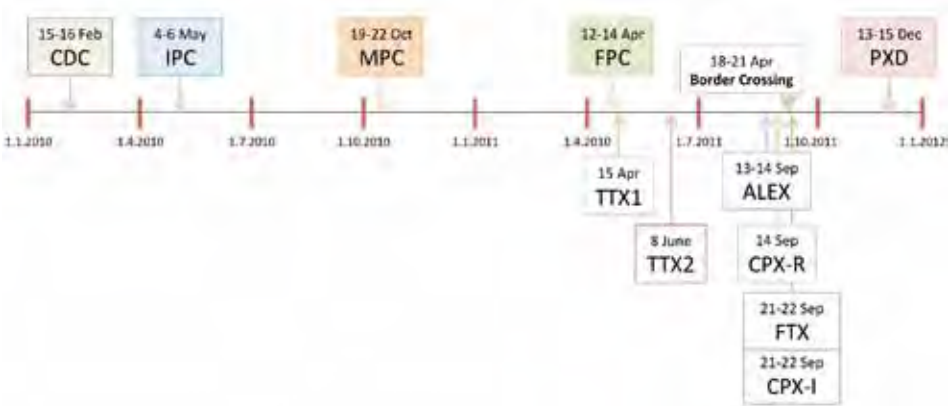
Barents Rescue exercises have been implemented within the framework of the Barents Cooperation since 2001. The first exercise was executed within the framework of the Partnership for Peace. The exercises have focused on strengthening and maintaining preparedness for mutual assistance in major disasters in the Barents Region. The host countries have earlier been Sweden in 2001, Norway in 2005, Finland in 2007 and Russia in 2009.

The Barents Rescue exercise series was originally intended, among other things, to strengthen the resources of countries in the Barents Region, an area covering great distances but with limited resources. An agreement was signed between Finland, Norway, Russia and Sweden in December 2008 concerning cooperation involving the prevention of, preparedness for and response to emergencies in the Barents Region. The agreement stipulates that the contracting parties will observe the benefits of sharing information and lessons learned in relation to preventing and responding to emergencies and restricting and eliminating their consequences, and the implementation of training and joint exercises.

The Swedish Civil Contingencies Agency (MSB) was tasked by the Swedish Government to plan and implement the Barents Rescue 2011 exercise during autumn 2011, pursuant to the multilateral agreement that Sweden has entered into with other countries in the Barents Region within the Barents Euro Arctic Council (BEAC).

MSB, in cooperation with the concerned governmental agencies and nations, (listed below) did plan and implement the 2011 exercise in Barents Rescue format, pursuant to the cooperation agreement that was signed in 2008. The exercise was to be implemented during the second half of 2011 in the Swedish part of the Barents Region - Norrbotten.

1. Lars Hillerström, Officer Conducting the Exercise



1.1 Exercise planning

At the Concept Development Conference (CDC) conducted in mid February 2010 form, engagement and performance of the upcoming exercise were discussed. There was a consensus on a “broad” exercise in a successive model, an Alarming Exercise and a final Field Training Exercise with realistic training events. The importance of a realistic scenario was specially stressed. It was also agreed that the Planning Process itself should be a learning process with enough space for participating organisations to test and update their own plans.

At the Initial Planning Conference (IPC) in Stockholm less than three months later, an embryo to a scenario was presented based on an assumption that a hydropower dam in Norrbotten collapsed due to a long period of heavy rain, resulting in huge catastrophic consequences. The created scenario gave space for exercising during a preparative and proactive period as well as for training various competences and units during a final Command Post Exercise (CPX) and a Field Training Exercise (FTX).

During the IPC suggestions on main aims and objectives were created and the intention was to have those processed in respective country and organisations to be finally decided at the MPC in October 2010.

At the IPC the main intention from the CDC also was decided. The exercise cornerstones should build on an international Table Top Exercise during a preparation period, an Alarming Exercise

and a final Command Post Exercise combined with certain Field Training Exercises within the scenario framework. The CPX should be based on the consequences of a dam collapse in Lule River and the FTX events should in that context suite the participating organisations and units' needs. Minor final adjustments should be allowed no later than at the Final Planning Conference (FPC) in Luleå in mid April 2011.

During the period in-between the IPC and the MPC the planning work on the final CPX was intensified and different objects in Norrbotten, suitable for the training purposes, were assessed. When doing this, a need of complementing training for the municipal rescue services in Norrbotten was identified as well as for some involved Swedish organisations. As a consequence, two extra training days for local operational units, a preparatory Table Top Exercise (TTX 1) and a Command Post Exercise for regional authorities (CPX Regional) were added into the exercise schedule.

At the MPC in Luleå one year before the final CPX/FTX, the recommended exercise sites were visited and a final decision was taken concerning what field exercise events to plan. It showed complicated to plan coordinated field training events with such high complexity for so many different competences at only one place. Instead, different places with a realistic geographical spread in accordance with the scenario were chosen. The maximum distance between the exercise sites came to be about 150 kilometres. The field exercise events should also be designed in form and proportion in accordance with the preliminary units' participation given from involved authorities.

During the MPC, planning of the final CPX was intensified, injects were formulated and a substantial complementary Media Play was created.

As many present and important representatives at the MPC felt they had limited mandate, the final exercise aims and objectives could not be decided as planned. They were therefore finally set in a telephone conference three weeks later.

After having decided on exercise aims and objectives in November 2010, the planning process had to speed up. The CPX International and the FTX planning were intensified and two national exercises (TTX 1 and CPX Regional) were created as mentioned earlier.

At the FPC in April 2011 the ALARMEX, the CPX International and the FTX planning were decided on in consensus as well as the final participation in the FTX. However, the decided participation changed. As late as three weeks before the FTX start, units were cancelled and new units were enrolled. Missing units and new competences created a massive re-planning. As an example, a planned major SAR event (collapsed building) had to be cancelled and replaced with a maritime rescue event.

1.2 Exercise description and concept

1.2.1 General format

The format of the exercise followed the conceivable progress of events, prior to, during and subsequent to a major dam collapse on the Lule River. The scenario was fictitious and its primary purpose was to make it possible for the exercise audience to achieve their established objectives.

1.2.2 Main and sub-exercises

Barents Rescue 2011 consisted of a range of main and sub-exercises that aimed to develop the capacity to provide and receive international assistance in the event of disasters in the Barents Region. The sub-exercises were held during a period from April to September 2011. The main exercises were held on 21-22 September 2011.

The five sub-exercises were:

- Two Table Top exercises, TTX 1 and TTX 2, which should increase knowledge and capacities. TTX 1 focused on national coordination, whereas TTX 2 focused on international coordination.
- The Alarm Exercise, ALARMEX, which consisted of an alert phase and a decision phase.
- A Command Post Exercise, CPX REGIONAL, which aimed to test coordination in Norrbotten County in conjunction with the dam collapse.

- A border crossing and receiving assistance exercise, BC/RECEIVE, which aimed to test issues that arise when providing international assets and crossing national borders.
- The main exercises were:
 - An International Command Post Exercise, CPX INTERNATIONAL, which primarily aimed to test international cooperation at various staff and command levels
 - A Field Exercise, FTX, which primarily aimed to test international operational cooperation in the field.

Linked to the exercise was also a media play with the aim to give participating countries and organisations an opportunity to exercise their organisations in crisis communication, and to create a realistic and relevant challenge for working with media during a crisis.

1.3 Scenario overview

In general

The fictitious scenario for the Barents Rescue 2011 exercise was based on a dam collapse in the Lule River, which resulted in a number of incidents. The exercise was an opportunity to train and test various emergency response skills. Participants from the northern parts of Norway, Sweden, Finland and Russia were able to influence the type of incidents included in the exercise. For a detailed scenario see appendix 1.

Lead in scenario

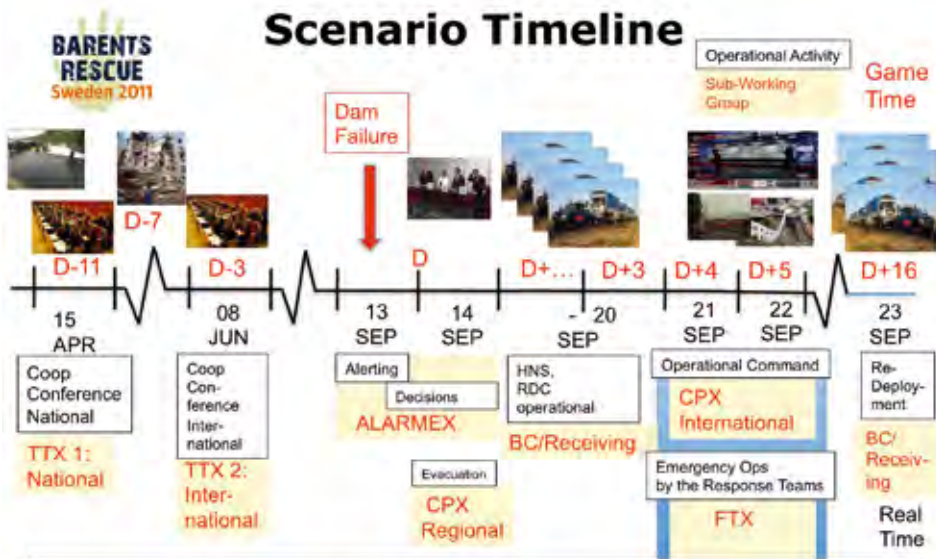
In a fictitious reality in the autumn of 2011 we found that a number of serious disasters have occurred around the world. In the wake of Haiti, Brazil, Chile, and Iceland, national and international emergency services were stretched to the limit and enormous resources were needed for societal infrastructure recovery. The international systems for risk assessment and emergency response, the UN and other organisations, indicated that more disasters were expected. This because the negative effect of global warming is leading to more natural disasters and an increased risk for environmental threats.

Since early April 2011, continuous rain had filled the waterways in the middle and northern Sweden, a phenomena shared by almost whole Europe. The water levels were extremely

high throughout the regions. The hydropower companies had increased the number of inspections of hydropower dams. In July 2011 the inspection of a hydropower dam in Västerbotten County detected a leak, where water was flowing into the Ume River. The leak was stopped and a major incident avoided. However, one person was killed while repairing the dam site.

The Swedish media and the media from some neighbouring countries in the Barents Region described the action taken by the responsible companies and by the authorities as a failure (“too little too late, just good luck that nothing more serious happened...”). The media pressure on the entities involved was immense and they had continued to report on the rising water levels in Norrbotten and Västerbotten.

At the beginning of September 2011, a large earthquake hit a popular tourist area in Turkey (also affecting tourists). Turkey requested international assistance and many countries, including



Dated 10 MAR 2011



Sweden, offered to help. Emergency response teams departed for Turkey on September 12th.

MSB was tasked by the Swedish Government to conduct national co-ordination conferences for the purpose of coordinating public information and evaluating the preparedness and effectiveness of civil protection and joint emergency response operations. Due to the current situation, the Swedish Government had also decided, in close consultation with the governments of Finland, Norway and the Russian Federation, to arrange an international co-operations conference for representatives from countries in the Barents Euro-Arctic Region.

1.4 Field Training Exercise events

The following exercises were performed:

- A train accident in Jokkmokk, mainly arranged with four train cars with dead and wounded people, of which two train cars had fallen downhill, extraction of trapped people, transportation of wounded people and search for missing people in the surrounding terrain.
- A medical rescue exercise linked to the train accident in Jokkmokk focused mainly on the transportation of wounded people, triage/medical prioritising and treatment, identification and registration.



- Evacuation of patients from hospitals, moved to Kallax Airport for transportation with the Swedish National Air Medevac (SNAM).
- A tunnel accident in Letsi, mainly arranged with trapped people and a fire deep in a tunnel.
- A hazmat accident in Boden with ammonia caused of a traffic accident between a cargo truck and a bus.
- A maritime accident in Luleå, mainly arranged as a boat collision with many people falling into the fast-flowing water.
- A fire in the engine room of the icebreaker Atle in Luleå harbour the lower decks were filled with smoke. Since there were people on board, a search and rescue operation was needed.

1.5 Participants

Kingdom of Norway

- Directorate for Civil Protection and Emergency Planning, DSB
- Joint Rescue Coordination Center North Norway, JRCC NN
- Ministry of Justice and the Police
- Midtre Hålogaland Civil Defence District
- Nordlandssykehuset (hospital in Norway)
- Northern Norway Regional Health Authority
- Norwegian Armed Forces – Joint Headquarters

Kingdom of Sweden

- Boden Energi
- Boden Municipality
- Boden Fire & Rescue Service
- Church of Sweden
- Norrbotten County Administrative Board
- Västerbotten County Administrative Board
- Gällivare Municipality
- Gällivare Fire & Rescue Service

- Haparanda Fire & Rescue Service
- Inlandsbanan AB
- Jokkmokk Municipality
- Jokkmokk Fire & Rescue Service
- Kalix Fire & Rescue Service
- Kiruna Fire & Rescue Service
- Luleå Energi
- Luleå Municipality
- Luleå Fire & Rescue Service
- Luleå University of Technology
- Ministry of Defence
- Ministry of Health and Social Affairs
- National Bureau of Investigation (Swedish Criminal Investigation Department)
- National Police Board
- Norrbotten County Council
- Piteå Municipality
- Piteå Fire & Rescue Service
- Norrbotten County Police
- Västerbotten County Police
- SOS Alarm AB
- SWEDAVIA
- Swedish Armed Forces
- Swedish Civil Contingencies Agency (MSB)
- Swedish Coast Guard
- Swedish Customs
- Swedish Federation for Voluntary Defence Education and Training
- Swedish Maritime Administration
- Swedish Meteorological and Hydrological Institute

- Swedish National Grid
- Swedish Radiation Safety Authority
- Swedish Transport Administration
- Swedish Transport Agency
- Swedish Women's Voluntary Defence Organisation
- Sveriges Radio Norrbotten
- Swedish National Board of Health and Welfare
- Volunteer Air Corps
- Vattenfall
- Västerbotten County Council

Republic of Finland

- Crisis Management Center Finland (CMC)
- Elisa
- Finnish Air Forces
- Finnish Red Cross
- Hospital District of Helsinki and Uusimaa (HUS)
- Ministry for Foreign Affairs
- Regional Rescue Department of Lapland
- Vanda City

Russian Federation

- Ministry of the Russian Federation for Civil Defence, Emergencies and Elimination of Consequences of Natural Disasters
- Murmansk Regional Police HQ
- General Directorate for Murmansk Region of the Russian Federation for Civil Defence, Emergencies and Elimination of Consequences of Natural Disasters



2. Evaluation²

2.1 General

This evaluation stretches from the Concept Development Conference (CDC) through the finalisation of the Barents Rescue 2011 Exercise in Northern Sweden, September 2011.

The evaluation is based on the overall aims following the Barents Euro-Arctic Region Agreement³ (further referred to as “the Barents Agreement”), Articles 6 – 12, stating that:

- *The Contracted Parties shall notify each other, without delay and using the channels stipulated in Article 5 (of the agreement) ... on emergencies that may have consequences for other Contracted Parties*
- *The Requesting Party shall notify the assisting Party ... on resources accepted*
- *The Requesting Party, as well as the transit states, shall apply, within its national legislation ... the most simplified border crossing procedures possible ...*
- *... the Response teams shall provide a certificate, issued by a competent authority ... describing the mission and the composition of the (assisting) team, along with a complete list of emergency response resources*
- *Each team member shall carry a document valid for travel abroad, as requested by the Requesting Party or transit state*
- *If governmental or military personnel, aircraft, vessels and vehicles requiring a special entry and exit permit have been accepted (by the Requesting Party) ... relevant authorities ... shall issue such a permit ... and ... the state border shall not be crossed before the necessary permit(s) have been issued*
- *The Contracting Parties shall apply their respective national legislation and international obligations as regards suspension of and exemption from customs duties (as well as other duties and taxes concerning*

2. Katarina Hildingsdotter, Head of Evaluation. Anders Johansson, Deputy Head of Evaluation.

3. Agreement between the Governments in the Barents Euro-Arctic Region on cooperation within the field of Emergency Prevention, Preparedness and Response



the emergency response resources entering, transiting or exiting)

- *Responsibility for operational command in the emergency area lies with the ... Requesting Party*
- *The competent authorities of the Requesting Party shall manage and direct the activities of the response teams of Assisting Parties*
- *The response teams shall have the requisite amount of resources sufficient for independent operation ... for a minimum of 24 hours (additional resources as well as any maintenance, proper medical care, food and accommodation shall be provided by the Requesting Party if required)*
- *The Assisting Party shall be prepared to submit to the Requesting Party the estimated costs of the assistance to be rendered before assistance is accepted*

As recommended, the Planning Process has mainly followed the *NATO/EAPC Guidelines for Planning, Conduct and Assessment of International EAPC Exercises*⁴.

In addition to those documents, an embryo to a *Barents Joint Manual Manual* is available. Its purpose seems to be to concretise some procedures mentioned in the Barents Euro-Arctic Region Agreement. So far, this Joint Manual has no binding status.

2.1.1 Discussion

The Barents Agreement indicates the framework for cooperation and assistance in emergencies. However, it has been found (now and earlier) that prompt and efficient information, reactions and assistance are limited due to the lack of more specific and concrete agreements or arrangements on how to act most practically in response to alarming procedures as well as on requesting and receiving partner assistance.

The NATO/EAPC Guideline has (now and earlier) been considered too “bureaucratic”. However, no well known steps have been taken to agree on adjustments or a more suitable Exercise Planning and Conducting Guideline suiting the Barents Rescue Cooperation activities. On one hand, using the NATO/EAPC Guide-

4. EAPC (SCEPC)N(2009)0032-REV1 / 30 October 2009

line gains an international approach and recognised terminology that can support better knowledge and understanding of exercise planning in other international environments. On the other hand, if the 45-page document has limited acceptance among the Barents Region countries and different organisations, it could hinder mutual communication of the planning process. In order to get a mutual acceptance of the planning steps (specific conferences, meetings and workshops) in the framework of the Barents Agreement, it could be considered to develop a specific Barents Rescue “light version” based on the NATO/EAPC Guideline. Such a Barents Rescue Exercise Guideline (BREG) could be an appendix to the Barents Joint Manual.

It is also noted that the Barents Joint Manual needs updating more frequently and, not least, to be better communicated and known by involved actors.

In general, it seems that evaluations, recommendations and lessons learned from earlier Barents Rescue Exercises are not taken into consideration in planning the next exercise or for updating the Joint manual. This could be more structured as a part of a CDC (Concept Development Conference) where preferably also the Joint Committee should be represented.

Those issues will be discussed further in this Evaluation Report.

Suggestions

- The Joint Committee recommends initiating a joint effort to develop a specific Barents Rescue guideline based on the NATO/EAPC Guideline.
- The Barents Joint Manual needs updating more frequently and, not least, to be better communicated and known by involved/presumed actors.
- Incorporating findings in evaluations and lessons learned from earlier Barents Rescue exercises could be a more structured process. For example, as part of a CDC (Concept Development Conference) where preferably also the Joint Committee should be represented.

2.2 Evaluation Organisation

The Barents Rescue Exercise 2011 evaluation has been coordinated by the Swedish Civil Contingency Agency (MSB). A Head of Evaluation was appointed already before the Concept Development Conference (CDC), and contributed to the first discussions about aims and objectives. During the Initial Planning Conference (IPC) in May 2010, a specific evaluation organisation started to be organised. This made it possible to discuss and develop objectives and to be flexible during the process concerning evaluation planning and manning. The role of the evaluation organisation was discussed during the IPC and mainly agreed upon during the Main Planning Conference (MPC) in October 2010. Representatives from Finland, Norway and Russia have been part of the Core Evaluation Team.

The evaluation work has been executed according to the overall objectives (see Chapter 4), focusing on essential parts of the Barents Agreement and the Joint Manual. TTX1 and CPX Regional have focused on regional/local issues, and evaluation of those has been the responsibility of the County Administrative Board. The evaluation of methods and techniques during the FTX at accident sites has been the responsibility of each organisation/unit.

The Core Evaluation Team has participated in all planning conferences, and the Head of Evaluation has been available for consultations/ discussions during the planning process, including participation in some main workshops. During the different parts of the exercise various numbers of evaluators/assessors/observers have been involved according to needs. Questionnaires and interviews have been used to complete the picture.

An Evaluation Plan was presented on 25 March.

Special thanks to all who have contributed in planning and conducting the evaluation activities.

2.2.1 Discussion

During the process, continuous participation in the Core Evaluation team by the cooperating countries has been problematic. As planning together is one of the essential ways of getting joint cri-

ses management knowledge, communicating ideas and reaching consensus should be of great importance. The lack of continuous participation, combined with e-mail problems, has made this process difficult.

We find that the partner countries/organisations have different priorities for those process ideas as stated in the Barents Agreement.

Suggestions

- Evaluation responsibilities must be set from the beginning of planning, and at least one person from each participating country should be appointed as the country's evaluation representative.
- The Core Evaluation Team should also be responsible for relevant discussions concerning earlier experiences and recommendations and their possible implementations in the planning process.

2.3 Overall Aim and Objectives

The Overall Aim and objectives were discussed during the IPC in May 2010. There was an ambition to finally set the objectives at the Main Planning Conference in October 2010. This could not be done because the delegates present did not have the mandate to do so. The objectives were finally set on a telephone meeting between head of delegations a few weeks later.

The EAPC Guideline mentions that *the aim of the exercise needs to reflect the interest of the major organisers*. It also mentions that *the objectives should be realistic and attainable, as well as relevant to the participating nations*. In the framework of the Barents Rescue Exercise Cooperation, *the major organisers should be seen as all countries contributing to a joint exercise, acknowledging that the country responsible always has the role of Leading Party, and therefore the opportunity to present ideas on the main scenario*. Those facts indicate the necessity of mutual discussions and agreement on the aim of the exercise, the scenario(s) and the objectives that should be attained. The Exercise Aim shall also support the intentions of the Barents Agreement and the overall intentions of the Barents Euro-Arctic Council.

The Barents Rescue 2011 Exercise aim was agreed as follows: *Barents Rescue 2011 aims to improve communication, cooperation and coordination between countries that may become involved in an emergency in the Barents region. The exercise is intended to improve preparedness and co-operational effectiveness of civil protection and joint emergency response as well as developing responders' network.*

The objectives agreed upon were the following:

1. *To define, test and evaluate relevant bilateral and multilateral agreements for assistance and the applicable legal and administrative framework*
 - *The participants have further developed their abilities for national or cross-sector coordination and cooperation according to the Barents Euro-Arctic Region Agreement*
 - *The participants have (acceptable) knowledge about bilateral, multilateral and other relevant mutual agreements concerning emergency and rescue response in the Barents Euro-Arctic Region*
 - *The participants use relevant agreements*

2. Promote co-operation between authorities in the Barents Region as well as at national and international levels

- Addresses processes for consultation, decision making and co-ordination between different authorities, organisations or nations
- Address how to create and maintain a Common Operational Picture and awareness on regional and national levels
- Consider to activate international and national procedures for notifying (alerting, assisting and reporting/information sharing)
- Consider how to coordinate national and international actions as required
- Coordinate messages to the media

3. To test national and international warning and alarm routines as stated or indicated in relevant agreements

- To test alarm chain/alarm routines from alarming organisation (Vattenfall) to end recipient
- Local and regional alarm chain (from Vattenfall to County Administrative Board of Norrbotten according to predefined alarming chain)
- Regional alarm routines
- National alarm routines
- International alarm routines
- Activate appropriate status levels (in acceptable time)
- Identify possible informal ways for alarming/notifying besides the "official" alarm routines, if any

4. Improve procedures and practical activities for requesting, sending and receiving assets

- Use correct/established request and accept communication routines as well as designated POCs
- Carry out border crossing procedures as intended in the Barents Agreement in an efficient way including document handling
- The response teams have the requisite amount of resources sufficient for independent operation in the emergency area for a minimum of 24 hours
- Establish an efficient receiving organisation for the international teams

5. Strengthen trans-boundary co-operation at local and regional levels

5.1 Objectives for LEMA (Local Emergency Management Agency)

- Practice cross-border cooperation within the Barents Region
- Increase comprehension when there is a need for an OSOCC
- Test reporting procedures
- Create and maintain a Common Operational Picture/Awareness (unit and staff levels)
- Assure liaison arrangements as required, incl. appropriate interpreting
- Engage with the media and public (and plan media and public activities)
- Assure arrangements for Requesting Party (Host Nation Support)
- Prepare for hand-over to follow-on units and bodies within LEMA

5.2 Objectives for OSOCC (if there is no OSOCC, all these objectives will be transferred to LEMA)

- Practice cross-border cooperation within the Barents Region
- Create and maintain a situational overview of the international pool of resources involved
- Coordinate activities between LEMA and the pool of resources
- Coordinate activities for the emergency units

5.3 Objectives for events (training audience)

- Practice cooperation with others internationally
- Find adequate procedures for cooperation with local authorities and private actors

6. To enhance the awareness and use of media being an important part in the crisis management process for channelling information to the public

- The participating organisations have an organisation for handling media contacts (communication with the media) during crises
- The participating organisations have the ability to coordinate when necessary their communication with others
- The participating organisations use the media as a channel for spreading information to the public (proactive actions)

The following two objectives will only be tested and evaluated to a limited extent

- *The participating organisations give information to the media that is: correct, timely and coordinated (on both national and international levels) The participating organisations have continuous situation analysis aimed at handling rumours (only tested to a limited extent)*
- 7. *Planning process itself as an important element in building personal networks, enhance familiarization familiarisation between participating agencies and countries (and for improving the planning process)***
- *To further develop the ability to cooperate in the planning of joint exercises*
 - *To increase mutual knowledge about and understanding of planning and evaluation processes concerning international joint exercises*

2.3.1 Discussion

Joint exercises and training are supposed to support the increased ability of the contracting parties to render swift and effective assistance in emergency response operations (Article 2).

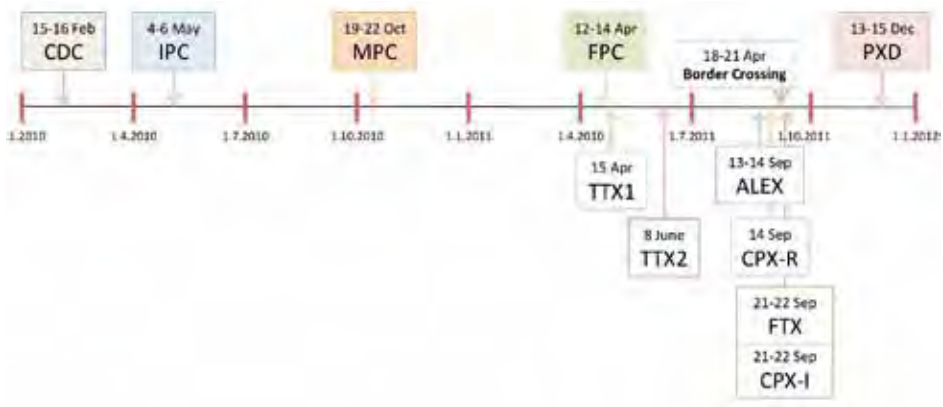
The Barents Agreement Region may have fewer civil protection and rescue resources than other parts of the engaged countries. However, this region is also less populated (in general) than other parts. All four countries have modern and well equipped civil protection and rescue resources and sufficient organisations and competence to allocate and lead extra resources. The Joint Manual mentions (Chapter 3.4) potential emergencies in the region. Dealing with some of those mentioned could need specialised and extra resources in cases of emergency. In order to prepare for more efficient assistance, it could be of interest to define more deeply the region's risk pattern and then concentrate on the preparation and training for and of specially appointed assets.

The planning process was able to stick to the common objectives over time. Due to changes in participation in meetings and workshops, the process on agreeing on those objectives took two steps forward and one step back until they were finally decided shortly after the MPC. However, as each participating organisation had to complete the objectives pattern with their own and more detailed objectives, this led to some difficulties and the scenario/DISTAFF WG finally had to support and decide.

In order to strengthen the impact and guidance of the Joint Manual, the Joint Committee should consider agreeing on some common aims and even a few overall objectives for completing the Joint Manual Chapter 4.

Suggestions

- In order to prepare for more efficient assistance it could be of interest to more deeply define the region's risk pattern and then concentrate on the preparation and training for and of specially appointed assets. It is recommended that the Joint Committee arranges a series of joint workshops in order to better define the region's risk pattern
- Better routines for guiding the participating organisations in how to complete their own and more detailed objectives need to be developed. These routines could include, for example, clearer communication of expectations, deadlines and education.
- The Joint Committee could ease the joint planning process by agreeing on some common aims and overall objectives that can be used for all Barents Rescue exercises.



2.4 The Planning Process

The planning process has mainly consisted of several Planning Conferences (for common agreements and decisions) and Workshops (to develop and concretise the different parts of the exercise). As Sweden has had the main responsibility for Barents Rescue Exercise 2011, those activities have mainly been conducted in Sweden. As the responsibilities for those Barents Rescue Exercises rotate among the Barents Region Countries, those facts should be well known by the countries.

To evaluate the planning process, two questionnaires, several interviews and information from the Swedish After Action Review have been used. Discussions with and documents from the Scenario/DISTAFF Working Group have added information to this evaluation.

2.4.1 Discussion

The prerequisites for the Barents Rescue Exercise 2011 were vague in beginning of the planning process. No specific guidance was given from the Joint Committee (e.g. as a result of earlier experiences and evaluations), and the task given to MSB by the Swedish Ministry of Defence was imprecise and vaguely anchored in several important organisations.

The task was also vaguely anchored and unknown in MSB, which created unnecessary initial internal friction. As MSB was both an exercise planning actor and a presumed important exercised one, a common internal understanding could have been better – especially during the first phases of the planning process. This

exercise was an opportunity for MSB to test and train its national coordinating role in an international environment, but this chance was not fully used.

The planning process and exercise model used, with several sub-exercises, have had its demands. It has been a long and resource-consuming task. Although the model was agreed upon at the IPC (May 2010), the partner countries have had various priorities and representation through this process. Two main reasons have been mentioned – the lack of human resources (due to other prioritised work) and financial problems. The Barents Agreement has set the framework for collaboration, to be agreed by the regional and local authorities in each state under their national legislation and within their competences and available funds. Those authorities shall themselves be responsible for what has been agreed upon (Article 3).



It is also stated that the Joint Committee shall initiate and participate in the planning of exercises, joint training and exchange of experts (Article 4 and Joint Manual 4.2.1).

The Joint Committee has by this an important role in finding and defining a common approach and responsibilities for the agreed aims and objectives, ambitions and financial allocations for the execution of the Barents Agreement. In absence of such guidance, and of an early presented timeline, the participating countries set their own priorities concerning their presence at different conferences and workshops. An insufficient initial knowledge and understanding of the planning process contributed to a situation where expected commitments were not delivered in time, the lack of participation caused need for repetitions and an uncertain timeline led to participants having problems prioritising. Participants also arrived late at meetings and some left early. In some cases they therefore missed the expected outcome of the event or the summing up and directives for the next planning steps. Those problems could perhaps be minimised if the responsible country visits the partner countries for discussions before the CDC and the IPC. It might also ease the initial planning process (in getting “all on board”) if there were more time between the CDC and the IPC (and less time between IPC – MPC – FPC).

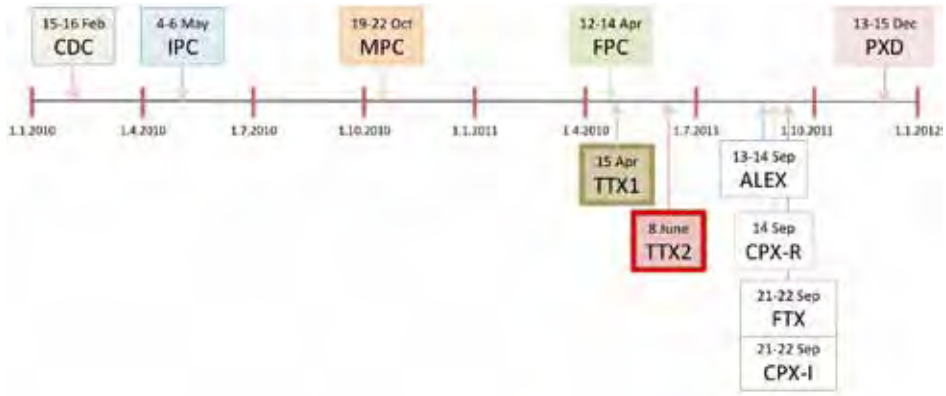
It is important that participating organisations gets firm information on what is expected from them and that they respect and take responsibility for delivering inputs as agreed and by set dates. This was not always the situation. Many of the participating organisations have mentioned as a problem that the conditions changed over time and that there were many changes made in the scenario and the exercise design.

MSB Cursnet (a web-based tool) was used for presenting directives and documents. E-mail was mainly used for communication, and this was a special problem in communication with Russian organisations. However, by using international information meetings with and in the respective country, the information gap was rather well bridged. In the development of a Planning Guideline, such options should be considered and mentioned as a practical way of keeping up the planning speed.

For Barents Rescue Exercises, a common planning process is a tool for gaining mutual understanding and knowledge and for opportunities to influence. However, this demands that each actor takes responsibility, participates as needed and delivers in time.

Suggestions

- It is important that the exercise planning organisation has a clear common internal understanding and defines its often several different roles, as this will clarify the organisation's needs in manning the planning and preparation work.
- It is recommended that the Joint Committee takes a more active role in the planning process. One suggestion is that the Joint Committee participates in the planning conferences (and also uses its presence for its own committee meetings).
- Expectations of and demands on the participating organisations shall be as clear as possible from the beginning. However, some things have to change and emerge during the process. That is what makes the process a process, and it is important to have trust in this process.
- It could be considered to improve the use of other technical systems for information sharing (e.g. Cursnet) and use of informal meetings to keep up good information sharing. Good facilities for reliable e-mail are absolutely essential for planning and information sharing in this international environment.



2.5 Table Top Exercise 2

Table Top Exercise 1 (TTX 1) focused on Swedish regional issues and was not explicitly followed by the core evaluation team.

Table Top Exercise 2 (TTX 2) mainly focused on notifications and requests procedures on county regional, national and international levels. TTX 2 was divided into a “national meeting”, on what resources would be needed and could be provided, and an “international emergency conference” chaired by MSB.

Evaluation focused on the following main objectives:

1. ***To define, test and evaluate relevant bilateral and multilateral agreements for assistance and the applicable legal and administrative framework***
 - The participants have further developed their abilities for national or cross-sector coordination and cooperation according to the Barents Euro-Arctic Region Agreement
 - The participants have (acceptable) knowledge about bilateral, multilateral and other relevant mutual agreements concerning emergency and rescue response in the Barents Euro-Arctic Region
 - The participants use relevant agreements
2. ***Promote co-operation between authorities in the Barents Region as well as at national and international levels***
 - Address processes for consultation, decision making and co-ordination between different authorities, organisations or nations
 - Consider how to activate international and national procedures for notifying (alerting, assisting and reporting/information sharing)

3. *To test national and international warning and alarm routines as stated or indicated in relevant agreements*

- *To test alarm chain/alarm routines from alarming organisation (Vattenfall) to end recipient*
- *Local and regional alarm chain (from Vattenfall to County Administrative Board of Norrbotten according to predefined alarming chain)*
- *Regional alarm routines*
- *National alarm routines*
- *International alarm routines*
- *Activate appropriate status levels (in acceptable time)*
- *Identify possible informal ways for alarming/notifying besides the “official” alarm routines, if any*

4. *Improve procedures and practical activities for requesting, sending and receiving assets*

- *Use correct/established request and accept communication routines as well as designated POCs*

The evaluation of TTX 2 has taken into consideration the following information:

- Filled-in questionnaires from 13 participants
- Reflections from three observers
- Follow-up reports from Scenario/DISTAFF WG

2.5.1 Discussion

A general idea of the intention of the whole exercise chain was unclear at this point (8 June 2011), and many participants expected something else because the exercise had been announced as a Table Top. Not all participants were thoroughly prepared for this day. Therefore, it took some time at the beginning to find out where we were in the scenario, how to tackle the exercise and each participant's role.

Much discussion came to be about different agreements, but what they regulated and how applicable they could be in this situation was never firmly set.

Based on the scenario (three days before the dam collapse), different Swedish organisations had made several formal and informal contacts with “colleagues” in neighbouring countries. This is because there are several other day-to-day cooperation networks. Those were never clarified. Should the BR Joint Manual POCs also be used more formally for such contacts, or should the Joint Manual accept those more direct profession-based contacts between colleagues? And are the POCs in the Joint Manual the most efficient according to certain national decision-making processes and defined mandates?

It became obvious that different administrative and organisational levels have different ideas on responsibilities, mandates and information networks. Discussions about how, for example UN OCHA, EU MIC and NATO/EADRCC could/should be involved were left unclarified.

The national Customs Organisation is important actor in a case involving moving units over country borders. No customs organisation was present during TTX 2, resulting in some questions raised remaining unanswered. It became fully clear that certain preparations for border crossings have to be made in advance, such as for medical drugs, special equipment and rescue dogs. Such preparations, on the other hand, can only be made sufficiently if the Barents countries have agreed on a probable “risk and needs pattern” and prioritised units.

Some other important Swedish organisations were also missing at TTX 2, and this affected the outcome of the conference.

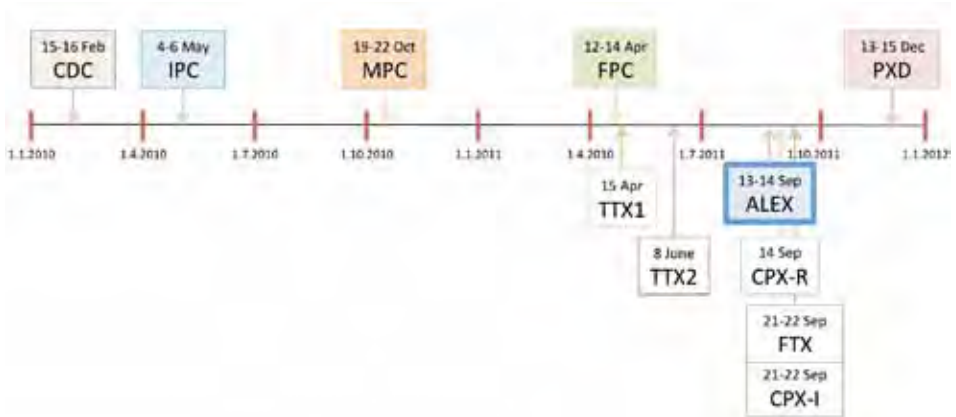
Objectives number 1 and 2 were considered best achieved, although not fully. Questions were not answered sufficiently concretely, and in some cases clear decisions were not taken. Objective number 3 was agreed as less fulfilled, very much due to how TTX 2 was arranged.

Running a TTX 2 must be seen as a good idea and an important step in the planning and exercise process. However, better preparations must be made, relevant participation must be assured and time must be reserved at the beginning of the TTX to agree on a common status picture.

It is debatable whether this actual TTX 2 in June 2011 was a Table Top Exercise, a Workshop or a Seminar.

Suggestions

- TTX 2 fits well into the exercise process, and this model could be considered a positive experience.
- Some questions were raised whether the Joint Manual was up to date. This underlines the need for regular updates, and the event could have been better used for such an update.
- Expected preparations must be clear and made in advance if the event shall be effective. It must be a minimum expectation that every person involved in the planning process and representatives of organisations have a certain level of knowledge about the Barents Rescue Agreement and the Joint Manual.
- Participation of relevant organisations/actors must be assured.



2.6 Alarm Exercise

The alarm exercise was conducted during 13-14 September 2011. Three evaluators followed the exercise, including the County Administrative Board Crises Management (CPX Regional). In the participating countries, specific persons in key organisations were appointed to observe and report back to the head of evaluation. A response cell in Boden gave inputs to the training audience, and a number of local exercise leaders in the different countries contributed with information to the exercise leader.

Evaluation focused on the following main objectives:

2. *Promote co-operation between authorities in the Barents Region as well as at national and international levels*

- Consider how to activate international and national procedures for notifying (alerting, assisting and reporting/information sharing)
- Consider how to coordinate national and international actions as required

3. *To test national and international warning and alarm routines as stated or indicated in relevant agreements*

- To test alarm chain/alarm routines from alarming organisation (Vattenfall) to end recipient
- Local and regional alarm chain (from Vattenfall to County Administrative Board of Norrbotten according to predefined alarming chain)
- National alarm routines
- International alarm routines
- Activate appropriate status levels (in acceptable time)

- Identify possible informal ways for alarming/notifying besides the “official” alarm routines, if any

4. Improve procedures and practical activities for requesting, sending and receiving assets

- Use correct/established request and accept communication routines as well as designated POCs

Phase 1 – Alarm procedures

At 0806 the alarm came to the SOS Alarm centre in Luleå. The operator started to alert the police at 0811, and at the same time the fire and rescue services in Jokkmokk, Boden and Luleå were alerted.

The alerting procedure took about 17 minutes. Luleå Energi and Gällivare municipality were initially forgotten. The alerting order used was perhaps not optimal, and some problems with the alerting procedure indicate a need for updated quality assurance.

At about 0900, the County Administrative Board in Norrbotten



(CAB) sent a fax to the SOS Alarm centre to be forwarded to Finland, Norway and Russia. There were problems in the beginning in getting it through to Murmansk and to Norway. Need for confirmation was unclear. It was also unclear in the centre who should be responsible for urgent public information.

Phase 2 – Decisions and requests

One hour after the dam collapse (at 0900), Vattenfall arranged a telephone conference expecting all alerted/informed organisations to join. This information was given on a special message box, referred to when the alerting information was given. Checking the message box seemed to be voluntary. The police and SOS Alarm did not attend this phone conference – it is unclear why.

The second phone conference was arranged by the CAB at 1130. This conference was mainly a check of the present situation, information about more dam collapses down the river and a first discussion about need for resources. Evacuations had started.

At about 1200 hrs, requests for assistance were faxed to Finland, Norway and Russia.

A third phone conference was conducted at 1400. Up to this time two public warnings had been made. Most discussions concerned the evacuation planning and work.

2.6.1 Discussion

A revised Swedish alarm plan was developed for the ALARMEX, as a result of experiences from the earlier planning process. The alarm plan at SOS Alarm Luleå was prepared in the automatic system. However, every organisation decided to be alerted had to be informed by phone individually. The SOS Alarm operators did not seem to know about the decided fax formats, and they did not check if the faxes got through to the recipients. JRCC North-Norway finally received and confirmed the alert FAX at 1148. Murmansk got the alert FAX at 0915 (SWE time), and they also got an e-mail from CAB Norrbotten at 0920. Only Murmansk confirmed. This e-mail was appreciated, as it contained several e-mail and contact addresses for different important organisations. Notifications were made according to plan (and the Joint Manual),

and further information from the country POCs to relevant organisations in the respective country went satisfactorily according to the observers.

Emercom in Moscow also seemed to be an important POC and actor responsible for decisions in Russia, concerning requests. This should be discussed when updating the Joint Manual.

It is notable that 1½ hours after the dam burst, there was still no public warning given. During the first, slightly chaotic, phone conference there were discussions about evacuations and decisions for rescue intervention. It seems remarkable that some rescue organisations needed to wait for political decisions for activation.

The organisations involved had problems in gaining a common picture of the situation. A tool available in Sweden is the Web-based Information System (WIS). However, the ability to use this tool varies. Experiences from this Barents Rescue Exercise and other national exercises indicate a need for improvement in using WIS – how to work in it, what to share and how to keep up the knowledge.

It is unclear if, for example, the media would be able to listen to the phone conferences. In order not to create media speculation, those phone discussions should be confidential – can that be assured?

The Joint Manual regulates the POCs to be used when informing and alerting. The manual also regulates how and where to send faxes. The manual states nothing about message confirmation and further regularly updated information. It must be up to the affected country to decide the need for informing or alerting the other Barents Agreement countries. However, when such information is to be sent, fax seems to be obsolete those days when e-mail and phones are more useful. To enable smooth information sharing, a certain and agreed e-mail format should be available at defined POCs and other main actors. It is also important that the common Barents language, English, is spoken and understood at the POCs.

During exercise day 1, there was no continuous information update to the other countries. This is something that could be considered for an update of the Joint Manual.

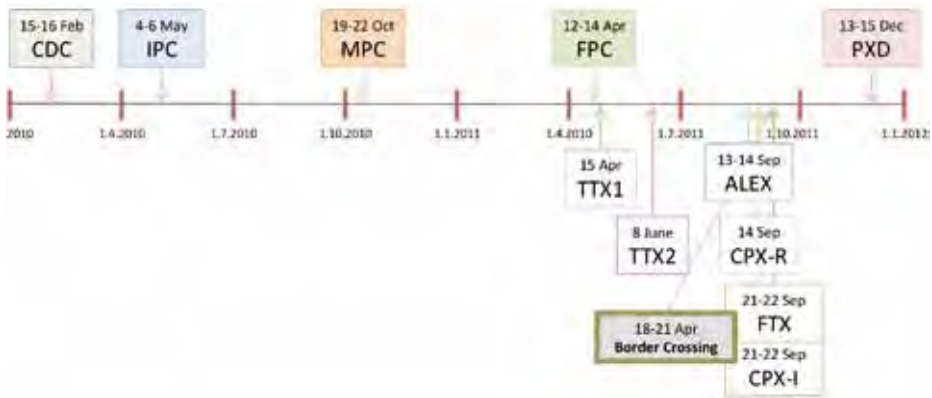
The Joint Manual recommends a common format for assets requests. It has been suggested that this should be further discussed, as the different countries have different possibilities for providing and transporting assets due to legislation, distances, customs regulations and military restrictions, for example. This should be further clarified in the Joint Manual.

As the ALARMEX was to test alarm procedures, requests and decision making, it was important that ordinary POCs and Duty Officers were used.

At the end of the exercise, an ENDEX message should be sent and confirmed.

Suggestions

- The Joint Committee must take its responsibility to update and develop the Joint Manual.
- Conducting such a “small-scale” Alarming Exercise each year under the supervision of the Joint Committee, combined with a yearly revision of the Joint Manual (see also Joint Manual 4.2.2) could be recommended.
- The County Administrative Board(s) suggests being responsible for updating the alarm list for major disasters in cooperation with MSB and SOS Alarm centre Luleå. The Barents Joint Manual and the alarm plan must also be known by additional alarm centres in order to secure redundancies.
- As a result of the exercise it is recommended that the County Administrative Board(s) takes initiative to hold a special workshop to revise crises management and evacuation plans.
- The security level of phone conferences should be clarified and security measures taken in order to ensure that only identified and competent participants in general can enter telephone conferences.



2.7 Border Crossing and Reception

Border Crossing in assistance of a major disaster is a main need in support according to the Barents Euro-Arctic Agreement, considered especially in Article 8 and described more in detail in the Joint Manual.

The objectives agreed upon were the following:

1. **To define, test and evaluate relevant bilateral and multilateral agreements for assistance and the applicable legal and administrative framework**
 - The participants have (acceptable) knowledge about bilateral, multilateral and other relevant mutual agreements concerning emergency and rescue response in the Barents Euro-Arctic Region
 - The participants use relevant agreements
4. **Improve procedures and practical activities for requesting, sending and receiving assets**
 - Carry out border crossing procedures as intended in the Barents Agreement in an efficient way including document handling
 - The response teams have the requisite amount of resources sufficient for independent operation in the emergency area for a minimum of 24 hours
 - Establish an efficient receiving organisation for the international teams
5. **Strengthen trans-boundary co-operation at local and regional levels**
 - Practice cross-border cooperation within the Barents Region
 - Assure liaison arrangements as required, incl. appropriate interpreting
 - Assure arrangements for Requesting Party (Host Nation Support)

Evaluation was carried out by questionnaires handed out to some arriving units, by information from Checkpoint Salla and by discussions with the BC Working Group. However, because “real” border crossing as in an “acute situation” was not really exercised, it has been difficult to properly evaluate if the intentions in the Barents Agreement and the Joint Manual really can be fulfilled as effectively as intended.

Host Nation Support (HNS) worked with all logistical and technical needs for the whole exercise, from the beginning of the planning process to the end of the exercise. This gave a somewhat incorrect picture of how “real” HNS should be arranged and can therefore only be evaluated to a limited extent.

2.7.1 Discussion

For this exercise, ground and air units were brought into northern Sweden from Finland, Norway and Russia. Border



Crossing Procedures were carried out in practice, but to ensure the participation of units on 20-21 September, many preparations were arranged well in advance. This means that preparations for a smooth border crossing were in place, but also that problems expected in a real situation never occurred.

It cannot be said, from this exercise, that border crossing procedures have been tested. It is also unclear how well known the Barents Agreement and the Joint Manual is at customs and by the border police. A situation at a border crossing between Norway and Sweden indicates that there could be some border crossing problems in a real situation. Military assets (all kind) and similar, normally require special permits, and this fact should be analysed more deeply.

Although no problems occurred at borders, due to good preparations, actors foresee some difficulties in a real situation concerning medical drugs, rescue dogs and telecommunications equipment, for example. Not all deployed international assets had the recommended 24 hrs self-sustainability.

When it comes to airborne assets, these are normally used to an international environment and they normally have established routines for flight plans and landing permits.

The HNS function was established early and became a part of the planning process and during all parts of the exercise, from TTX 1 through the FTX. During the FTX week, the function was enlarged with personnel, mostly locally staffed. Their obligation was to register arriving assets and support them with lodging, food, fuel, transport, interpreters and so on. Border Crossing Procedures (as mentioned earlier) were also prepared and supported by the HNS. The HNS function was exercised during Barents Rescue but the circumstances were unrealistic. Normally, in a crisis, the HNS must be organised with a limited amount of preparation time. During this exercise, as said before, the HNS function supported during the whole planning process.

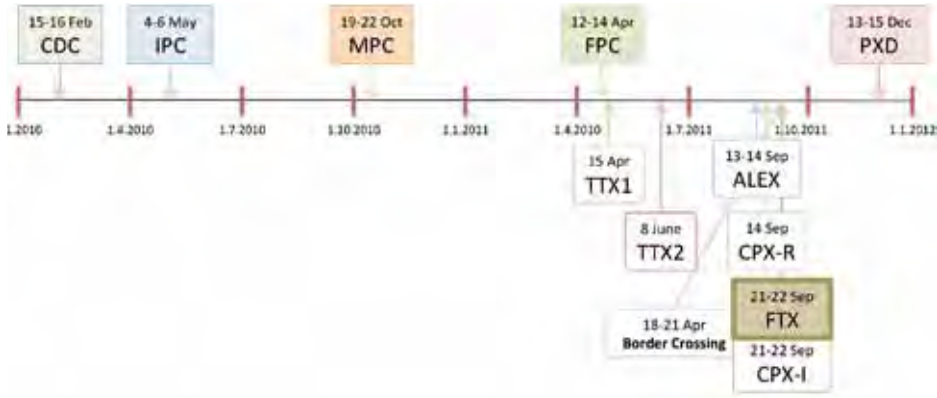
“Appropriate interpreting” has been shown to be needed. It is assumed that the common Barents Rescue language is English. International cooperation requires the possibility to speak with

each other at an accident/disaster scene as well as in command and control work. Liaison staff and interpreters therefore need to be on hand when required. This was assured and arranged mainly by the Swedish authorities during this exercise.

Sweden is not used to receive help from other countries. This showed through the whole planning process, when discussions about LEMA (Local Emergency Management Authority) and OSOCC frequently popped up (see Chapter 2:9 for further discussion). The Barents Rescue Exercise could have been a good opportunity to gain experience. It seems that MSB had some ambitions in that direction in the early planning process but it came later to fade.

Suggestions

- Customs and Border Police in the Barents Region shall be regularly updated on the Barents Agreement and the Joint Manual.
- It is recommended that the Joint Manual is supplemented with a discussion about the use of an OSOCC.
- It is recommended that the Joint Committee takes the initiative to arrange a special workshop concerning Border Crossing Procedures. Such an event could be a part of work to update the Joint Manual.



2.8 Field Training Exercise

Evaluation focused on the following main objective:

5. Strengthen trans-boundary co-operation at local and regional levels *Objectives for events (training audience)*

- Practice cooperation with others internationally
- Find adequate procedures for cooperation with local authorities and private actors

The field training exercise (FTX) was conducted during 21-22 September 2011. The FTX was conducted with injects from the response cell. During these two days evaluators observed the different sites during the exercise. The evaluation team also followed the response cell (and the DISTAFF). In accordance with the objectives, the analysis of the field training exercise focused on cooperation and coordination, especially international, and not on technical skills. Each of the participating teams and organisations were supposed to evaluate its own participation in the exercise.

The day before the actual FTX, September 20, was a training and experience day. For the rescue teams, this was performed at the rescue services training centre at Hertsön. The aim of the day was to get a better understanding of how rescue services from the different participating countries work - an opportunity for team members that would work together during the FTX to get to know each other and the different cultures. Finally, the aim was

also to test equipment used by the different nations. During the day, two different scenarios were performed. The County Council in Norrbotten also had a training day at the base camp in Boden, with table top exercises, and also a programme with the other nations' medical teams with short seminars and an exhibition of equipment. The police also had a program with seminars... Finally, there was preparation and training on how to handle ammonia on the day before the actual exercise on September 22.

During the FTX there was also an observers program (75 persons), a Director General's distinguished guests program (42 persons), and a special program for the Crown Princess of Sweden and the state secretary of the Ministry of Defence.

Observers program consisted of two main parts. On day one, September 20, there were seminars focusing issues related to flooding as a consequence of climate change, dam safety and how to protect drinking water in case of flooding. Also information about the exercise scenario as a preparation for the next day was presented. On September 21 the main event for the observers program was a visit to the train accident site in Jokkmokk. During this day also some work shops mainly related to medical issues were held.

The Director General programme, September 20-22, visited the train accident site including participation in the work shop and the maritime accident in Luleå. This programme also included certain social events.

The special program for the Crown Princess of Sweden and the state secretary of the Ministry of Defence visited the train accident site in Jokkmokk.

On September 21, the following rescue exercises and medical rescue exercises were performed:

- Train accident in Jokkmokk, mainly arranged with four train cars had dead and wounded people, of which two train cars have fallen downhill, extraction of trapped people, transportation of wounded people and search for missing people in the surrounding terrain.



- The medical rescue linked to the train accident in Jokkmokk focused mainly on the transportation of wounded people, triage/medical prioritising and treatment, identification and registration.
- Evacuation of patients from hospitals, moved to Kallax Airport for transportation with the Swedish National Air Medevac (SNAM).

On September 22, the following rescue exercises were performed:

- Tunnel accident in Letsi, mainly arranged with trapped people and a fire deep in a tunnel.
- Hazmat accident in Boden with ammonia caused of a traffic accident between a cargo truck and a bus.
- Maritime accident in Luleå, mainly arranged as a boat collision with many people falling into the fast-flowing water.
- A fire in the engine room of the icebreaker Atle in Luleå harbour the lower decks were filled with smoke. Since there were people on board, a search and rescue operation was needed.

2.8.1 Discussion

The training day was closely linked to the FTX and was an important tool in reaching the goal to practise international cooperation and understanding. The training day aimed to create good cooperation on the different sites during the FTX.

Observers program was ambitious and had the aim to really be a learning program. Mostly observers programmes includes “only” visits to field exercise sites but this time it also included seminars and work shops. An observers program can be a good opportunity to gather experts and other persons with special interests in issues related to the exercise scenario and to increase their competence. It can also be a good opportunity for networking.

During the first day of the FTX (September 21), a big train accident was simulated. Rescue teams from Sweden, Finland and Russia and police teams from Sweden and Russia participated. There were also medical teams from Sweden, Norway and Finland. Initially it took quite a while before it was possible for the teams to start their work at the site. This was because the

electrical aerial lines were torn down and the equipment for protective earth connection was delayed. Another important cause of delay was that the rescue leader on site had no information about which equipment and competences the units from the different nations had. The rescue leader on site had to spend an unnecessarily long time working that out. If there had been an OSOCC function, this problem would probably have been smaller. The rescue leader at LEMA did not know the competences of the international teams, so he could not pass this information to the rescue leader at the sites. Radio communication was another cause of problems. There were initial problems with the radio communication between the rescue leader and the medical leader. They did not use the same radio channel, and it took approximately 20 minutes before they were able to speak to each other.

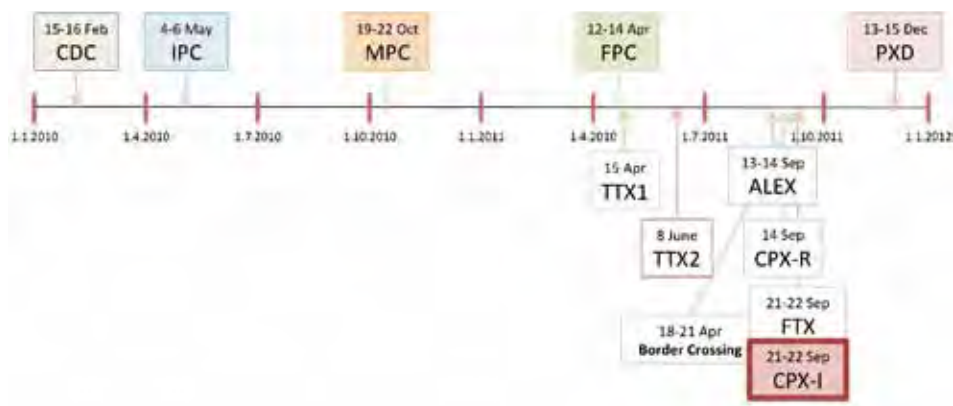
To make it possible to handle the situation, the site was divided into different sectors, and the units/teams were responsible for a sector of their own. When work on site finally started it functioned well. There are quite a lot of good examples of cooperation between teams in the different sectors.

During the second day of the exercise, the coordination and cooperation between the teams from the different countries improved. The actual sites for this day were smaller, but the first day's work probably contributed to the creation of greater opportunities for cooperation and confidence. There were fewer mistakes, knowledge about strengths and weaknesses was better and there were also fewer prestige issues.

Suggestions

- The training day for the rescue teams, health sector and the police and chemical training was a good opportunity to meet colleagues from the other nations and to exchange knowledge. It is recommended that this concept is further developed and improved.
- It is recommended that the observers programme aim on learning and this concept can be improved in future exercises. It is important to involve persons responsible for this early in the process, to have enough staffing over time and to have a programme to present in good time before the exercise. Consider also to include seminars and/or visit to DISTAFF/Response Cell for those interested of these parts of the exercise.
- If the on-site rescue leader shall be able to coordinate as expected and make full use of international units, it is recommended that an OSOCC is established.





2.9 Command Post Exercise International

Evaluation focused on the following main objectives:

2. Promote co-operation between authorities in the Barents Region as well as at national and international levels

- Address processes for consultation, decision making and co-ordination between different authorities, organisations or nations.
- Address how to create and maintain a Common Operational Picture and awareness on regional and national levels
- Consider how to activate international and national procedures for notifying (alerting, assisting and reporting/information sharing)
- Consider how to coordinate national and international actions as required

5. Strengthen trans-boundary co-operation at local and regional levels

5.1 Objectives for LEMA (Local Emergency Management Agency)

- Create and maintain a Common Operational Picture/Awareness (unit and staff levels)
- Assure liaison arrangements as required, incl. appropriate interpreting
- Prepare for hand-over to follow-on units and bodies within LEMA

5.2 Objectives for OSOCC (if there is no OSOCC, all these objectives will be transferred to LEMA)

- Create and maintain a situational overview of the international pool of resources involved

- *Coordinate the activities between LEMA and the pool of resources*
- *Coordinate the activities of the emergency units*

5.3 Objectives for events (training audience)

- *Find adequate procedures for cooperation with local authorities and private actors*

The Command Post Exercise (CPX) was conducted in parallel with the FTX on 21-22 September 2011. During these two days one evaluator followed the County Administrative Board of Norrbotten, (synonymous with and hereafter referred to as LEMA). The evaluation team also followed the response cell and the DISTAFF. The CPX International was preceded by a CPX Regional on September 14 (not evaluated in this report). In accordance with the objectives, the analysis of the CPX International focused mainly on cooperation on different levels, decision making, the creation of a common operational picture and how to coordinate the pool of resources. It was important for the evaluators to examine the connection between the CPX and the FTX and how well this part of the exercise worked out. To get an answer on that question we interviewed the heads of the different parts of the response cell, the local exercise leader for the police, the Exonaut coordinator and the head of scenario. As this knowledge is important for improving the planning process for future Barents Rescue exercises, the following objective is also relevant here:

7. Planning process itself as an important element in building personal networks, enhance familiarisation between participating agencies and countries (and for improving the planning process)

- *To further develop the ability to cooperate in the planning of joint exercises*
- *To increase mutual knowledge about and understanding of planning and evaluation processes concerning international joint exercises*

However, the evaluation result is not unequivocal and this leads to a conclusion that “it depends”. To integrate a CPX with a FTX as done in this case is both positive and negative. Viewpoints from involved persons vary. On one hand, it’s obvious that running those exercises together is a more complicated task. On the

other hand, it could be more effective and also feel more natural for the training audience. Most important is to have a clear view of what to achieve already in the planning phase - to have an answer on “why” we want to do as we want to do. If possible problems in conducting an integrated CPX/FTX can be foreseen they also seem possible to tackle.

2.9.1 Discussion

It is important to notice that the CPX Regional on September 14 had an impact on the CPX International and led to some changes and improvements in the organisation of LEMA between these two exercises. One example is that the organisations for handling information, both internal and external, were made more effective. Another change was that the number of functions in the staff was increased and a new “work manual” was created. A number of other organisations, County Council in Norrbotten and some of the municipalities for example, also made improvements between these two exercises.

During CPX International, liaison officers from other organisations (MSB, Swedish Armed Forces, rescue services and the police) were used and were an important tool for coordinating and making a common operational picture. One problem linked to the liaison officers was that they did not get a proper introduction and they did not get any work space of their own. This led to that they had only telephone (and fax) for giving information back to their own organisations. This was a problem because they could not forward information for a common operational picture and other important facts that were produced in LEMA. The system with liaison officers was improved on day two when a coordinator for the liaison officers was appointed.

During CPX International there was no real long-term perspective in the work. (Even if this became better during day two. This led to actions being more reactive than proactive.

The ways of establishing a common operational picture (COP) improved over time, both between the two CPX exercises and during CPX International. Different COPs were established for different areas (resources, incidents) and the ambition was to



update the COP every hour. A problem with establishing the COP was the lack of discussion on which information that should be important for the COP. A reason for this was perhaps that the target group for the COP was not clear and agreed upon. Different receivers need different information.

When it comes to resources and how to handle them, there was a function in LEMA with the “only” task of monitoring resources. The liaison officers from MSB and from the rescue services were



part of this. The list of resources was updated continuously, and the resources were categorised into three groups: demanded, disposable and distributed. Some problems occurred with resources that no one had asked for, and the best way to use them. Communication with the municipalities was also problematic when it often took a long time to get answers.

Although there was a function for monitoring resources in LEMA, the lack of an OSOCC (or similar function for coordination) caused problems in the regional decision chain. The purpose of an OSOCC is to be a coordination link between LEMA and the international units. It was the experience of the leaders of both the Finnish and the Russian teams that the lack of an OSOCC created uncertainty in their planning. This probably also contributed to the capacity of their units not being fully used. To be able to handle the lack of a monitoring function for the rescue leader at LEMA and to avoid some units being unused/not exercised, the problems were solved by DISTAFF. Despite the lack of an OSOCC, the FTX worked out well for the units at the sites, although the CPX International was not completed. This is because some international units were only simulated. The achievement of the objectives concerning LEMA/OSOCC also became obsolete. Last but not least, the host nation missed a good opportunity to exercise receiving and using international help.

Suggestions

- The system using liaison officers is probably a good way to make the contact and communication between the organisations involved better and more effective.
- Having a long-term perspective in the planning even during the acute phase of a crisis is recommended. This will create better opportunities for proactive actions.
- It is important to have a clear target group for the common operational picture(s).
- The establishment of an OSOCC able to handle the international units in an effective way is recommended.



2.10 Media Play

Evaluation focused on the following main objective:

6. *To enhance the awareness and use of media being an important part in the crisis management process for channeling information to the public*
 - *The participating organisations have an organisation for handling media contacts (communication with media) during crises*
 - *The participating organisations have the ability to coordinate when necessary, their communication with others*
 - *The participating organisations use media as a channel for spreading information to the public (pro active actions)*
 - *The participating organisations give information to media that is correct, timely and coordinated on both national and international level (only tested to a limited extent)*
 - *The participating organisations have a continuous situation analysis aimed to handle rumours (only tested to a limited extent)*

For evaluating the media play, two questionnaires⁵ (21 and 22 September) and observations by the evaluators both in the media DISTAFF module and on the field were used. The participating journalists were professional free-lance journalists and students at Kalix folkhögskola. This objective was divided into two parts, of which the second was optional and tested to a limited extent by five organisations who wanted to further test their communication organisations. These organisations were: Police in Norrbotten, County Administrative Board in Norrbotten (CAB), Swedish Transport Agency, County Council in Norrbotten and Northern Norway Regional Health Authority. The media play was used during the FTX/CPX International parts of the exercise.

2.10.1 Discussion

Most of the organisations had a function in their staff with the purpose of handling media contacts, and a plan for how to do this during crises, which is good. The general impression is that the organisations gave unclear feedback to the media, especially during the initial part of the exercise. Identifying the organisation responsible for which area/questions is a problem. At some

5. The questionnaires to the media play were answered by 60 % on September 21 and by 46 % on September 22

occasions journalists were sent back and forth between different organisations/contact points before they were given answers to their questions. One thing mentioned is the lack of capacity to think pro-actively. It should be possible to foresee many kinds of questions that may arise in a situation like this.

Another problem mentioned (for an organisation that operates on different levels) is that there is sometimes a problem between central/national and regional/local levels when it comes to handling information and passing information between the different levels in the organisation. Different levels gave different information and did not seem to have enough contact with each other during the exercise. This problem with information updates and contact in general could also be seen between the “home” organisations and the field representatives. This became better over time as the exercise continued.

Some of the organisations did not want to answer questions directly; instead they referred to the coming press conference. When it comes to coordinating information with others, the ability to do so can be improved. There was a tendency that not



many contacts were established between different organisations, and those that were so were mainly with organisations that participants were used to cooperate with, in their own network.

We can see that during the exercise the participating organisations did not use the media as a channel for information to the public as much as they could have done. To some extent this can be explained by a lack of resources, and stress, but in some cases it is probably because they are not familiar with the media. Many organisations can improve their knowledge of how the media works. Despite this, there were good examples of using media as a channel. One example is when the organisations send press releases.

A problem in contacts with media was that the organisations did not have the ability to analyse and to design specific information to communicate to the media and the public. It seemed that there was a massive information bulk that was communicated but with not so much thought of the recipients. The information to/communication with the public were mainly through the organisations' own web sites and, in some cases, press releases. Frequently organisations referred to their own web sites and also to other organisations' even if the information was not published (yet) on these web sites. A lack of target group adaptability was also seen. Although some things did not work very well, it did improve over time. The information was better coordinated later on during the exercise. Something the media play mentions as a good thing is that most of the persons responsible for media contacts are friendly, engaged and helpful, which is a good start. Another problem was that the press conference was cancelled (late) on the first exercise day. This left a gap in the information and an information problem. Since many of the organisations had previously referred to the press conference, it created an information problem when it was called off. Another press conference was carried out at CAB/LEMA on day two, and was a good opportunity for media to get information.

When it comes to handling rumours (only tested in a limited way), this was not prioritised in the exercise. Firstly, there were not many rumours at all during the exercise. There may be many reasons for this; one is that there was no public play and no social

media like Facebook or Twitter used during the exercise. The few rumours that did occur were handled by the organisations. Most of the participating organisations did not seem to have or use a monitoring function or an analysing- and situation awareness function to identify and handle rumours and incorrect information during the exercise. Another thing noticed was that there was not much follow up on what media did publish; probably there was not the time to monitor during the crises.

A general observation is that no organisation seemed to be properly prepared to communicate with the public and the media in a way other than through sources that need electricity or a working telephone system. In this scenario, some affected persons might not have the opportunity to use any of these electrically powered information sources.



Suggestions

- Improving knowledge about other organisations and their role and mandate, and with organisations outside your own sector, is recommended.
- Improve the capacity to spread information in your own organisation. In relevant cases, also between different levels, national, regional, local in the organisation.
- The information needs to be more coordinated. One way doing this could be to have more joint press conferences, press releases.
- Media training to learning more about media and how to use media better as a channel for information/communication. Media is usually a fast way to reach many people.
- Prepare channels for spreading information other than, for example, web sites and information numbers (telephone).
- Consider exercising communication matters more in coming Barents Rescue exercises. To get more realistic pressure on the organisations establish a public play and also consider using social media.

The Nordic countries have been affected in different ways and the situation in Sweden is worst. Due to heavy rainfalls in the middle and northern parts of Sweden (Svealand and Norrland) large areas are being flooded and the fire brigades have been heavily engaged since beginning of April.

Especially in Västerbotten and Norrbotten counties (in Norrland) the previous winter was very severe. The spring and the ice melt resulted in severe flooding in April and May; the rivers most affected were Torne River, Kalix River, the lower parts of Lule River, Pite River, the lower parts of Skellefte River, Ume River - notably the unregulated River Vindelälven, and Ångerman River. Buildings, bridges, parks and roads located in low-terrain areas particularly those near the rivers sustained water damage and in some areas people were forced to move. Some roads are still closed. Many municipal fire brigades managed to handle the situation well with limited support from the Swedish Armed Forces (Home guard). On May 5th 2001 in Älvsbyn Municipality (Norrbotten County along the Pite River) temporary flood barriers close to a residential area collapsed and two children drowned. This event led to major headlines and many questions were raised regarding the protection and reliability of temporary flood barriers. Many people also requested help from the municipality to build temporary flood barriers in their areas but they only received recommendations.

Landslides occurred in areas close to rivers. Farmers were affected in many ways; both regarding limited harvests, but also with flooded fields. Farmers asked the municipal authorities to provide new fields for their cattle.

Road traffic accidents (RTAs) were a serious problem. Approximately 25 serious car accidents with dead or severely injured persons, and many more were injured due to undermined condition of roads. The amount of water on the roads caused many cases of aquaplaning. In May a Spanish lorry coming from Finland and transporting hazardous materials was near to cause a major accident near Luleå. Bad tyres in combination with a drunk driver, high speeds and water on the road surface make the vehicle out of control resulting in an overturned lorry of E4

motorway. Luckily no explosion or leakage of poisonous materials occurred. It was only luck that stopped the catastrophe. The Swedish Transport Administration supported by the police issues regularly specific information about the roads condition. However, it seems that the traffic accidents continue to be a big problem. The police also obtained reports from the public about increased burglaries and looting in areas that were evacuated. It seems that the police have not enough personnel to match all these emergency demands.

Many people have made complaints to insurance companies which are unwilling to cover the cost of damages. The many unsolved issues have led to some newspaper headlines. Insurance companies use the media for distributing information to the public: Take preventive action is their main message!

During the whole timeframe, the Swedish Meteorological and Hydrological Institute (SMHI - a government agency under the Ministry of the Environment) has issued general forecasts and weather warnings as support to Swedish national, regional, local decision-makers and the public in general. Since April 2011, SMHI has issued three warnings of level 2 and four warnings of level 1. Level 2 indicates a 10 to 50 year flow and implies danger to the public and great material damage and disturbance in the important community functions. Level 1 indicates a 1 to 10 year flow and implies some risk to the public and disturbance in some community functions. The SMHI's long term forecast for the summer predicts a continuation of high rainfall period and possibly an exceptional wet season. It is however a forecast and thus uncertain.

To support coordination of measures taken, MSB conducted a cooperation conference with the county administrative boards and some governmental agencies. The purpose was to coordinate public information and examine the preparedness and co-operational effectiveness of civil protection and joint emergency responses.

The MSB has also monitored the development of the spring flood by collecting data from the County Administrative Boards (CAB) regarding water discharges. This information has been compiled and submitted on a weekly basis to the Ministry of Defence. The

MSB has supported the municipalities with specific extra resources, e. g. sandbags, temporary flood barriers and water pumps.

The impact of the flooding was however limited:

- drinking water was only slightly affected,
- contamination of water was limited,
- no hazardous substances (CBRN) incidents occurred,
- the health of the population was quite good with a limited occurrence of stomach-related illnesses,
- no sewage system collapsed,
- electrical power supply and telecommunications were only slightly affected,
- no major evacuations were necessary,
- the municipalities including the fire brigades handled the situation well,
- no major emergency situation occurred.

The severe spring flood situation was an issue on the annual meeting between the Nordic Directors General (DG:s) for civil protection. The DG:s have encouraged their organisations to cooperate on preventive measures when it comes to a flooding scenario. The duty officer at MSB has informed the MIC on the situation in Sweden but Sweden has not made any request for additional international resources so far. The EU MIC continues to monitor the situation.

June until beginning of September 2011

The first part of June started dry, but the rest of the summer was wet and cold. The precipitation amount has exceeded the maximum level in Norrbotten County since the start of weather observations more than 140 years ago and has been much higher than normal in Västerbotten County. In some areas precipitation has been more than the three times greater than the normal value. The cooler than normal temperatures resulted in accumulation of precipitation in the form of snow in winter and significantly lower than normal evaporation during Summer. This has led to extremely high discharge and water levels in the rivers.

In early August the large regulation reservoirs were filled to their full supply level (FSL). In order to maintain the safety margins of the dams the flood gates were opened to release the surplus water downstream. As a consequence the resulting water flow in the lower parts of the rivers reached the 50-year values in many places. Decisions have been heavily questioned by those affected and some people have raised financial complaints. The municipalities and county administrative boards (CAB) have examined and updated their plans for handling the flooding situation. Extra temporary flood barriers have been obtained. Public relations officers have been active in disseminating information. Routines for public warning systems have also been examined. Some of the municipalities have contacted the Swedish Government with financial complaints for extra costs for flood measures. No decision has yet been made by the government.

The water level in the Lule River has increased very fast in the last few weeks and it is expected to reach up to 3 metres higher levels than normal in the coming days for some areas.

The long term forecast from SMHI shows that the rainfall would intensify and increase in duration in Norrbotten county in the first half of September. In the 90-day SMHI forecast however Norrbotten and Västerbotten counties can expect temperatures near-normal to a little cooler than normal for the period, along with normal rainfall for Norrbotten and below-normal rainfall for Västerbotten. The second half of September looks to have near-normal temperatures with rainfall near normal in the Norrbotten and near to below-normal in the Västerbotten County. October temperatures and rainfall look near normal for both Norrbotten and Västerbotten counties. For November temperatures look below normal with rainfall also below normal.

It is worth mentioning that the 90-day weather forecast is just the start of the forecast process or first approximation. It will have to be further refined in the months ahead based on other contributing meteorological factors.

The Norrbotten CAB extended attendance of their meetings to include representatives from the municipalities and insurance companies, followed by increased public information work. The



River Lule between Jokkmokk, Boden and Luleå.

municipalities are also stepping up their efforts: Analysis of lessons learned from the spring floods, mapping probable landslide areas and assessing available resources for the handling of flooding emergencies. Many municipalities have extended public relations service with specific public information centres (PIC). A growing task for the fire service is to rescue civilians trapped in motor vehicles in deep water.

During the summer, the Swedish Transport Administration, conducted several examinations of roads and railways and performed a safety supervision of companies involved. They have recommended the closure of some roads and railways. The railway used by Luossavaara-Kiirunavaara AB (LKAB, an international high-tech mining corporation) for ore traffic from Kiruna to Luleå Harbour is closed at Nattavaara. The traffic is routed to Narvik Harbour and is running with a reduced capacity.

Norrbotten County Council (local health authority) has also increased its readiness and public relations work. They are also supporting the municipalities and Norrbotten CABs with advice and recommendations.

The Swedish National Food Administration (NFA, a government authority) has issued instructions to municipalities to increase inspections of abattoirs, butchers, dairies and poultry farms and also food facilities in trains, aircraft and on certain maritime vessels. The NFA has also issued advice to regional and local supervisory authorities and to the food processing industry. The NFA has also the overall responsibility for export inspections. As a part of import control, the NFA offices at the Border Inspection Posts carry out regularly test and sampling of food coming from the countries outside the EU for different infectious diseases like salmonella.

The MSB supports other authorities with expertise and advice. It has been in close contact with other national authorities and also with the private sector. The MSB has initiated discussions with the Swedish Armed Forces regarding the possibility of support in the form of transport resources (mainly helicopters and aeroplanes, but also tracked vehicles) and manpower from the Home Guard for various tasks, so far no decision has been made.

The MSB general assessment, based on the facts from national authorities and the dam owner companies, is that it will be a tough autumn ahead with increased flooding. MSB's estimation is however that it will be manageable with the available resources.

The anxiety seen among people in the affected areas is increasing. The regional radio network of Sveriges Radio (SR, PBS radio in Sweden) in Norrbotten County has started a daily programme on the effects on daily life. Many questions have been raised by the listeners and SR used to invite representatives from authorities, the private sector and insurance companies to answer the questions.

The extremely high water levels in the river system and the increased discharge of surplus water from the reservoirs cause more and more problems for the public. Cellars and basements are flooded and drinking water systems are contaminated by sewage water. Some municipal offices are also concerned about the risk of water seepage into their basements where their computer servers are located.

In some municipalities the decision has been taken to prepare evacuations of residents from affected areas. The municipal offices are receiving increasing numbers of telephone calls from residents and local businesses regarding support for the transport of properties and cattle out of the affected areas. Elderly people's home run by municipalities are requesting assistance to deal with the flooding that is polluting drinking water, causing power cuts, and not least causing anxiety and frustration among the elderly and their relatives. More and more calls are also received from people who are uninsured or have limited insurance; they are now turning to the municipalities for financial assistance.

At Sunderby Hospital (a county hospital on the border between Boden and Luleå) the flooding has caused severe problems. The surgical operations are hampered due to temporary power cuts and water flood. On 9th September an outbreak of salmonella was detected at a clinic in the Norrbotten County.

Incidents of diarrhoea are reported more frequently in the Norrbotten County and directives are issued by the local health authority regarding preventive hygiene.

Beside the hospitals, the electrical power is increasingly affecting the schools, farms, offices, shops and factories. The Swedish National Grid (the government authority responsible for electricity preparedness) supports different actors and contributes with several kinds of resources to reinforce the electricity supply system to ensure it is able to withstand this critical situation. Resources like emergency power supply units and tracked vehicles with operators, line poles, communication equipment, volunteers (operators, pilots) and so on are used.

The head teachers of some schools have allowed pupils to stay at home due to the risky transport to and from school and due to reduce the risk of contagion. Some farmers are facing problems with cattle drinking polluted water. Farmers are experiencing problems with power supply for their stables the reoccurring power shortages have affected the resilience of their back-up systems and the transportation difficulties have caused gaps in fuel deliveries. There are also disturbances in milk deliveries, which have forced the farmers to spill the milk in the sewage.

Some companies are facing problems with their computer server rooms, and from time to time their homepages are down. More and more shops are having problems with their cash systems, but also with equipment ceasing to work. They suffer also from shoplifting and burglary during the power blackout. Transportation of food from regional distributors to local shops is being hampered and even halted due to poor road conditions. Some factories report problems in receiving and distributing technical components.

The flooding has probably lead to contaminations in affected rivers as the chemicals used in households (e.g. paint, methylated spirits and acetone) are dispersed into the rivers and further into the Gulf of Bothnia.

In some areas in Norrbotten County, large numbers of foreign lingo berry pickers have showed up and used camping grounds with small cottages as temporary residences. Problems with informing these groups have occurred as some groups only speak Thai.

At the same time, more and more people are calling both municipal and county offices to offer their help, but with a limited response. In the media this is being reported as a failure by the authorities not accepting the assistance of those offering it.

The Swedish Board of Agriculture has released information on measures to prevent the spread of contagious animal diseases. Through the organisation of district veterinarians animal health care is ensured. Directives for preventive animal health care are issued. These are related to the environment, seeds and water, plant inspections and cattle registration.

The Swedish National Veterinary Institute (SVA) (a government authority) has issued recommendations for managing animal diseases, particularly zoonotic diseases that can be transmitted between animals and humans.

Airport authorities report that flooding has reduced road capacity to and from the airport causing reduced operational capacity of Luleå Airport by 25 %.

The Swedish Maritime Administration (SMA) has continued to keep the navigation routes open and safe. The SMA together with the Swedish Sea Rescue Society (SSRS) and the Swedish Coast Guard has conducted several maritime search and rescue operations in the Gulf of Bothnia.

More and more residents and tourists from neighbouring countries like Finland and Norway are visiting the damaged areas which make the police work even more difficult. Furthermore, some policemen have reported incidents where criminals have used dangerous laser pointers against police. After medical examinations, minor injuries to the eyes of the policemen were noted. In early September the police stopped a Finnish registered speedboat in Luleå Harbour, resulting in the arrest of a Swedish man and a Finnish woman. So far the investigation shows that those arrested were involved in illegal import of laser pointers from China to Sweden via Finland. They used Luleå Harbour and the Torne River as the gateway to Sweden. The Chief Constable in Norrbotten County has requested assistance from other counties with additional police personnel to maintain law and order in the area.

The use of helicopters, both civil and military, has been limited because of the bad weather. The increased need for tracked vehicles with drivers is forwarded to Norrbotten County Administrative Board from the police and the municipalities.

The road conditions are worsening and more and more roads (both gravel and metalled) are being closed for the traffic.

Telecommunications are also affected by the flood situation and disruption to telecommunications has been reported in many rural areas. From time to time the switchboards at municipal and county council offices also have been blocked by too many calls. Low-pressure system coming from the west has brought record rainfalls causing the water levels in the river systems and reservoirs reaching extremely high levels. The flood maps over the most affected river, Lule River, are attached to this report. As mentioned earlier, the hydro power companies continue with high discharge levels for the surplus water from the reservoirs.

There are reports about overworking and stress related problems among municipal employees in Norrbotten CAB employees, particularly from switchboard operators. Some employees have also faced threats from angry residents. These employees have been working with flood related tasks without holiday since early May. The medical advice is that they need rest.

During the summer, churches within the Swedish Church experienced the increased turmoil in the community. The needs for pastoral care and individual calls have increased significantly, talks about people's anxiety, fear and anger. Many who live along the rivers have expressed their decreased confidence in insurance companies. People have tried to get help to protect their property from the water. More and more people express a sense of being abandoned. Everyone does not believe in authorities' assurance that it has the situation under control. People's concerns and anxiety for the future have also brought many existential questions, which deals with security in life and society. The parishes have been concentrated in worship, pastoral care, diaconal work, home visits and visits to nursing homes. Parish employees meet a lot of anxiety and anger mixed with sorrow. On-duty priest has also noticed an increasing number of calls, dealing with concerns about what will happen.

The CAB of AC and BD have conducted cooperation conferences with regional actors addressing coordination of information and to examine the preparedness of civil protection capacities.

Settings shortly before D-11

On D-14, SMHI sent a forewarning (Hydrological information) to CAB of Norrbotten, MSB and other relevant Swedish authorities regarding a 40% risk for a level 3 warning for Norrbotten County in the following 5 days. Based on the SMHI forewarning, CAB of Norrbotten and Västerbotten asked MSB to facilitate a National Coordination Conference. MSB accepted and the date for the Conference was set for D-11. MSB will together with CABs produce an agenda with specific questions and identify participating authorities and organisations.

Two days after the issuance of the forewarning (D-12) SMHI however issued a level 3 warning for Lule River and a level 2 war-

ning for Pite River and Kalix River (Appendix 1). Level 3 warning indicates of high-flow equal to 50 year flow or more and implies major flooding problems. In the same message SMHI issued warnings of level 2 for Pite River and Kalix River in Norrbotten.

Appendix 2, Types of Exercises

Types of Exercises (from Nato's guidelines for exercise planning)

The Field exercise (Operation based) is designed to test command and control, communication, coordination, interoperability as well as procedures involving deployment of consequence management teams to the field from the host nation as well as from interested EAPC nations, International Organisations (IO) and Non Governmental Organisations (NGO). Field exercises require very detailed and realistic preparations and simulations, and consequently a larger and more flexible DISTAFF

The Command Post exercise (Discussion Based) is a very useful way to exercise the tasks of the command elements, focusing on decision-making, interrelation and coordination. The CPX could also be executed as a final test of the command and communication system prior to a field exercise

Table-top exercise (Discussion based) can address the processes of consultation, decision making and co-ordination. It is typically carried out in an office environment, but can also take place in other venues (i.e. conference facilities). Table-top exercises are carried out with the involvement of responsible bodies or individuals, as specified in relevant procedures. No deployment of personnel and equipment to the field is involved. This makes table-top exercises a flexible and cost-effective way of training and exercising.

Exercises, especially field exercises, require a long planning process and are quite expensive for participating nations. Therefore, it is important that the exercise is carried out effectively in order to serve as an important part of the learning and preparation process for real consequence management operations.

It may be necessary to conduct a tabletop or command post exercise in order to conduct a successful field exercise. If that is the case, these activities should be incorporated as part of the planning process for the final field exercise.

Directing Staff – DISTAFF

Any major international exercise which involves many nations and/or more than a thousand people will require an extensive command structure. For that purpose, a properly manned DISTAFF must be organised. The task of the DISTAFF is to direct and control the exercise play in order to achieve the agreed aims and objectives. Instructions issued by the DISTAFF are binding on all players. DISTAFF must be fully independent, physically separated from the players and have complete freedom of action and free access to all information in order to be able to properly direct the exercise.



Appendix 3, Abbreviations

LIST OF ABBREVIATIONS

| | |
|---------|---|
| AAR | After Action Review |
| AT | Assessment Team |
| CBRN | Chemical, Biological, Radiological and Nuclear (agents) |
| CEP | Civil Emergency Planning |
| CDC | Concept Development Conference |
| CPX | Command Post Exercise |
| DISTAFF | Directing Staff |
| EADRCC | Euro-Atlantic Disaster Response Co-ordination Centre |
| EAPC | Euro-Atlantic Partnership Council |
| EXPI | Exercise Planning Instructions |
| EXSPEC | Exercise Specification |
| FTX | Field Training Exercise |
| FIR | First Impression Report |
| FPC | Final Planning Conference |
| IPC | Initial Planning Conference |
| LEMA | Local Emergency Management Authority |
| LO | Liaison Officer |
| MIC | Monitoring and Information Centre |
| MPC | Main Planning Conference |
| NGO | Non Governmental Organisations |
| OCE | Officer Conducting the Exercise |
| OSC | On-Site Commander |
| OSDS | On-Site Directing Staff (Distaff) |
| OSOCC | On-Site Operations Co-ordination Centre |
| PIC | Public Information Centre |
| POC | Point of Contact |
| PXD | Post Exercise Discussion |
| RC | Rescue Commander |
| SAR | Search and Rescue |
| TTX | Table-Top Exercise |

