

BARENTS RESCUE 2007 FINAL REPORT

1. Introduction

We exercise with the aim of constantly improving our joint efforts in saving lives. Exercises are a learning process which includes the planning process, the execution of the exercise, the evaluation process and finally the lessons learned.

This report presents the achievement of the exercise objectives. In addition, it elaborates the planning process and execution of the exercise. The assessment and lessons learned from the process will hopefully be valuable to the BEAC countries when developing their capabilities in emergency management.

2. General Framework, planning and evaluation processes of Barents Rescue 2007

2.1 General Framework

Barents Rescue 2007 project was aimed to facilitate communications, coordination and cooperation between countries and civil-military services that may become involved in an emergency relevant to the Barents Region. The project consisted of a series of planning conferences, training events and exercises. The main event of this project was the Barents Rescue 2007 Exercise, held from 18th to 21st October in the Saariselkä region, Finland.

Geographic and climatic conditions in the North of Finland with long distances and limited infrastructure pose a real challenge to any rescue operation. The scenario was aimed to challenge all services and agencies to enhance transboundary cooperation. National authorities of Finland requested rescue assistance from BEAC countries.

The scenario for the exercise was based on real risk assessment as hundreds of flights will be arriving in Lapland in December. In the scenario an aircraft executed an emergency landing to the uninhabited areas of Inari municipality. More than 200 passengers were injured or deceased. The passengers were mainly tourists from the UK, but there were also many other nationalities among the passengers. The reason for the crash was not immediately obvious.

The exercise included three phases, each with a different approach to the emergency management:

Phase One – ALARMEX was aimed to test alarming and gathering of possible resources in the Barents Euro-Arctic Region in case of major emergency. Executive officer for the ALARMEX was Mr Erkki Rytilahti from the Lapland Emergency Response Centre.

Phase Two. TTX – The aim of the Table Top Exercise, TTX, was to practice response in the emergency area especially from the leadership and management point of view. This phase consisted of a command post exercise, larger than usual table top exercise with the utilization of virtual tools. Executive officer for the TTX was Mr Paavo Tiitta from the Emergency Services College

Phase Three – Field Training Exercise, FTX. This phase demonstrated the capabilities of respective organisations and agencies involved in the major emergency situation planned for this exercise. Executive officer for the FTX was Mr Pasi Ryyänen from the Regional Rescue Service of Lapland.

In addition to the exercise activities, two seminars were organised and took place simultaneously. The seminars were also a part of the visitors program.

The responsibility for planning the Barents Rescue 2007 Exercise rested with the Crisis Management Centre Finland and the State Provincial Office of Lapland. In addition, the Regional Emergency Services of Lapland together with the Voluntary Rescue Service placed their knowledge and experience of local resources at the disposal of the organisers.

2.2 Planning Process

The planning process is vital and covers a large part of the aim of the exercise. It was agreed already during the Barents Exercise 2005 that Finland will arrange the next exercise in 2007. There were some difficulties in Finland in establishing the responsible body for the exercise. At the beginning of the process the State Provincial Office of Lapland was chosen to take the lead role in arranging the exercise and started the planning. They also made the initial choice of the Scenario.

In October 2006 the international pre-planning seminar was arranged in Saariselkä. In that meeting Finland was urged by other participating nations to make progress in the planning. After that meeting the Emergency Services College was tasked to assist in the exercise preparations and be responsible of the planning of the exercise contents

and managing the process. In the beginning of 2007 a Barents Rescue 2007 project was established in the College's new unit Crisis Management Centre.

Certain mandates, facts and assumptions dictated the planning process. These preconceptions and reservations were mapped in the beginning of the project to avoid overlapping in the planning process. Such were for example the following:

- Finland stressed the management point of view. The leaders need most training and therefore the priority should be on the management exercise (Table Top)
- Situational picture/awareness is a perpetual challenge in all emergencies and exercises, which was also highlighted in the BR05 Final Report
- National spokesman is indispensable, as highlighted in the BR05 Final Report
- Finland proposed that hypothermia prevention and logistics should be one of the thematic areas.

The objectives of the exercise, planned together with the participating organisations emphasised the learning aspect of the process. The exercise objectives were:

- To test how functional the agreements on assistance are
- To test how effectively the countries in the Barents Region alarm each other in case of major emergency or share information with each other
- To develop leadership skills in major emergencies
- To practice and develop informing at all levels
- To improve preparedness and the maintenance of situation awareness
- To develop transportation and logistics, particularly in view of preventing hypothermia in major accidents
- To develop the capacity to organise a major international exercise.

The Planning process followed the newly approved Nato/PfP Exercise Directive as a planning document when applicable and the Initial Planning Conference was then organised in Helsinki in February 21-22, 2007. As the remaining time was so limited, it was decided that the Main Planning Conference and Final Planning Conference will be joined into one event, which was eventually held in Saariselkä in 4-6 September, 2007. In addition the FTX was developed together with key players at the security meeting that took place in Ivalo June 6th, 2007. Regional meetings were arranged on a monthly basis.

2.3 Evaluation

The Emergency Services College R&D Department was in charge of the evaluation of the exercise. To fulfil this task an Evaluation Team with independent exercise evaluators representing different countries and organisations was established. Both the activities during the planning period and the execution of the exercise were evaluated. A separate evaluation report is delivered to the Project Leader.

The objective of the Evaluation Team was to provide an overall evaluation of the Barents Rescue 2007 project. The purpose of the evaluation was:

- To assess whether the aims and objectives of the Barents Rescue 2007 project were achieved.
- To identify lessons learned to improve future Barents Rescue exercises.
- To suggest improvements concerning plans and procedures between countries and their respective organisations that may become involved in an emergency within the Barents Region.

The methodology used was based on the experiences from evaluations from a number of international exercises. The most important were Barents 2005 Exercise in Norway, International Humanitarian Partnership (IHP) Triplex Exercise in Finland 2006 and NATO PfP Exercise IDASSA in Croatia 2007.

The evaluation was carried out by a combination of observations of activities, questionnaires to participants and interviews with key personnel as well as workshops and feedback sessions during the exercise. In addition, a valuable source were the internal reports of various organisations involved in the exercise.

The emphasis was placed on evaluating primarily the exercise, so that the actions and conduct of all participants were not thoroughly assessed by the evaluators. However, the major findings were recorded.

The core evaluation team was a multinational group of experienced professionals many of which had also participated in Barents Rescue 2005 in Norway. The team was formed during the Main Planning Conference and it was later joined by additional members. The evaluation team was structured in sub teams with different approaches to the exercise and its objectives. The sub teams were responsible for making their individual assessment plans for the exercise and to report their major findings and recommendations in a consistent manner by a common reporting form.

The evaluation had, however, started much earlier and some of the evaluators were present in all international planning seminars starting from the preplanning meeting in Saariselkä in October 2006. There was also a questionnaire aimed to get feedback of the planning process and sent to national representatives of all four countries.

During the actual exercise phase, the evaluation team carried out the following activities:

- Observed the functions in all levels of the exercise
- Chaired two feedback workshops during the exercise

- Chaired the hot-wash-up session after the exercise
- Introduced the web based feedback questionnaire, which was available in English and Finnish until 1st of November for all exercise participants.

After the exercise, the findings were collected and analysed in the Emergency Services College.

BR2007 was also used as a platform for various R&D Projects to test, experiment and validate their operating procedures, equipment, information sharing etc. Organisations were free to do research individually, but they were recommended to join other research projects for both administrative and operational purposes. The projects were requested to submit a short report for the Exercise evaluation purposes.

3 Achievement of the Exercise Objectives

This chapter is the result of the work carried out by the Evaluation Team with independent exercise evaluators representing different countries and organisations. The exercise objectives were emphasized in all events related to the Barents Rescue Project. Therefore, the following findings are presented through the exercise objectives.

3.2 Objective 1: To test how functional the agreements on assistance are

The ALARMEX was based on the agreements and existing procedures, so the objectives in this respect were met quite well. The event list for the TTX and the FTX unfortunately did not at all deal with agreements, e.g. border crossing procedures or reimbursement of costs etc, and during the first day of the TTX, none of the current bilateral (between Finland and Russia) or multilateral (Nordic) agreements for assistance was referred to. MoI corrected this during the replay of the second day of the TTX.

Taking the plane-accident as a starting point the agreement expert in the evaluation team performed an inventory of all the relevant agreements, both bi- and multilateral, between the Barents countries. He then compared the real action in the TTX and the FTX with the procedures stipulated in the different agreements and did not find any serious divergences. The overall impression is that there is no urgent need for any reviews of the agreements.

Besides the real action in the three exercises, it is worth noting that none of the international response teams, both military and civilian, met any obstacles when bringing personnel and equipment into Finland in order to join the exercise.

There was, however, recorded a number of differences in the procedures during the ALARMEX. Some of them were caused by the streamlining of the procedures or using modified forms for exercise purposes which should not have been done. Others were caused by different views of the actual procedure to be followed. For example, Finland expected a very fast response from other countries, while Norway worked for some time to find the exact resources available. In addition, the use of ERC Tromsø as contact point was not known to the JRCC and question is whether this procedure is in accordance with the agreements.

One relevant point was also the matter of getting the Go-ahead command, and who is supposed to give this. If this is not clear between the requesting and assisting organisation there could be unnecessary delay.¹⁵

3.3 Objective 2: To test how effectively the countries in the Barents Region alarm each other in case of major emergency or share information with each other

The ALARMEX was directed to test these matters and was quite well composed. The duration of the exercise was so short that there was very little follow-up communication between Finland and the other countries.

The exercise tested the communication lines between the contact points without any problems found. The system works quite fast and is a good system for alerting each other. All the Rovaniemi ERC alarms and requests of assistance were sent efficiently to Norway, Sweden and Russia.

There was, however, some confusion on getting the replies. e.g. information from JRCC North Norway regarding capacity in Norwegian hospitals never reached Finnish Health Authorities, even though they were sent to ERC Rovaniemi.

ERC Rovaniemi alerted JRCC North-Norway after 25 minutes – a relatively realistic time, maybe even too soon in a real case. ARCC Rovaniemi involved at least one non-player (ATC in Bodø). This caused confusion and unnecessary “noise” for JRCC North-Norway and the ATC in Bodø.

ARCC Rovaniemi did not send SITREP to Murmansk ARCC in time, but called them soon after. Murmansk ARCC did not have any pre-information about the BR07, but they reported to having MI-8 in 40 minutes “ready to start” status.

In TTX and FTX the alarming was more simulated and e.g. ERC Rovaniemi players in Saariselkä were not operating staff, i.e. dispatchers, although they were taking care of the operative duties during the TTX. They also did not have the normal equipment, but instead they used pen and paper which does not correspond to the real-life situation. This resulted in inadequate information flow. The alarms should be channelled through real existing ERC:s during the whole exercise, this would serve the purpose of training at all levels and would point out possible defects in the system.

¹⁵ During the capsizing of Estonia ferry there was a delay of 90 minutes in sending the helicopters because of this. See **Larsson, L., Nohrstedt, S. (Eds.) 1996.** “Det ser verklig illa ut.” Kommunikationsproblem i samband med Estoniakatastrofen 28 september 1994. Stockholm: Styrelsen för psykologiskt försvar, for information.

The use of additional informal methods (emails and voice conversation) was a useful way to communicate (to help the understanding and have the information recorded).

3.4 Objective 3: To develop leadership skills in major emergencies

This objective was covered in TTX as well as FTX phases although Management level should be faced with the real life type pressure for fast decision making; this feature was now missing from the TTX. There would have been more challenge if the scenario had included tasks outside of the routine rescue activities. The Scenario itself was, however, so challenging that the flaws in command and control of the local emergency management became obvious.

It seems to be that the concept of LEMA/OSOCC was unfamiliar to most of the trainees. OSOCC should work closer in cooperation with LEMA. It seemed that during TTX OSOCC / LEMA worked more or less independently. This hampered information sharing – (this matter worked better on TTX day 2).

The OSC was formed with routine. The members knew each other and were experienced in working with each others. The leader of OSC was the chief of Inari Rescue Service, P3. He went straight to the accident place and formed his command post there. L3 (chief of medical) joined him later. The first police patrol (K1) came by car as far as they could and set up their command post there, about 2 km from the accident place. Border Guard leader joined the police command post. The second police patrol was guided straight to the accident place.

In this kind of exercise it would be important to take into account that organisations have different kinds of organisational structures (some have clearly divided operational and management levels and others do not). This has an effect in the forming of both DISTAFF and OSOCC and their roles and relations.

3.5 Objective 4: To practice and develop informing at all levels

Some players essential for the scenario were missing at the TTX scene in Saariselkä, e.g. representatives from MFA and consulate representatives, although one of the main aspects of the exercise was to test incident involving many foreign national victims in Finland and how the authorities would share information with the foreign authorities.

Also the role of the media and needs of the relatives were very small, even though these form the major information demand during this type of an incident.

During the TTX, having players from different organisations in the same room and communicating verbally instead of making phone calls does not give a realistic

picture of how long it would take to contact the person and forward the information (busy phone lines, mobile phones not working, network overload).

It lasted 1½ hours from alarm time to get first information about patients to the medical command posts. Only after this information had arrived the medical organisation was able to determine exact details about needs of assistance. This time is much too long.

Involvement of Finnair in the exercise gave good understanding of the role an airline company can play in this type of accident. In addition, Finnair's role was very active in the information sharing. The main question is, if the operator is other than Finnair, how is passenger info collecting organised? Which authority is responsible for passenger lists and organizing the telephone inquiry call centre?

During TTX the police was informed on the accident at a very late stage. Helsinki University Hospital got the information on the air crash promptly; however there was delay in the response because they didn't receive information on the victims and whether there was someone still alive. Weather broadcasts were not given. LEMA did not inform media representatives about the media centre they had opened; also the information on the Press Officer was inadequate.

3.6 Objective 5: To improve preparedness and the maintenance of situation awareness

There were no specific events directed to test situational awareness. This area was mainly covered by testing a number of software products. There are, however, potential hazards in the use of technology; the user may focus too heavily on the computer and lose touch with the physical world or apply technology to those problems that are most easily addressed by the technology, and to ignore or downplay those that can not be so easily handled. This was also observed in Barents Rescue 2007.

The airport and the rescue service localised the accident site to two different places, which obviously was the result of different map coordinating systems.

In FTX whole of LEMA did not work in the same room as the rescue services and the medics worked in the separate rooms. Due to this, they had to ask about the each other's doings. Head of voluntary rescue services was not in LEMA from the beginning which caused confusion because the medics did not know where she was. There was no Russian representative in OSOCC/LEMA. Apparently he was in the OSC bus but it was not clear whether he even got the information of the executive group meeting in the OSOCC/LEMA. All information in LEMA e.g. on the notice board was in Finnish so none of the OSOCC international personnel could follow it.

The role of the SHIFT (Shared Information Framework and Technology) tool was not clear. Some participants thought that it was an operational tool although it was aimed for exercise control, keeping track of events and showing the situational picture of the actions.

3.7 Objective 6: To develop transportation and logistics, particularly in view of preventing hypothermia

This objective was well planned in the exercise, especially in the FTX. It was important to have the exercise in three parts, so the cold protection as well as other objectives could be evaluated throughout the whole process.

Due to previously mentioned lack of Go-ahead command, there was a shortage of cold protection equipment at the accident site. In addition there were resources provided, but all of them were not used.

It was asked whether the leaders do trust only larger aircrafts e.g. SNAM and Finnair resources, but are a bit shy in trusting smaller specially equipped ambulance aircrafts. In this FTX, Lufttransport Be 200 a/c (normally they have three of those in northern Norway) might be at the scene – same time as the first helicopters. They could fly two patients in one hour to Tromso and back to Ivalo. From Helsinki there could be two to three ambulance jet a/c within two and half hours.

It was difficult to estimate the time for transport because of the exercise timing. In any case, the time from the accident happening to receiving the cold protective equipment at the accident site was too long and there was a great risk for hypothermia in the prevailing weather conditions, even in the shortened time scenario.

The observation of the most wounded patients on their way to the helicopter transport could have been better. There was an efficient helicopter pick up point, which functioned well, but the patient logistics could be developed more. The classification paper was difficult to understand for foreigners. The one used in 2005 exercise was better. Also marking of tents was poor, red and green patients were in same tent. Tents had no “traffic” calculations and no information about patients staying there; how many, how long time etc. The patients were not divided properly for transportation and for hospitalising.

3.8 Objective 7: To develop the capacity to organise a major international exercise

The organising of the exercise was very challenging in such a short time. The exercise was large enough to give thorough understanding on what is needed. The project organisation was clearly too thin and together with the timing it resulted in the lack of coordination between various stakeholders due to some of them being in Lapland and

others in Kuopio or Helsinki. The overall control, however, was well kept and helped to keep the end result satisfactory.

Although the actual work in the joint events was generally seen as productive, the process was criticised for being too slow to start and having too few international planning conferences, both formal joint conferences and specialized branch conferences. In addition, the planning was obviously not transparent enough for foreign planners; this was due to the fact that most of the planning was undertaken by Finns and also a part of the planning documents were written in Finnish.

It is clear that it would have helped if there had been a separate Main Planning Conference and a Final Planning Conference. It was not, however, feasible to have all three conferences in such a short time. One result was that the event lists were never complete. They were changed often, even up to the exercise day.

The Russian participation in the planning process was somewhat small. The reason for this is that the contacts were made at quite high level and did not involve the operational level enough. Russians participated in the Final Planning Conference. The national planning was generally seen to be adequate and both Swedish and Norwegians reported of good and rapid national planning processes.

The information sharing through CMCFinland's web pages was seen as a useful tool for planning. They were informative and easy to access.

The idea to have everybody present in the exercise with distinctive role without a large number of informal visitors running around was proper. It did not quite succeed though.

The registration for exercise roles through the internet pages was unclear and confusing and resulted in double bookings and incomplete information. Also there were a large number of participants registering after the official final date. Some Finns even showed up to the exercise site without any prior knowledge. All this resulted in confusion and extra work for the administration in the first day.

The handling of accommodations was outsourced to the Saariselkä Central Booking Office and it worked quite well. The participants were generally satisfied with the host nation support.

4 Lessons Learned and future recommendations

It is important that all agencies taking part are involved from the very start of the planning process. The Barents Rescue Exercises is a "joint adventure" between our four countries and involvement from all four countries must be present to ensure a successful exercise.

There is a need to uniform the procedures between the four countries. The alarming procedures have been introduced in the time when fax was the most common tool. It might be useful to look at the possibilities of the more advanced information technology as an option. The new BEAC agreement on emergency prevention, preparedness and response, which hopefully will be signed in the near future, will help in this work by providing also a permanent joint committee to look upon these matters.

As per the alarming procedures, also the information sharing during the incident between BEAC countries should be enhanced. There should be methods to share the operational view between countries. All countries have their own Information Management tools but there are currently very little possibilities to link them together.

However, there is a danger that maintaining situation awareness is seen only as a technological issue. The leadership processes vary between Barents countries. Also the management methods of national units are different. It would be beneficial to include a training event about these differences to the planning conferences. A separate "emergency management" seminar is also recommended to local authorities in the Barents Region. At least for Finland the receiving of large scale international assistance is new so the procedures should be planned on national level and trained.

Role of the DISTAFF should have been better defined. The Distaff of TTX was combined in very late stage and there was not enough coordination between various organisations. There could be distaff-controllers in different "offices" i.e. LEMA; OSC; OSOCC to make sure that the planned scenario is developing in more realistic timetable. These obscurities could have been avoided by arranging a Main Planning Conference.

DISTAFF training and planning can never be stressed too much. It is obvious in the future exercises too that the role of DISTAFF and other staff appointments (EXCON, EVALUATORS) is not clear to all participants. It is recommended that each planning conference contains a part on the training of DISTAFF role on-site.

The timeline of the exercise was in some parts confusing. It is obvious that in this type of exercises we cannot play in real time and there has to be time jumps. When making the jumps it has to be clear to everybody when it starts, how much we jump,

and also there has to be a mutual understanding on what can be expected to have happened in the meantime.

There is a clear need for more co-operation and training within the BEAC Rescue community and thus renewing and continuing the work that was in progress during the Barents Rescue Project in 2003-2005 is important and strongly recommended.

The exercise scenario was generally rated realistic especially for the tourist season and the focus on "Barents challenge"- cold weather and mass-injuries was useful. A lot of improvement in cold protection was made during the project. In the future it is recommended that the cold protective equipment shall be transported from the closest possible place. The cold protective equipment shall be located in several storages in the region, so that the transportation distance in case of emergency is as short as possible. This shall be emphasized in education and training.

The exercise objectives were not the core principle in all phases of event planning. Since it was decided to execute the exercise in conjunction with the Voluntary Rescue Seminar, some exercise phases were planned by different teams with too little coordination.

There are not many possibilities for BEAC emergency preparedness networking. Therefore it is recommended that workshops and seminars for distinctive branches are included also in the future.

Dividing the exercise in three parts with focus points instead of having one mass event was seen as a good idea in principle. Also the exercise methods: In ALARMEX real organisations, with real messages, in TTX Virtual command post exercise and in FTX hands on training and testing of processes and equipment, was seen to be feasible.

In general the planning process appeared to be effective. The most successful exercise is not the one where all went well and participants walked away thinking "aren't we great?" Rather, the successful exercise is one that forces an honest look at capabilities and leads to improvement. In this respect Barents 2007 was clearly a success but only if the improvements are implemented.