



**EPPR Working Group  
Meeting  
5-7 April 2006  
Tornio, Finland  
-Meeting Report-**

***EPPR WORKING GROUP MEETING  
TORNIO, FINLAND, 5-7 APRIL 2006  
–DRAFT MEETING REPORT –***

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***EPPR WORKING GROUP MEETING  
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**Introduction**

The EPPR Working Group meeting was held in Tornio, Finland, 5-7 April 2006. The meeting was attended by country delegations from Canada, Finland, Norway, Sweden, the USA and the Russian Federation. Representatives from Indigenous Peoples' Secretariat also attended the meeting.

Dr. Igor Veselov of the Russian Federation was Chair for the meeting and Mr. Timo Viitanen of Finland was Vice Chair. Ms. Olga Filippova was the Secretary.

A number of presentations were made on the ongoing projects, proposals for future work, and on other related topics. Copies of the presentations are available on the EPPR web site.

The meeting report has been organized according to the agenda items. A copy of the meeting agenda is included as Appendix 1. The actions and decision from that were recorded are reflected in this meeting report.

**0. Registration**

Visit cards from the participants were taken to fulfill the list of participants.

**1. Opening of the Meeting**

Dr. Igor Veselov, the Chair, provided words of welcome to the delegations and other participants.

The Chair opened the meeting and introduced the delegation. A list of meeting participants is included as Appendix 2.

The secretary informed about results of registration.

Mr. Harri Paldanius, Fire Chief of the Kemi-Tornio region, Emergency Services of Lapland, welcomed the group and provided the administrative information regarding the schedule.

Mr. Timo Viitanen welcomed members of the Working Group, told some historical fact about Tornio region. He introduced members of Working Group from Finland. He wished a successful meeting.

## **2. Adoption of the Agenda**

The meeting agenda and timetable were reviewed. The Sweden asked the meeting to include the EPPR report for the upcoming SAO meeting. Canada proposed to include the presentation in Other Business. The IPS asked to add the presentation from IPS. The agenda was adopted with amendments.

## **3. Chair and Secretariat Reports, including Arctic Council Activities**

### ***3.1 Work of the Arctic Council and the SAO***

From the last meeting in Copenhagen the protocol was made. The Chair spoke about new results, presented the working plan on SAO meeting.

Sweden asked about the EPPR report in Khanti-Mansyisk about the two projects with Northern Forum. These projects are made with Northern Forum. The Chair of the WG added some information about the project on floods. The second project is lead by Northern Forum. The Chair hoped to see the representative from Northern Forum and see the results.

The EPPR Chair reported the Working Group on the EPPR report for SAO. He noted the projects, thanked Sweden for support of EPPR web site and the US for the financial support of EPPR secretariat.

The Chair noted that there is little time for preparation for the SAO meeting in Syktivkar in 26-27 April. The Chair asked to support and to provide a good coordination in making a protocol. He informed that the Ministerial meeting would be in October 2006.

### ***3.2 Secretariat report***

The secretary reported about key activities lead by secretariat and thanked Nuclear Safety Institute (IBRAE) for support.

### ***3.3 Activities of Other Working Groups/Projects***

The EPPR Chair gave short information about the progress in activities and programs of the ACAP, ACIA, AMAP, CAFF, PAME and SDWG groups.

#### **PAME**

A discussion took place regarding the current work program of PAME and those issues that would have a impact on the EPPR Work Group program. A presentation was made regarding PAME work on issues such as GIS Information System Partnership; Large Marine Ecosystems (LMEs) approach to the Arctic; the Port Reception Facilities Study; the status of the review of Regional Program of Action on Land Based Sources of Marine Pollution; the status of the Russian Federation Program of Action; and the status of the Arctic Marine Shipping Assessment. Discussion took place regarding the value of information sharing between the two working groups on a more immediate basis and the potential program benefits of such cooperation.

- 3.3.1 It was recommended that the Chairman of the EPPR Working Group discuss with the Chairman of the PAME Working Group the possibility of periodic joint meetings of the two Working Groups. The terms of reference for such an inquiry were (1) that the joint meetings be at the Working Group level; (2) that the joint meetings provide for one day of joint meetings for shared work projects and the cross briefing on work which is not shared, followed by separate working group meetings; and (3) that this be sought either annually, or if this is not feasible, on an every other year basis since most projects are of sufficient length of time to permit such a frequency.**

## **Education, Outreach, and IPY**

Recognizing the importance of a knowledge base for disaster prevention and emergency preparedness, EPPR looked at ways of developing the education and outreach dimension of its work. EPPR took note of possible initiatives to cooperate with the University of the Arctic regarding International Polar Year (IPY) proposals and with its coordination office for IPY education and outreach. The meeting was briefed on the proposals for community engagement and a curriculum on Environmental Stewardship and Radioactivity and for the development of Online Learning in Arctic Regions using Wireless and Mobile Technologies, and was encouraged to consider addressing emergency policy issues in the context of the International Conference on Arctic Research Planning II (ICARP II) grand research challenges for the Arctic region in the next decade., EPPR will cooperate with other Working Groups in the follow-up to the ACIA Report, emphasizing emergency preparedness implications and the need for education and outreach in that connection.

- 3.3.2 The EPPR Working Group reviewed the presentation and agreed to consider the recommendations coming from the presentation.**

## **4. *Project Updates and Information Exchange – By Area of Focus***

### **4.1 *Oil and Gas***

#### **Oil and Gas**

Reports on EPPR Ongoing Projects.

#### **Arctic Rescue**

At previous meetings, the Russian Federation proposed a new legal framework to initiate the concept of Arctic Rescue. It was agreed that no new framework is needed, and that EPPR should focus on projects that would contribute to improving emergency preparedness in the Arctic, thus addressing enhanced cooperation called for by Russia. A position was developed to explain the

new emphasis, inform SAOs, and serve as the basis for text for the Ministerial Declaration to be written for the October meeting.

The following text was developed: Recognizing that existing treaties, conventions and agreements provide the necessary framework for the work of the EPPR, the WG would like to draw attention to the need to continue to develop co-operation and the exchange of experience and lessons learned in the field of prevention, preparedness and response in the Arctic.

The recent Russian sponsored symposium held in Moscow on Prevention and Mitigation of Emergency Situations in the Arctic has highlighted the special challenges related to emergency response in the Arctic in particular

- Awareness of the severe effects that disasters might have on Arctic ecological systems and on the traditional way of life of Arctic indigenous people;
- Extreme operating conditions for rescue workers and response equipment in the Arctic, and the need to develop the ability to respond to emergencies in cold and remote areas;
- The need to expand the exchange of experience and lessons learned in order to improve the technical capabilities and the practical expertise in response to emergencies in the Arctic;

In order to address these issues the EPPR will put special focus on these areas and initiate new projects in order to improve the capacity to respond to emergencies in the Arctic. The projects will focus on

- exchange of information, training and experience
- public information
- technical development and support, and
- co-ordination of response

The EPPR WG decided to initiate a number of projects in order to enhance the cooperation in this area and will be developing a proposal for establishing a National Assistance Capability based in Northwest Russia to respond to radiological emergencies in the Arctic. Further the group decided to start a review of the possibilities to strengthen the response capabilities in cold climate in 2007.

To enact this cooperation, Sweden proposed to have local seminars, and to develop special projects.

The US and Russia will work on developing a proposal for the National Assistance Capability, and encouraged members to focus on concrete projects. It was noted that the possibility for proposals is very flexible under this new plan.

Indigenous people asked how they would be involved in the work. We see that this framework will not be separate. Each country may answer by them.

**4.1.1 Sweden noted that at the beginning we tried to make an operative plan for operating. It was not very much stressed. The transportation is growing that is why we should focus on it and may be should study the oil spills.**

**Sweden has through the Swedish rescue service Agency arranged a number of international courses on the environmental impact of emergencies operations. This has been a project conducted under the Partnership for Peace (PfP). The course program includes presentations made by different experts. This course could be**

**adjusted to take in to account the special conditions of the Arctic. Sweden would to the next meeting be willing to review the possibilities to run this course in order to enhance cooperation in this field of emergency prevention and preparedness. The US will present a specific proposal for National Assistance Capability in North West Russia at the next meeting.**

### **Information about “Symposium of EPPR Working Group on the Conception of creation the system of preparedness and response of emergencies in Arctic”**

According to the recommendations of the 2005 annual meeting the symposium on the main problems of the organization of the system of prevention and response in Arctic (Arctic Rescue) was organized in Moscow. Four countries took part in symposium: Russian Federation, Sweden, Finland and Canada. Reports with proposals for organizing the rescue service, environment security and other problems were presented. Russian Federation thanks Sweden for financial support. The materials of the symposium were published in English and Russian. The book was distributed to the participants of the meeting.

### **Shoreline Cleanup Assessment Technology (SCAT) Manual**

Canada provided the final draft of the Shoreline Cleanup Assessment Technology (SCAT) manual.. Canada proposed to use the disk with translation The US said that they used Russian translation terminology. But finally they are not really sure in the translation. They asked if there is a mechanism to translate brochure correctly. It was proposed the Chair to contact with Gennadii Semanov in Saint Petersburg to get a good translation. Then to provide good Russian translation.

Canada is proposing to put on a SCAT training courses on use of the manual. The last was in Innuvik, Canada. They intend to make a combined course, depending the facilities, the members of EPPR Working Group.

SCAT manuals have not been addressed to conditions in the Arctic, and new information is reflected in the new manual.

#### **4.1.2 Countries congratulated Canada on the SCAT manual and encouraged to keep on working on translation the booklets into Russian.**

### **Discussion and decision on possible joint effort with other Working Groups**

#### **R&D – Response for oil in ice**

#### **4.1.4 Countries agreed that the report from Walter Parker on Response for oil in ice would be useful in their ongoing work on developing response to oil in ice.**



## **Transboundary cooperation**

Sweden noted that there was an accident a week ago. One of the ships sank 1500tons spilled. It happens from time to time in Baltic Sea. This is where cooperation should be used. Every country has the same problems. There are different facts that have to be considered on a problem of sailing transport. Every decision should be put on the law to treat legally. Some options of the plan have to be done. Sweden noted that this kind of problem can be on the Baltic Sea. Norway said that it could be done for the Arctic in whole if to keep it very strictly in the project.

### **4.1.5 The Working Group noted the same situation can take place in their countries.**

## **Oily waste disposal**

Canada outlined a proposal to develop guidelines and strategies for oily waste management decisions in the Arctic.

The issue of oily waste management has, in general, had a lower level of focus and effort than environmental or oil spill related issues, and there are three main reasons for the development of a tool to address this topic:

- a) the discussion of a waste management is frequently the weakest part of oil spill contingency plans;
- b) there exist many manuals for on-water and shoreline response operations, but there are none specifically for waste management;
- c) the capacity for on-water recovery or elimination of spilled oil in Arctic Waters is limited as a result of the remoteness and difficulty of working in ice-infested waters, so that shoreline oiling is to be expected in most spill incidents.

Waste management can be a critical bottleneck for response operations, particularly in remote areas where large amounts of waste are generated which then require transfer to temporary or permanent disposal locations. Data for the recent M/V Selendang Ayu incident and the T/V. Exxon Valdez response were provided by way of example.

The purpose of the proposed project is the development of guidelines for waste management, which would include recommendations for:

- a) the decision-making process and
- b) the implementation of a waste management plan for both temporary and permanent disposal.

The focus of the document would be on remote areas i.e. locations away from large settlements, towns, and cities. It will cover both on-water and shoreline operations inland to the limit of marine conditions, and the intended users include spill-management decision makers, operations supervisions, and politicians.

A value-added component will be a simple interactive Job Aid which will lead the user through a series of basic steps that are necessary to evaluate the cost/benefit of each of the shoreline treatment or clean-up options in the context of waste management.

It is anticipated that the project would take 9-12 month at an approximate cost of \$100,000 (US), and result in a document of 75-100 pages.

A Table of Contents was provided, together with the Canadian example of the country-specific elements.

- 4.1.5 It was suggested by Sweden, and endorsed by the US, that Canada convene an Experts Meeting/workshop following which, a more detailed proposal would be provided to the Working Group for it to consider prior to its next meeting. Canada agreed to do this. Norway also supported proposal, development at the last EPPR Working Group meeting, but was not present for discussion of the current proposal. Sweden said to make proposals for Canada and to make a final project to the next meeting.**

### **New activities in the Arctic areas (transportation, production)**

The U.S. Coast Guard Report on Hurricanes Katrina and Rita, 2005. Oil and gas exploration, development, and production facilities located in the Gulf of Mexico region of the United States (U.S.) were subjected to category five hurricane-force winds during the passages of hurricanes Katrina and Rita during the summer of 2005. The hurricanes, occurring during a season of numerous major hurricane events, destroyed major infrastructure, caused serious loss of life, presented major search and rescue demands, released approximately 9 million gallons of oil, and severely challenged the off shore and on shore energy industries. Major fixed platforms were totally destroyed or severely damaged as were smaller production facilities, moorings on mobile offshore drilling units failed, and both transportation and in-field sub-sea pipelines sustained significant damage. Major shore side facilities were severely damaged, pipelines were affected, and major and minor spills were accompanied by thousands of minor spills from a wide variety of facilities ranging from major production and storage facilities to small facility tanks and distribution facilities. The presentation summarized the extent of the impacts of the hurricanes on the offshore and on shore energy infrastructure and what efforts were immediately undertaken and are still underway to return U.S. crude oil and natural gas production to pre-hurricane levels. Emphasis was placed on the regulatory programs that established notification, contingency planning and response capabilities as well as the Incident Command System, which integrated thousands of federal, state, local and private sector organizations. Discussion was provided on the resources in place to prevent and limit oil spills from facilities, requirements for hurricane operational planning, and procedures for post-event damage assessment, prioritization, and reporting. Lessons learned and best practices from responses to these precedent-setting natural disasters that affected the U.S. offshore energy infrastructure were also shared.

- 4.1.7 The Working group thanked the US for the interesting presentation. The EPPR Working Group discussed the nature of response to individual incidents as compared to major disasters which destroy the infrastructure upon which individual incident planning is predicated. The Working Group appreciated the information provided and the lessons learned which were shared.**

### **Updates on the Mackenzie Gas Project**

Canada updated the Working Group on the Mackenzie Gas Project. The MGP is composed of a 1200 km long, 0.75m diameter gas pipeline linking 3 anchor fields in the Mackenzie Delta region of the Northwest Territories, Canada, with southern Canadian markets. The chilled, buried pipeline will follow the Mackenzie River and cross continuous, discontinuous and non permafrost terrain. A smaller, buried natural gas liquids line will parallel the gas line to Norman Wells where the natural gas liquids will be transferred to the existing oil pipeline for shipment south.

Public hearings are now underway. The Joint Review Panel (JRP) is conducting environmental and social impact hearings, the National Energy Board (NEB), which regulates the project, is conducting detailed technical hearings. Both sets of hearings will take about a year. The NEB will take into account the JRP findings (effected in mid 2007) before finding its report. Both reports will be presented to the federal Cabinet for final decisions, expected in late 2007. Other regulatory hearings and processes will follow if the project receives JRP, NEB, and Cabinet approval. Construction could start in winter 2009. Additional information can be found at the [www.neb.ca](http://www.neb.ca) and [www.ngps.ca](http://www.ngps.ca).

#### **4.1.8 Thanked Canada for the report.**

### **Beaufort the strategic Regional Plan of Action**

If the Mackenzie Gas Project (MGP) proceeds, exploration and development of gas fields in the near shore zone of the Mackenzie Delta Region of Beaufort Sea may follow. To prepare for this possibility, in 2005 federal departments, the Government of the Northwest Territories and the Inuvialuit (lead by the Joint Secretariat, the Inuvialuit Game Council and the Inuvialuit Regional cooperation) launched an initiative to prepare a strategic plan of action. A final report with recommendations for future work is due by March 2007. Some specific studies are underway and two major workshops have been held including a recent one on social, economic and cultural concerns. The Joint Secretariat is leading the overall initiative; further information can be found at [www.bstrpa.com](http://www.bstrpa.com).

### **The research program of the Prince William Sound Regional \Citizen's Advisory Council research program**

A report was made on the Council organization and its research program. The report detailed 11 past research programs and 11 current ones.

High priorities in the present program are:

- a) Preventing transfer of non-indigenous species in ballast water;
- b) Chemical dispersants research to review toxicity, to determine if stockpiles are effective and to promote incorporation of scientific knowledge and local input in the dispersant's use discussion making process.
- c) The uses of tug escorts in tanker accident prevention and spill response.
- d) The development of geographical response strategies to protect sensitive areas and resources.

- e) The development of a weather information data base for Prince William Sound, Weather buoys and other weather tracking infrastructure.

## **North Slope Oil Spill**

The US made a presentation on the lessons learned from the recent North Slope oil spill. On March 2, 2006, the largest oil spill in North Slope oil history was discovered by passing truck drivers who smelled it. Oil had been flowing for several days without being discovered by the Prudhoe Bay field leak detection system. It took 3 days to discover the source of the leak; a quarter inch hole in the 34 inch gathering line. The leak is now estimated at 4000 barrels. Corrosion has been attributed as the cause of the leak. The last time the line was checked internally for corrosion was 7 years ago. The Prudhoe Bay field in this section is over 30 years old.

The failure of leak detection and corrosion detection systems poses serious problems for this aging field. The 48 inch Alyaska Pipeline that serves it was recently renewed for another 30 years lease by the US. Department of Interior with no requirements for extra surveillance due to its age.

### **4.2 Radiological/Other Hazards**

Reports on EPPR Ongoing Projects

#### **Source Control Management Phase III –FSUE “Atomflot” (Murmansk) and FSUE “ME Zvezdochka” (Archangelsk Region)**

Two first phases of the Source control project (USA & Russia) at the Apatity water treatment facility in the Murmansk Region and Fuel Research Department of the R&D Institute for Nuclear reactors in Dimitrovgrad (the Ulyanovsk Region) were completed. Risk assessment based upon the ISO14001 Standard was performed, and recommendations made to improve the safety level at both facilities. A Risk Assessment Methodology was developed for both chemical and radiation hazardous types of facilities. The third phase of this pilot project is being carried out at two facilities in the North-West Region of Russia, which are related to nuclear powered vessels maintenance and nuclear submarine decommissioning activities: FSUE “Atomflot” in Murmansk and FSUE “ME Zvezdochka” in the Arkhangelsk Region. The objective is to verify the Risk Assessment Methodology in complex conditions, which combine both chemical and radiation risks, as well as to perform the risk analysis and to develop recommendations for reduction of risks and improvement of emergency response system. The results of the risk analysis can be used as input data for development of a scenario of a major international emergency exercise at “ME Zvezdochka” in the future. The third phase is to be implemented within the next two years. Countries are invited to participate in the project.

**4.2.1 The Working Group thanked the US and Russia for the presentation. It was proposed to endorse the continuation of source control project in phase III.**

**4.2.2 Countries are invited to participate in the project.**

## **ISO 14001 Training Programs**

Three courses on ISO14001 Standard application were developed for the top managers and environmental specialists of nuclear industrial facilities (USA&Russia). The courses covered development and implementation of Environmental Management Systems based on ISO14001 standard, and internal auditing. The courses were conducted at the Training Center “Emergency Response” of the Institute for Advanced Training (MIPK “Atomenergo”) of Rosatom. The specialists from more than 25 Rosatom facilities and all Russian nuclear power plants attended the courses. The importance of this activity is stressed by the Rosatom policy on implementing ISO14001 at all facilities as tool for continual improvement of environmental protection, safety level and facility’s operation. The developed lecture materials and exercises are transferred to MIPK for further using in the training programs for Rosatom specialists.

### **4.2.3 The Working Group expressed an interest in availability of the developed lecture materials at the EPPR web site in the area open for the public.**

**The project is complete and sustainable. If new issues related to this project and in EPPR’s project scope are identified, new project proposals will be brought to the WG for consideration.**

## **Work on establishment of Training Center “Emergency Response” (TC ER) at MIPK**

The works on improvement of the training and advanced training of the emergency rescue teams (ERT) of Rosatom were started in 2002. Within the framework of US DOE - IBRAE RAN cooperation, a series of pilot training courses and exercises on emergency response was conducted for the Rosatom specialists. To apply the accumulated experience a decision was made on establishment of a training center for the management and leading specialists of emergency rescue teams of Rosatom facilities. The main objective of the created Training Center “Emergency Response” at the Rosatom Moscow Institute for advanced training (MIPK) is to introduce the best international experience and modern forms of education based on computer technologies into the training process. The project includes renovation of rooms and equipping of the center (computer classes, situation hall, conference hall, technical rooms). Special training programs on emergency response for different audiences, training courses on environmental management, computer simulators have been developed for the Training Center. Over 100 managers and leading specialists of Rosatom facilities have been trained and 30 of them were certified at the new Center.

Plans for Center development in 2006-2007 include:

- Completion of renovation work and expansion of the MIPK Training Center;
- Completion of Training Center equipping;
- Development of specialized programs on improvement of professional skill and a subsequent certification of ERT leaders;
- Conduct of training courses on emergency response;
- Conduct of exercises.

### **4.2.5 The progress in the project realization will be shared with EPPR Working Group, and the best practice in training the specialists of nuclear branch will be available for the Arctic countries to be used for development of similar Training Centers in other regions.**

## **Exercise on emergency response at radiological hazardous facilities – Exercises at FSUE “Atomflot” in 2005 and new projects**

On July 26, 2005, an exercise was conducted to improve the preparedness of the system of emergency response in case of a radiological accident connected with reloading of the spent nuclear fuel from Russian nuclear fleet ships.

The accident scenario involved the fall of the counterbalance of a tower crane onto a transport container, which lead to its destruction and release of the radionuclides into the atmosphere. Over 200 people from emergency rescue units of “Atomflot”, radiation survey teams, branch and federal situation emergency centers, and a technical support center participated. Regional, national, and International notifications were performed. Norway, Sweden and the US observed the exercise. The exercise was successfully tested plans, proceedings communication and response. An exercise in 2007 is in the initial planning stages for the Zvezdochka facilities in the Arkhangelsk Region. Notifications to the International Atomic Energy Agency will be carried out as a part of the exercise play.

**4.2.6 The Working Group thanked the US and Russian Federation for their effort in conducting these projects and for the continued invitation to participate in the ongoing project.**

### **Emergency Public Information**

In order to inform the public and the government officials who may become involved in nuclear emergency and response, for information development projects have been undertaken.

“The ABC of Radiation Protection” booklet has been completed in both Russian and English. The brochure addresses radiation effects, probability of accidents, radiation monitoring in Russia, and actions taken in the event of an emergency, the booklet will be available on the EPPR web site.

“Emergency Public Information” brochure, designed for public information specialists who may not have nuclear training, has been completed in Russian. The English translation will be finalized by June 2006 and will be available on the web site. The brochure addresses effective communication organization, and working with the media, and the effected public.

A new project was introduced; with the goal of a tutorial for information Service personnel on how to communicate to the public in a radiation accident. The tutorial will include lectures, exercises, and simulations. This education program will be in development for one year, and will be completed in Summer 2007.

### **Development of Brochure on Far East Region of Russia**

The information series “Risk and Safety” containing brochures on the South Urals and the North, will be continued with the development of a brochure on the Far East region of Russia. The brochure will compile accurate information on the nuclear activities and facilities into region



including. The industrial risks, radiation safety conditions, and emergency response. The brochure will be completed in April 2007.

**4.2.7 The Working Group thanked the US and Russian Federation for the report and booklets. The Working Group endorsed continuation of community Radiation information's projects: tutorial for information service personnel and development of a Risk Safety booklet on the Far East of Russia.**

### **PORTABLE ANALYSIS CAPABILITY (Laptop based)**

A new Project "Portable Analysis Capability" is aimed at development of portable software/hardware system for experts of radiation survey groups or emergency rescue teams to be used for radiation dose measurements, analysis and forecast of radiation situation development, preparation of data for local crisis centers, and transfer of information to the higher level organizations for decision making. One facility of FSUE "SevRAO» in the Murmansk Region is proposed to be equipped with the described portable system.

**4.2.8 The Working Group thanked the US and Russian Federation for the report.**

**4.2.9 As the system is developed and applied at additional facilities, the information will be shared with EPPR.**

### **NOSTRADAMUS: real time computer system for estimation of atmospheric transfer**

A new Project on development and installation of Plume modelling code "Nostradamus" at local crisis centers of nuclear and radiation hazard facilities was presented by USA and Russia. Nuclear Safety Institute of the Russian Academy of Sciences (IBRAE RAN) developed a software package "Nostradamus" to analyze and forecast of radiation situation development in emergencies accompanying by radioactivity releases in aerosol and gaseous forms. The model was verified against the experimental data by various groups and the Chernobyl data, and proved to be a very reliable tool for prediction of plume propagation in changing weather conditions or source parameters, which takes into account precipitation and features of landscape. Previously, in the framework of DOE-IBRAE cooperation, specialised software packages were developed for a number of Rosatom facilities. Within the present Project, three Nostradamus packages will be developed for facilities related to management of spent nuclear fuel from civil and naval nuclear powered vessels in the North-West Region of Russia.

**4.2.10 In addition to being instrumental in an actual emergency response, Nostradamus will be used in exercises, in which EPPR countries will be invited to participate.**

### **Related activities of interest – other regional organizations**

Sweden informed about the meeting of the Working Group on Nuclear and Radiation Safety under the Council of Baltic Sea States, held in Reykjavík, April 3-5. Attention was drawn to the

ongoing WGNRS discussion in the field of nuclear and/or radiological emergency assistance and the possible need for additional action, in particular to ensure that existing mechanisms can be put into operation. It was also mentioned that the exchange of air monitoring data between CBSS Member States has been finally approved by the CSO in March.

## **5. Natural Disasters**

### **5.1 "Managing the cold conditions - A systematic approach"**

Ms. Tanja Risikko, Principal Lecturer, Cold Climate Technology, Rovaniemi Polytechnic, gave a presentation on study undertaken to examine the means and methods for people to cope with cold climate.

The Arctic cold climate presents in various situations at work and exceptional situations. In emergency situations the injured persons are always in the risk of hypothermia and cold injuries. Cold climate also has adverse effects on responses and technical equipment.

#### **5.1.1 Sweden and Finland would be willing to review jointly the possibilities to start a project on cold climate and the stress this poses on man and machine in rescue operations.**

### **5.2 New activities in the Arctic areas**

No proposals.

## **6. Cooperation with Northern Forum**

### **Northern Forum flood hazards meeting held in Yakutsk**

The US provided information about the flood hazards meeting sponsored by the Northern Forum Flood Working Group and held in Yakutsk, Sakha Republic in March 9-12, 2006. The Group developed a work plan for the following areas:

- a) Translation of specialized literature to English or Russian as necessary to be completed July, 2007;
- b) Training at the River Forecast Center in Alyeska for one week and at the University of Alberta for 3 days both in August 2006;
- c) Satellite imagery was agreed upon for 14 sites. Khanti-Mansyisk is ready to offer training on satellite imagery (GIS mapping, ArcView etc) to specialists;
- d) Cooperate with EPPR by forming a Working Committee composed of two members from the Northern Forum Flood Working Group and two members from EPPR.

Northern Forum and EPPR will cooperate in the following assessments:

- a) Assess the accuracy of the flood risk assessment;
- b) Determine the entities in charge of issuing flood, warnings in each region and country
- c) Determine how warnings are issued;
- d) Work to harmonize how flood, warnings are issued and determine their adequacy.



The Northern Forum asks two members from EPPR Working Group to participate in the Northern Forum's Working Group on Floods. The next meeting will be in Oregon and the US and Canada are willing to participate.

**6.1 Two members of the EPPR will participate in Northern Forum's Working Group on Floods. Canada, the USA and possibly Russia will participate.**

## **7. EPPR Web Site (Secretariat)**

Canada made a report on revitalization of the web site. They made an interview and survey of EPPR Working Group web site. Sweden continued to maintain the web site. Working Group thanked Sweden for technical support.

Secretary reported that the EPPR web site was updated. And secretary noted that only informational update is made by secretariat with the help of IBRAE. Secretary told that there were many broken connecting links that should be changed by communication with secretariat. It needs updating.

The US provided updated information for the web site to the Secretariat.

**7.1 The EPPR Working Group gratefully thanked Sweden on managing the web site and thanked Canada for undertaking the revitalization project.**

**7.2 The EPPR project information on the Arctic Council web site will be updated by the Secretariat, in consultation with the project leads. The corresponding sections of the EPPR web site will also be updated.**

**7.3 The Secretariat asked all delegations to check their links within 30 days of the meeting.**

**7.4 Working Group members are invited to provide suggestions for the web site to the Secretariat at any time.**

## **8. Election of the EPPR Chair**

Norway was elected to be the Chairmanship country of EPPR Working Group. The secretariat will be from Norway too. The next Chair will start his chairmanship from 31 December, 2006.

## **9. Other Business**

The draft report on the EPPR meeting in Tornio, Finland will be provided within 30 days. Countries are to provide comments within 30 days of receipt of the report.

## **10. Next meeting**

The next meeting will be in Spitzbergen, Norway. The time of meeting will be defined later but it will be held before SAO meeting to discuss results and plans.

- 10.1 Norway's offer to host the next meeting was accepted by the WG with thanks. Norway will provide the information on the meeting closer to it.**

## **11. Record of Decisions - finalize**

Due to the close timing of the next SAO meeting (two weeks after the EPPR meeting) the EPPR report to SAOs was drafted at the meeting. It was noted that a full meeting report (this document) would be prepared in 30 days..

## **12. Closing the session**

The EPPR Chair, provided words of gratitude to the delegations and other participants for the work done and thanked the host of the meeting, Finland, and personally Timo Viitanen.

The Chair closed the meeting wishing productive co-work in future.

Appendix 1: AGENDA OF THE EPPR WORKING GROUP MEETING  
***Tornio, Finland***  
***5-7 APRIL, 2006***

**0. Registration**

**1. Opening of the Meeting**

**2. Adoption of the Agenda**

**3. Chair's and Secretariat Report, including Arctic Council Activities**

**3.1 Work of the Arctic Council and the SAOs**

Information and discussion on recent and coming meetings/developments:

- SAO meeting – Khanty-Mansiysk, Russia, 12-14 October 2005
- Upcoming SAO meeting – Siktivkar, Russia, 26-27 April 2006

**3.2 Secretariat report**

**3.3 Other Working Groups/Projects**

Short information about the progress in activities and programs of the following groups:

- ACAP
- ACIA
- AMAP
- CAFF
- PAME
- SDWG
- IPY projects (education and outreach)

**4. Project Updates and Information Exchange – By Area of Focus**

The delegations are invited to provide the meeting with information on:

**4.1 Oil and Gas**

Reports on EPPR ***ongoing projects*** (by lead country):

- Arctic Rescue (Russian Federation)
- Information about "Symposium of EPPR Working Group on the Conception of creation the system of preparedness and response of emergencies in Arctic"
- Shoreline Cleanup Assessment Technology (SCAT) Manual (Canada)

- Arctic Council circumpolar mapping project (Norway)<sup>1</sup>
- Discussion and decision on possible joint effort with other Working Groups
- R&D – Response for oil in ice
- Transboundary cooperation
- Oily waste disposal (Canada)
- New activities in the Arctic areas (transportation, production)
- Updates on the Mackenzie Gas Project (Canada)
- Updates on the planning process for near shore development in the Beaufort Sea (Canada)
- Preparing for Development in the Canadian Beaufort Sea - a workshop report
- The flood hazards meeting held in Yakutsk March 8-12 (US)
- The research program of the Prince William Sound Regional \Citizen's Advisory Council (US)
- Lessons learned from recent North Slope oil spills (oil in ice and snow information) (US)
- Major organisational changes in the Arctic countries
- Other items of interest

#### **4.2 Radiological/Other Hazards**

Reports on EPPR *ongoing projects* (by lead country):

- Source Control Management Phase III – FSUE “Atomflot” (Murmansk) and FSUE “ME Zvezdochka” (Archangelsk Region) (US and Russian Federation)
- Exercise on emergency response at radiological hazardous facilities – Exercises at FSUE “Atomflot” in 2005 and new projects (US and Russian Federation)
- Community Radiation Information Project (US and Russian Federation)
- ISO 14001 Training Programs (US and Russian Federation)
- Plume modeling (I phase – completed, II phase – on going, III – planned for the next period) (US and Russian Federation)
- Moscow exercise – plans (US and Russian Federation)
- Canadian Preparedness for Nuclear Emergencies in the North (Canada)
- Arctic Council circumpolar mapping project (Norway)
- New activities in the Arctic areas
- Major organisational changes in the Arctic countries
- Bilateral and multi-lateral agreements/plans
- Related activities of interest – other regional organisations (E.g., Barents Euro-Arctic, Regional Council, Nordic Council of Ministers, Council of Baltic Sea States)
- Other items of interest

## **5. Natural Disasters**

- 5.1 "Managing the cold conditions - A systematic approach" (Finland)**
- 5.2 New activities in the Arctic areas**

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<sup>1</sup> The project will be presented on Tuesday

**6. Cooperation with Northern Forum**

- Project to create a prevention system concerning catastrophic flooding on northern rivers (Northern Forum)

**7. EPPR Web Site (Secretariat)**

- Information on the web re-design project (Canada)
- Discussions on updating needs and on the contents/structure of the web site
- Updates to the Arctic Guide

**8. Election of the EPPR Chair**

**9. Other Business**

**10. Next Meeting**

**11. Record of Decisions – finalise**

**12. Closing the session**

**Appendix 2: Participants – Working Group Meeting – Tornio, Finland, 5-7 April, 2006**

<b>Country / Organization</b>	<b>Head of Delegation* / Other Representatives</b>	<b>Title/Organization/Mailing Address</b>	<b>Tel/Fax</b>	<b>E-Mail/Website</b>
<b>EPPR Chair</b>	<i>Dr. Igor Veselov*</i>	Deputy Director of Department of Prediction of emergencies, EMERCOM of Russia Teatralnyi proezd, 3, Moscow, Russia 103012		
<b>EPPR Secretariat</b>	<i>Ms. Olga Filippova</i>	Executive Secretary, EMERCOM of Russia, Teatralnii proezd, 3, Moscow, Russia 103012		
<b>Russian Federation</b>	<i>Dr. Mrs. Larisa Shpinkova</i>	Head of office for International Scientific and Technical Projects, Nuclear Safety Institute (IBRAE) of the Russian Academy of Sciences, 52, B.Tul'skaya, Moscow, Russia 115191		
<b>Canada</b>	<i>Ms. Bonnie Leonard*</i>	Policy and Planning Advisor, Marine Safety Transport Canada 330 Sparks St., 10 <sup>th</sup> Fl. Ottawa, ON CANADA K1A 0N8		
	<i>Mr. Larry Trigatti</i>	Superintendent, Environmental Response, Fisheries and Oceans Canada 201 Front Street, 6 <sup>th</sup> Fl., Sarnia, Ontario Canada N7T 8B1		
	<i>Dr. Norm Snow</i>	Executive Director Joint Secretariat, Inuvialuit Renewable Resource Committees Box 2120 Inuvik, Northwest Territories Canada X0E 0T0		
	<i>Mr. Frank Pokiak</i>	Chair, Inuvialuit Game Council, Box 2120 Inuvik, Northwest Territories Canada X0E 0T0		
	<i>Mr. David Livingstone</i>	Director, Renewable Resources and Environment, Department of Indian Affairs and Northern Development, Canada Renewable Resources and Environment Directorate Bellanca Building P.O. Box 1500 Yellowknife, Northwest Territories Canada X1A 2R3		
<b>Denmark / Greenland</b>				

<b>Finland</b>	<b>Mr. Timo Viitanen*</b> <b>(Vice-chair)</b>	Ministerial Adviser Ministry of the Interior Kirkkokatu 12, PO Box 26 Helsinki, Finland, FIN-00023 GOVERNMENT		
	<i>Ms. Tanja Risikko</i>	Principal Lecturer, R&D, Cold Climate Technology, Rovaniemi Polytechnic, Jokiväylä 11C, Rovaniemi, Finland, FI-96300		
	<i>Mr. Seppo Lehto</i>	Deputy Chief of Rescue Department State Provincial Office of Lapland P.O. Box 8002 Valtakatu 2, 96101 Rovaniemi, Finland		
	<i>Mr. Kari Lampela</i>	Division Manager, M.Sc. (Tech), Finnish Environment Institute, Expert Service Department, Environmental Damage Division		
	<i>Mr. Harri Paldanius</i>	Fire chief of the Kemi-Tornio region, Emergency Service of Lapland, Verkkotehtaankatu 6, 95420 Tornio		
<b>Iceland</b>				
<b>Norway</b>	<b>Mr. Tor Christian Sletner*</b>	Director of Department for Emergency Response, Norwegian Coastal Administration, P.O.Box 125, NO-3191 Horten Norway		
	<i>Mr. Morten Sickel</i>	Project manager, Norwegian Radiation Protection Authority, Grini Næringspark 13, Østerås, Norway 1361		
	<i>Ms. Inger Margrethe H. Eikermann</i>	Senior adviser, Norwegian Radiation Protection Authority, Svanhovd Emergency Preparedness Unit N-9925 Svanvik		
<b>Sweden</b>	<b>Mr. Anders Hermansson*</b>	Desk Officer, Ministry of Defence, 103 39 Stockholm Sweden		
	<i>Mr. Thomas Fagö</i>	Head of Response Department, Swedish Coast Guard Headquarters, Box 536, Sweden, 371 23 Karlskrona		
	<i>Ms. Julia Fredriksson</i>	Senior Executive Official, Swedish Rescue Service Agency, Karolinen, Karlstad, Sweden S-651-80		
	<i>Mr. Jonas Lindgren</i>	Programme Coordinator, Emergency Management Swedish Radiation Protection Authority Stockholm, Sweden 171 16		

<b>USA</b>	<i>Ms. Ann Heinrich*</i>	Deputy Director Office of International Emergency Management and Cooperation National Nuclear Security Administration US Department of Energy 1000 Independence Avenue, S.W. Washington, D.C. USA 20585		
	<i>Mr. Walter B. Parker</i>	Board Member Prince William, Sound RCAC, 3724 Campbell Airstrip Road Anchorage, Alaska USA 99504		
	<i>Ms. Karen Erickson</i>	Professor, University of Alaska Fairbanks, P.O. Box 750138, Fairbanks, Alaska, USA, 99775		
	<i>Mr. Mark Meza</i>	Deputy, Office of Incident Managemnt, US Coast Guard 2100 2nd Street, S.W. Washington, D.C. USA 20593-0001		
<b>Indigenous Peoples' Secretariat</b>	<i>Ms. Alona Yefimenko</i>	Technical Advisor, Arctic Council, Indigenous Peoples' Secretariat, P.O. Box 2151, Strandgade 91,4.sal DK-1016 Copenhagen K		
<b>Snow change (Northern Forum)</b>	<i>Mr. Tero Mustonen</i>	Researcher, Snow change Apajalcuja FIN-80140, Joensuu Finland		



### Appendix 3: EPPR Work Plan 2006-2007

**OIL POLLUTION: L - LEAD, P - PARTICIPANT**

PROJECTS	Canada	Denmark/ Greenland	Finland	Iceland	Norway	Russian Federation	Sweden	USA
<i>Ongoing</i>								
Shoreline Cleanup Assessment Technology (SCAT) Manual – Next Steps	L					P		P
Oily Waste Disposal	L							
The Mackenzie Gas Project	L							
Beaufort the strategic Regional Plan of Action	L							
<i>Proposed Projects</i>								
Interactive Maps and Environmental Information from Arctic Council Programmes on the Web	P		P		L	P	P	P
Arctic Rescue						L		

**RADIOLOGICAL & OTHER HAZARDS: L - LEAD, P - PARTICIPANT**

PROJECTS	Canada	Denmark/ Greenland	Finland	Iceland	Norway	Russian Federation	Sweden	USA
<i>Ongoing</i>								
Source Control Management Phase III – FSUE “ME Zvezdochka” and FSUE “Atomflot”						L		L
ISO 14001 Training Programs						L		L
Community Radiation Information Project						L		L
Conduct of radiation emergency exercises – Moscow table-top exercise						L		L
<i>Proposed Projects</i>								
Development of Brochure on Far East Region of Russia						L		L
Portable analysis capability (Laptop based)						L		L
NOSTRADAMUS: real time computer system for estimation of atmospheric transfer						L		L
Work on establishment of Training Center “Emergency Response” (TC ER) at MIPK						L		L

**NATURAL DISASTERS: L - LEAD, P - PARTICIPANT**

PROJECTS	Canada	Denmark/ Greenland	Finland	Iceland	Norway	Russian Federation	Sweden	USA
<i>Ongoing</i>								
Creation of a warning and information system regarding catastrophic flooding on Northern Rivers (project between the EPPR and the Northern Forum)	P					L		P
<i>Proposed Projects</i>								
"Managing the cold conditions - A systematic approach"			L				P	
Host EPPR Website	P					P	L	