

EPPR Working Group Meeting 17. – 19. March, 2009 Las Vegas, USA

Final report
June 3, 2009



1. Introduction and Opening of the meeting:

Mr. Johan Marius Ly, Acting Chairman of EPPR welcomed the participants to the 17 th. EPPR meeting in Las Vegas, USA.

The host for the meeting, Mrs. Ann Heinrich, welcomed the participants to Las Vegas. Rear Admiral Josph Krol Jr., Associate Administrator for Emergency Operations, officially opened the EPPR meeting. He stressed the importance of the knowledge and expertise on radiation in the Las Vegas area and hoped that the participants will have a fruitful meeting. See attachment 3.

The meeting was attended by delegations from Canada, Denmark, Finland, Norway, the Russian Federation, Sweden and the US.

Mr. Ole Kristian Bjerkemo was the Secretary of EPPR working group.

The host country arranged a tour to Nevada Test Site, an important historical area, but also an important area for further development of emergency response related to radiation.

The meeting report has been organized according to the agenda items, although at the meeting adjustments were made to the order of agenda items to accommodate the circumstances. A copy of the meeting agenda is included as Appendix 1

2. Approval of the agenda:

The chairman asked for comments to the agenda and possible changes or additions. The agenda was approved with some minor changes in the time table.

3. Chair`s and Secretariat`s report including Arctic Council Activities and information from other working groups

3.1.1 Report from EPPR Secretariat

The secretariat had prepared a document, EPPR 09/3.1.1 which gives information about the work of the EPPR secretariat since the 2008 meeting. The document was presented by EPPRs executive Secretary Mr. Ole Kristian Bjerkemo.

Conclusion:

EPPR took note of the report from the secretariat.

3.1.2 Information from PAME regarding the AMSA report

The secretariat in cooperation with Larry Trigatti gave a presentation on the status of the

AMSA report and important findings for EPPR. It was underlined that the presentation was based on the draft report. Some of the important findings up to date are related to Places of refuge, Arctic Maritime Traffic Awareness – risk reduction, No binding requirements concerning *Polar Class* and the December 2002 IMO Guidelines for Ships Operating in Ice-covered waters and Emergency Response capacity for saving lives and pollution mitigation and the infrastructure. See also presentation 3.1.2 which is uploaded on EPPRs web site.

Conclusion:

EPPR noted the general recommendations related to EPPR activities in the AMSA report. It was underlined that the finding and recommendations are still drafts. When the final AMSA report has been submitted to the Ministers, EPPR needs to evaluate what will be important for EPPRs future work related to Arctic Marine Shipping Assessment. Final drafts for the AMSA report are proposed for April 1st.

It was also decided that EPPR should establish closer liaison with PAME and other working groups where relevant. In principle EPPR should have one representative at every PAME meeting. It was not decided whether it should be a permanent or rolling liaison. To reduce travel costs, the preferable option was to have a liaison from the country where PAME has their meeting. The secretariat was asked to follow up on this decision.

4. EPPRs Strategic Plan (SP) and Work Plan 2009 - 2011

4.1 EPPRs Strategic Plan

Norway was asked in the EPPR meeting in 2007 to start a process for updating the Strategic Plan (SP). A process for updating the documents started in the spring 2008 which led up to a discussions draft for the Annual EPPR meeting in 2008.

The conclusion from the 2008 meeting was:

“Based on the feedback and the discussions in the meeting the Secretariat will work with Canada (David Livingstone) to prepare a revised draft Strategic Plan by October 31 with a target for feedback from member countries of November 30. Further iterations will follow with a target of finalizing a recommended strategic plan for formal EPPR consideration of February 28 2009 In the interim the Secretariat will advise SAOs as to the general direction the revised Strategic Plan is expected to take and the process envisaged for finalizing that Plan.

The revised penultimate draft plan will be discussed (and hopefully approved) at the next full EPPR meeting, tentatively scheduled for late March 2009”

Due to unforeseen circumstances, the revision process was interrupted and the SP has not been updated as described in the 2008 Annual Meeting report.

Based on this the secretariat gave a presentation on thoughts for a further process to finalize the SP.

It was proposed to link EPPR’s SP closer to recommendations and findings from other AC WG reports, the Ministerial declaration and the SAO report to the Ministers. This approach will may be make EPPR more relevant related to challenges raised in the different Ministerial Declarations. Another aspect that was raised was the challenge for

EPPR to fulfill projects described in the different Ministerial declarations with only an annual meeting. It was therefore suggested that the EPPR should discuss the possibility for semi annual meetings for the EPPR (as e.g. PAME and CAFF) or one Annual meeting for EPPR and in addition one meeting for HoDs. See also the presentation uploaded on EPPR's web page, document 4.1.

Conclusions:

EPPR agreed to the approach for a closer link between the description in EPPR's SP and the output from other WG reports. It was also underlined from many countries that this may lead to more work for EPPR and the secretariat.

To finalize the SP, the secretariat should prepare a draft framework and headlines based on this principle, and circulate this to the HoDs for comments. A correspondence group, with representatives from Canada (Nora), USA (Ann), Russia (Igor) and Norway (Ole) will continue this work and prepare a final draft that will be discussed and hopefully accepted in the fall 2009.

EPPR agreed to hold HoD meetings between the Annual WG meetings. The fall 2009 meeting will be a mandatory EPPR- HoD meeting with possibilities for others to attend.

4.2 EPPRs Work Plan

A draft Work Plan was submitted before the meeting. It was agreed to consider the draft in the end of the meeting and correct the draft based on the input and decisions taken in the meeting.

5. Project Updates and Information Exchange Oil and Gas.

5.1 Project updates

5.1.1 Circumpolar Map of Resources at Risk from Oil Spills in the Arctic

Norway had submitted a document to the meeting. Through two years work with the initiative to improve EPPR's Circumpolar maps of Risk, experience has showed that this is a very difficult task. The work with this issue needs more resources than we can achieve through the working groups. An initiative from the Nordic Mapping Agencies meets all the initial wishes for an Arctic SDI that might help EPPR in the work with Risk Analysis, improved Risk maps etc. This initiative will hopefully lead to an Arctic SDI that will give EPPR the possibility to use relevant data from all of the working groups for EPPR purposes. These data will also be very useful for future Emergency Response. Because of this Norway proposed that EPPR should support the initiative from the Nordic Mapping Agencies. The possibilities for further improvement of EPPRs Circumpolar Maps of Risk should be based on the progress of the project of the Nordic Mapping Agencies and the possibilities that might arise through this project. Norway offered to be EPPRs contact point related to the initiative and report back to EPPR on the progress of the project.

Conclusion:

EPPR noted the information from Norway on this issue. EPPR supported the initiative from the Nordic Mapping Agencies on an Arctic SDI.

The possibilities for further improvement of EPPRs Circumpolar Maps of Risk should be based on the progress of the project of the Nordic Mapping Agencies and the possibilities that might arise through this project. On behalf of EPPR Norway will be the contact point related to the initiative and report back to EPPR.

Because of this the project is deleted in EPPR work plan. The work plan should be updated with a new section "Liaison with others". Under this section the headline for this activity will be: "Liaise with the project established by the Nordic Mapping Agencies on the Arctic SDI project."

5.1.2 Arctic rescue

Russia gave a presentation on the status of the Arctic rescue project. It was referred to the document 5.1.2 that has been submitted earlier and which is uploaded on EPPRs web page.

Within the framework of the Russian project "Arctic Rescue" and the issue of elaboration of the concept of establishing a specialized information and rescue centre in the port of Dudinka an international workshop dedicated to the issues of emergency prevention and response in the Arctic conditions was held in Dudinka (Tajmyr municipal district) on August 31-September 4, 2008. 52 specialists took part in the workshop. There were written reports from the specialists and organizations of Russia, Sweden, Finland and Canada.

The workshop was organized by EMERCOM of Russia and supported by the Swedish Rescue Services Agency and Emergency Prevention, Preparedness and Response (EPPR) Working Group of Arctic Council. One of the workshops aim was to discuss the issues of the Russian project "Arctic Rescue".

Reports were presented on the following topics: emergency prevention and coordination of emergency responses in Arctic; medical problems in the work of rescuers and fire fighters in low temperature conditions; mitigation of emergency situation of ecological nature in Arctic, including large oil spills.

Under the EPPR project Arctic Rescue, an International scientific – practical conference "Emergency prevention and the coordination of emergency responses in arctic conditions including consequences for the environment" is going to be held in the city Anadyr, Chukot Autonomous Area, Russian Federation August 17-21. The conference will focus on the following subjects:

1. Prevention and mitigation of emergency situations in Arctic.
2. Discussion on development of search and rescue systems in Arctic.
3. Problems of prediction and mitigation of possible threats of nuclear character.

It is planed to discuss wide range of problems connected with prevention and liquidation of emergency situations of different origin: natural, technologic, ecological. The conference will also discuss possible nuclear threats. In addition, conference participants will have the opportunity to view relevant facilities, infrastructure and life support of the city Anadyr.

Conclusion:

EPPR took note of the presentation. The secretariat is asked to upload the report from the Dudinka seminar on to the EPPR web page.

The Arctic rescue activity for 2009 will be a seminar in Anadyr in the Far East of Russia in August 2009.

5.1.3 Development of Safety Systems in the Arctic while implementing infrastructural and other Economic Projects

Russia gave a presentation on the project. The concept of the project was submitted in 2007 by the Russian Federation to Emergency Prevention, Preparedness and Response (EPPR) Working Group of the Arctic Council and was approved by the group in August 2008.

The project is aimed at presenting the Russian Federation initiative to build a global environmental and technogenic accidents prevention system, ensuring preparedness for implementation and promotion of the best practices in this sphere with participation of international organizations. These best practices would include the progress achieved in regulatory control, as well as voluntary obligations of economic agents aimed at improving technological, industrial and environmental safety. Within the framework of the Project in 2008 there were held a number of practical activities in Russia.

The key activity of the year was the exercise at Varandey oil export terminal. In order to test the production and environmental monitoring system at oil export terminals and to coordinate interaction of regional forces and means within the framework of the planned establishment of an information and rescue center in Naryan-Mar, an international exercise with the use of the forces and means of Emercom of Russia in partnership with the Federal State Institution "Gosmorspassluzhba" under the Ministry of Transport of the Russian Federation, observers from the member states of the Arctic Council was held on September 30 – October 4, 2008 in the vicinity of the Varandey oil export terminal. The main goals of the exercise were coordination of forces and means during emergency response operation accompanied by fire, human casualties and oil spills in the sea and onshore. An assessment of terminal equipment and possibilities to attract regional forces and means in accordance with the regional plan of emergency oil spills response in the Western Arctic were made, while the personnel of the Varandey terminal were trained to act efficiently during oil emergency spill localization and response.

Conclusion:

EPPR took note of the presentation on the project.

The 2009 activity related to this project will be the Exercise Barents Rescue 2009 which will be held in the Kola area in early September. In addition to Russia, Norway, Sweden and Finland will participate in the exercise.

5.1.4 Guidelines and Strategies for Oily Waste Management in the Arctic Regions

Canada gave a presentation on the final progress of work with the guidelines.

The objectives of the project have been:

- Develop guidelines and recommendations for decisions regarding shoreline

- treatment in remote (Arctic) regions.
- Provide decision makers and planners with relevant information regarding potential waste generation, waste types, and waste volumes upon which they can set the response objectives.

There will be three deliverables to the 2009 Ministerial meeting:

1. Technical Report – text will be completed 24th April (only Appendix E left)
2. Waste Management Calculator completed – software will be available 1st May 2009
3. User's Guide – completed

All three deliverables will be submitted to Canadian HoD for submission to the EPPR Chair for presentation to the Arctic Council Minister's Meeting in Tromsø on 27th April 2009.

Conclusion

The meeting welcomed Canada's successful finalization of the project. The Norwegian chairmanship of EPPR will bring the report to the 2009 Ministerial meeting.

The secretariat should upload the report and the waste calculator on to EPPR's web page as soon as it has been approved by the SAOs.

5.1.5 Behavior of oil and other hazardous substances in Arctic Waters (BoHaSa)

Norway had submitted a document to the meeting and gave a presentation on this. Based on a request in the Salekhard Declaration, Norway initiated a process to develop a project proposal to meet this request. The draft proposal was discussed in the EPPR meeting in Luleå in August 2008. In Luleå EPPR concluded: *"EPPR accepted the Norwegian draft proposal for the project. Canada and Sweden supported the project, but they needed a more detailed proposal included costs to fully consider their contribution. EPPR did not have objections for possible partly funding from the oil industry for this project"*

As a follow up of the Luleå meeting, Norway has continued the work with the project. In addition has EPPR Secretariat reported to the SAOs that the project has been approved in principle and that the project will start in 2009 and be finalized before the 2011 Ministerial meeting.

Since the project was not funded when the Ministers signed the Salekhard declaration, many efforts has been used to get funding. These efforts are:

- Application to Nordic Council
- Application to Norwegian Ministry of Foreign Affairs
- Presentation for the Oil Industry in their Steering Committee for their Joint Industry Project (JIP) Oil in Ice. They were very positive to the project and will consider a more detailed application

Norway and Sweden have committed themselves for funding, ref. the project proposal. Feedback from Nordic Council is expected in late May. Up to date has the Norwegian Ministry of Foreign Affairs not given any feedback.

Conclusion

EPPR took note of the presentation from Norway and agreed to the proposed plan. Norway underlined that the funding of the project will be clarified in late May 2009. The goal will be to finalize the project before the next AC Ministerial (2011 – 2012). The HNS descriptions will be an important part of the report. In addition to Norway, Sweden and Canada, will Finland participate in the project.

5.1.6 Arctic MoU

Norway gave a short introduction to the challenges if an oil spill or HNS spill should occur in the Arctic. The need for an instrument for cooperation in situations like this has been underlined in AMAPs Oil and Gas Assessment 2007 which states that the AC should support improvement in bilateral and multilateral cooperation among AC countries. In the coming AMSA report from PAME the need for a multilateral agreement on oil spill response is highlighted.

Based on the introduction, some countries referred to an EPPR activity in the late 1990's related to a project led by Canada. A gap analysis was conducted and the conclusion of the work was that cooperation should be based on regional agreements. Russia informed about the proposal for an Arctic agreement through the Arctic rescue project. Nevertheless, the situation is changing and the input from OGA and AMSA is important to consider and follow up.

Conclusion

EPPR conducted a GAP analysis on this issue before 2000. Because of the recommendations in OGA 2007 and the draft AMSA report related to this issue, EPPR agreed that the GAP analysis of 2000 should be reconsidered. Possible next steps will be to hold a workshop on this issue before the next annual EPPR meeting. Norway was asked to prepare a draft agenda for a workshop. The content for a workshop could be the GAP analysis, information from each country on response and bilateral agreement and discussions based on a scenario. The future steps will be decided based on e-mail communication between the HoDs.

5.2 Country Reports on Oil and Gas

5.2.1 JIP Oil in ice

Norway gave a presentation on this project. It was also referred to a presentation on the project at Svalbard In 2007.

The overall objective of the program is to develop knowledge, tools and technologies for environmental beneficial oil spill response strategies for ice-covered waters. Through the program will the oil industry try to improve their ability to protect the Arctic environment against oil spills, give improved basis for decision-making and enhance the state-of-the-art in Arctic oil spill response. The program was initiated in September 2006 after a comprehensive preparation phase and it will last until end of 2009. The program covers R&D areas as; Mechanical recovery, use of dispersants, burning of oil spills, remote sensing and numerical modeling

Laboratory and field testing of tools and methods is an important part of the program.

The "Joint Industry Program on oil in ice" has been developed as a result of cooperation between SINTEF and the oil companies Shell, Chevron, Statoil, Total and ConocoPhillips. AGIP KCO joined the program in 2006.

The program consists of 8 different projects divided into approximately 25 Tasks. For further details see separate document on EPPRs web page.

Conclusion

EPPR took note of the presentation

5.2.2 Coastal JIP

Norway gave a presentation on this project.

The overall objectives of the proposed projects are:

- To contribute to an adequate and sufficient basis of competence and facts to document possible consequences in case of an oil spill close to coast
- To provide documentation ensuring the countermeasures giving the optimal environment gain

Phase 1 of the project was finalized in February 2009. 19 reports have been produced, but they are not public. The following activities were a part of this phase:

- Natural dispersion and long term weathering of oils
- Oil on shore lines – natural processes meso scale and laboratory studies
- Laboratory testing of shoreline cleaning agents

Phase 2 is going on with the following activities:

- Test procedures for shoreline cleaning agents
- Effectiveness testing of bioremediation products
- Effectiveness testing of sorbents on shorelines substrates
- Potential use of shoreline cleaning agents on different oils
- Fate and effects of dispersed oil

Conclusion

EPPR took note of the presentation

5.2.3 Technology development program on oil spill response.

Norway gave a presentation on this project.

The Norwegian Clean Seas Association for Operating Companies (NOFO) and the Norwegian Coastal Administration (NCA) has initiated a technology development program on oil spill response. The program covers four main topics:

- A. Oil recovery technology
- B. Dispersant application
- C. Remote sensing
- D. Coastal and shoreline operations

The project is based on the recognition that progress in oil spill technology development over the last decades has not yet resulted in commercially available equipment and systems that can handle all relevant situations. The experience gained from actual situations in recent years demonstrates the need for improved emergency response performance, and we see a need for initiating measures to promote accelerated development within relevant technologies.

Conclusion

EPPR took note of the presentation

5.2.4 Mar Safe North project

Norway gave a presentation on this project.

The project has just been established. About 15 partners are involved, mainly private companies and research organizations.

Mar Safe North shall present the crucial needs and indicative solutions for maritime safety management means required to realize the future commitments in the High North, focusing on Nautical Operations and Transport, Dynamic Risk Assessment and Emergency Response, Territorial Security Control and Resource Supervision and Infrastructure and Integrated Coastal Zone Management. Through the project the goal is to utilize novel underpinning technologies for environmental surveillance and sensing, arctic communications and radio navigation and tracking

The project has the following work packages:

WP1: Project management, coordination and result dissemination

WP2: Nautical Operations and Transport

WP3: Dynamic Risk Assessment and Emergency Response

WP4: Supervision, monitoring and control

WP5: Infrastructure and Integrated Coastal Zone Management

WP6: Environmental Surveillance and Sensing Technologies

WP7: Arctic Communications Technologies

WP8: Radio navigation and Tracking Technologies

Many of the topics discussed in the AMSA report are included in the MareSafeNorth project. Norway's Norwegian Coastal Administration (NCA) is partner in the project and will follow the different activities. Norway through NCA will also try to influence on the different activities that may be interesting for EPPR countries. As an example could workshops be of interest for some of the EPPR countries. A broader participation in workshops and other activities will improve the work and the output of the project.

Conclusion

EPPR took note of the presentation

5.2.5 Oil spills in ice, enhanced shoreline protection and beach clean-up resources for winter conditions in Sweden

Sweden gave a presentation on this project which include a literature survey with recommendations to be extracted for an operational shoreline clean-up manual.

The possibilities for effective oil spill recovery at sea as well as for shoreline clean-up operations are significantly reduced when ice is present at sea or along the shoreline. The experience and know-how regarding efficient methods applicable in ice conditions are limited in Sweden and are also recognized internationally as a problematic area associated with operational response gap. In order to update and strengthen the

competence in this field the Swedish Rescue Services Agency (from 2009 the Swedish Civil Contingencies Agency) commissioned SSPA Sweden AB to conduct a literature survey and to compile operational instructions to be added in an updated issue of existing operational field manual for shoreline clean-up in Sweden. Some operational recommendations from the report are summarized below.

- Ice, snow and winter darkness make clean-up operation more difficult and unsafe but the ice may also give advantage with respect to restricted spreading and to low ecological and socio-economic sensitivity in wintertime.
- Conduct necessary environmental rescue operations as quick as possible to minimise the impact of the spill and beach contamination but consider waiting with clean-up operations so that natural oil degradation processes and ice erosion can work until spring season when clean-up operations can be conducted safely.
- Utilize natural and manmade holes in the ice and other open water for recovery with conventional equipment for mechanical oil recovery.

For further details, see document which is uploaded on EPPR's web page.

Conclusion

EPPR took note of the presentation.

5.2.6 AMVER

US gave a presentation on this issue.

The Automated Mutual Assistance Vessel Rescue System (AMVER) is sponsored by the United States Coast Guard. It is a computer-based voluntary global ship reporting system used worldwide by search and rescue authorities to arrange for assistance to persons in distress at sea. Amver has been operating since 1958. AMVER's function is based on Merchant ship owners or managers that enter specific information about their vessels into the Amver database. Prior to sailing, participating ships send a sail plan to the Amver computer center. Vessels then report their locations every 48 hours until arriving at their port of call. Search and rescue controllers are able to predict the position of each ship at any point during its voyage. The position of each participating ship is displayed in an Amver surface picture. In an emergency, any rescue coordination center can request this surface picture to determine the relative position of Amver ships near the distress location and divert the best suited ship to respond.

To participate, any commercial vessel, regardless of nation or flag, over 1,000 gross tons on voyages of 24 hours or greater is encouraged to enroll in Amver. Other vessels such as private yachts, research vessels, and fish processing vessels can also enroll.

Amver participating vessels account for approximately 40% of the world's ocean going fleet. Encouraging ice class vessels to enroll and participate in Amver increases the number of SAR resources available to assist during maritime emergencies in the Arctic. Amver is a force multiplier that, when used consistently, can greatly reduce the need for limited SAR assets saving them for other core missions. Amver encourages SAR authorities in the Arctic to request Amver data as standard procedure during SAR

emergencies. Amver data may be obtained by entering pertinent distress information in the following website: <http://www.amver.com/surpicrequest.asp>.

Conclusion

EPPR took note of the presentation.

5.2.7 Short updated from US on

- Safe Tug II prevention program which is looking into best available technology to assist vessels in distress.
- Gap analysis at the Prince Williams Sound to examine responses, equipment and weather. Through this project experiences world wide will be used to improve preparedness. Experience has shown that bad weather in many situations will result in no response.
- Events surrounding Exxon Valdez 20 years anniversary the 24th of March.
- Research on oil simulation material for oil spill response and training. The project investigates the possibilities to improve the emergency response to oil spills in darkness and bad visibility. In addition they are investigating possibilities for other substances that can simulate oil in exercises.
- Terrestrial spills and the use of bioremediation. The presentation focused on Movement and Fate of Petroleum Spills in Arctic Soils. In relation to this it was highlighted the work with regulatory agencies on developing appropriate regulations and developing appropriate means of spill response and cleanup.

Conclusion

EPPR took note of the presentations.

5.2.8 The use of dispersants in Arctic climate

Canada introduced the discussion on this topic. Today there are several new dispersants that might be effective in the Arctic. Nevertheless, it is still unclear which kind of dispersants might be effective or which are ineffective. Up to date it is clear that large scale use of dispersants in the Arctic is not relevant. Through the discussion it was referred to the Industry JIP. Continued study and testing of dispersants by industry and government is necessary.

Conclusion:

It was agreed to keep each other informed on this issue in future EPPR meeting.

6. Project Updates and Information Natural Disasters

6.1 Prevention network concerning catastrophic flooding on northern rivers

On behalf of the Northern Forum, the US gave a short info on this project which is conducted by the Northern Forum. There has not been any meeting within this network since the last EPPR meeting. Their next meeting is planned to be in St. Johns, Canada 15 – 19 of June 2009.

6.2 Managing the cold conditions – a systematic approach

Finland gave a presentation on this project. This project was approved and added on EPPRs work plan in 2006.

The purpose of the project is to build up the capacity for cold protection as a part of the regional and interregional Emergency and Rescue Services in Barents Region. The project leader has left the project. There is still work on financing the project and an application for funding through EU will be sent in the nearest future and organize the project as an Interregional project. A seminar was conducted in early 2009 on the project to see the interests for the project. In addition to Finland, Sweden, Russia and Norway are partners in the project. They are also partners in the new governmental rescue agreement between the countries.

Conclusion:

EPPR took note of the report from Finland and the fact that they still are in the application process. Finland was asked to involve indigenous people in the project. Finland will inform about the progress in next EPPR meeting.

6.3 Arctic SAR MoU

US gave a short brief on this project which will start up in the nearest future. The project was approved by the SAOs in their meeting in Copenhagen this year. The work on this issue will be based on a Task force outside the AC working groups. The Task Force will report directly to the SAO's.

Conclusion

EPPR took note of the oral presentation from US about the task force that should work on this issue. EPPR must consider the work related to SAR when the task force has been finalized.

6.4 Project on flooding in Torneå river between Sweden and Finland

Sweden gave a presentation on this project. Swedish Civil Contingencies Agency (MSB) is involved in an EU-project (3-years) concerning cross border mapping of the Torneå River (between Sweden and Finland). MSB's part of the project is education with seminars and emergency preparedness training with flood scenarios and flood forecasts. In a national report Sweden facing the climate change, threats and opportunities. The final report from the commission on climate and vulnerability points out for example:

- Sweden will become warmer and wetter
- The risk of floods, landslides and erosion in many areas is increasing to such an extent that stronger initiatives for preventive measures are justified
- Dam safety should be reviewed

The Civil Contingency Agency is mapping areas of high risk of landslides and erosion, especially in the northern part of Sweden.

Conclusion

EPPR took note of the presentation

6.5 Report "National Vulnerability and Emergency preparedness in Norway"

Norway gave a presentation on the report which focuses on risk, vulnerability and emergency preparedness in the northern areas. Extreme weather will lead to damages because of events such as strong winds, flooding and landslides. The damages could lead to problems for e.g. freshwater, sewer system, electrical power supply, communication network, other infrastructure (as roads, ports etc) and oil industry, shipping and nuclear power plants/-installation/-ships. It could also lead to changes in the biological diversity, e.g. introduction of harmful species which may lead to increased risk for infections.

Through the presentation Norway also asked the question about EPPR's work on Natural disasters. Based on the question, EPPR discussed the way forward on this issue.

Conclusion

EPPR took note of the presentation. There were discussions on EPPR's future approach related to the work on natural disasters, but there were no conclusions on how EPPR should bring this forward. Norway was asked to consider the possibility to prepare a discussion document on this issue to the next Annual meeting.

7. Project updates and Information Exchange Radiation

The meeting venue was moved from the Atomic Test Museum to Remote Sensing Laboratory (RSL) which is located on Nellis Air Force Base. The Director of RSL, Dr. Brent Park, welcomed all to RSL.

7.1 Reports on EPPR projects by lead country.

7.1.1 Portable analysis capability (lap top based) - Adaptation and Installation of the software "TRACE_WIN" and "NOSTRADAMUS"

Russia and the US are co-leaders of this project.

The two software programs are used to model airborne radiological dispersion and contamination for radiation hazardous facilities. Both programs are customized to a specific site by adding information such as local terrain, facility data, and population.

After the table-top exercise conducted at FSUE NIIAR on December 9, 2003, in the framework DOE-IBRAE cooperation, it was concluded that it was necessary to upgrade the software of local crisis centers of Rosatom's radiation hazardous facilities for simulation of the consequences of radioactive releases at the early stage of accident evolution. From 2004-2008 thirteen "TRACE_WIN" and "NOSTRADAMUS" software packages were adapted for radiation-hazardous facilities of Rosatom. Previously, facilities developed their own systems with varying success. These products are powerful tools to support decision-making in crisis situations related to atmospheric release of radioactive materials, providing a standard approach of high quality.

TRACE_WIN allows users to simulate, monitor, analyze, and map atmospheric radioactive releases using a GIS format. The model is designed for computation of atmospheric transport of pollution within a radius of 10 to 20 kilometers of the facility.

The main advantages of the model are its simplicity and immediacy. The computation takes a few seconds so TRACE_WIN is used by emergency responders for initial (approximate) assessment of radiation situations.

NOSTRADAMUS is a real time computer system for estimation of atmospheric transfer, designed to effectively forecast radiation situations with a release in aerosol and gaseous forms with subsequent precipitation. The software package analyzes accidents of various scales. NOSTRADAMUS code is based on a Lagrangian trajectory transport model. The the system is PC oriented, friendly WINDOWS interface, forecast efficiency — real time calculations. The presentation of calculation is easy to understand and is based on geographical maps so that emergency managers at local crisis centers have robust forecasts on which to make decisions for response and protective actions.

Conclusion: the project will continue with development of site specific software for three additional facilities in Russia. The project will be finalized in 2010.

7.1.2 Technical Crisis Center support on the EMERCOM Crisis Situation Management Center

US gave a presentation on this project, aimed at enhancing EMERCOM's National Crisis Situation Management Center (NCSMS) capabilities in a radiological emergency. NCSMC supports EMERCOM management in protecting the public and the territory in case of emergencies including radiation accidents. NCSMS supports the activities of Governmental Commission for Emergency Situations in emergencies of federal level. . The initiatives for 2007-2009 have been:

- Developing software to enable access of NCSMC experts to IBRAE databases
- Developing databases on scenarios of possible radiation accidents at key facilities
- Enhancing existing capabilities to assess accident consequences for different radiation emergency scenarios, including those located in urban environments
- Developing reference materials based on Rosatom's experience as well as international recommendations
- Developing standard manuals for EMERCOM's experts on response actions for radiation emergencies, based on IAEA recommendations
- Conducting training courses and exercises for EMERCOM's experts

The current status of the project is: the reference materials on response to radiation emergencies are developed; manuals for duty personnel of EMERCOM and IBRAE are developed. Procedures for expert support of IBRAE to NCSMS of EMERCOM in radiation emergencies and day-to-day operation are developed.

Conclusion: The materials for training of NCSMS personnel and exercise plans are in process of development. The project will be completed in December 2009.

7.1.3 Conduct of radiation emergency exercise in 2010 at Nerpa Shipyard

US gave a presentation on the US-Russia cooperation in emergency response enhancement within the Emergency Exercise Series. The cooperation between Russia –

and US DOE has the following aim: *enhance the preparedness of emergency rescue units (ERU) of the nuclear industry; and improve notification procedures and interaction between emergency response elements.* Specific activities have included:

- Conduct of emergency preparedness and response drills, training and exercises at hazardous facilities
- Train the ERU heads and specialists using modern techniques, technologies, international experience and computer simulators.
- Develop and upgrade technical capabilities for data transfer, communications, etc.
- Enhance scientific support to responders based on modern techniques including decision support systems.
- Improve interaction between response elements, including expert support of regional authorities regarding population and environment protection.
- Improve public information.

Through this cooperation four exercises have been conducted, the latest in 2008 at “Zvezdochka”.

The lessons learned from the exercises are applied to improve emergency plans and monitoring systems not only at the exercise facility, but also at similar nuclear and Radiation-hazardous facilities of the Northwest Russia. It is planned to conduct the next exercise at the shipyard “Nerpa” in the Murmansk region in 2010.

Shipyard “Nerpa” is a branch of shipyard “Zvezdochka” is located in the Murmansk region and it participates actively in activities on decommissioning of nuclear submarines, spent nuclear fuel and radioactive waste management.

Conclusion: An emergency exercise will be conducted at the Nerpa Shipyard in Murmansk region of Russia in summer, 2010. EPPR members will be invited to play and/or observe the exercise. The final report and observers manual for the Zvezdochka exercise are available on EPPR’s web site.

7.1.4 Source Control prevention related to transportation

US gave a presentation on this project. The activities in the source control project phase I – III from 2000 to 2008 have been related to risk assessment at radiation and chemical hazardous industrial facilities. Based on comparative risks, recommendations on enhancing the safety of facility operation were developed. In addition, recommendations on introduction of environmental management systems based on ISO-14001 have been developed in partnership with facility personnel. Instituting both risk assessment and environmental management system principles places an emphasis on prevention at the facility. Russia and the US co-lead the projects, which have been implemented at the technical level by IBRAE RAN specialists, DOE experts and personnel of the facilities. The Source Control Project, Phase IV has the following objectives:

Application and further verification of the developed methodology at a large Russian enterprise involved in transportation of radioactive substances by motor transport

The site to be studied is State Scientific Centre of Russian Federation “Scientific and Research Institute of Atomic Reactors” (SSC RF NIIAR). The project has duration from

2008 to 2010.

The Project Management Plan and the status for the project was reviewed. A working group on implementation of the project is formed and the analysis of requirements of documentation regulating transportation of radioactive substances has been conducted. Working materials on the facility and technological processes have been collected. Finally it was informed about the Identification of hazards and preliminary risk assessment related to the project.

Conclusion: the source control project will continue into phase IV, focusing on transportation of radioactive substances at the State Scientific Centre of Russian Federation "Scientific and Research Institute of Atomic Reactors" (SSC RF NIIAR). The project will conclude in 2010. The risk assessment methodology and source control reports for Atomflot, Zvezdochka, and NIIAR are available on EPPR's web page.

7.1.5 Community Radiation Information Project

The Community Radiation Information Project will continue with development of computer-based simulation training on emergency public information and a reference manual for communicating with the public. The target audience is public affairs teams of the administrative bodies that will be involved in a response. These tools will enhance the training of personnel of the public information services at nuclear facilities to be able to provide effective accurate and timely communications to the public during an emergency situation. The training will be based on two levels of events at a hypothetical nuclear power plant at two different levels of severity and will incorporate lessons on rumor control and media interaction. A reference manual will be produced which will provide definitions of terms at both the scientific level and public information levels; templates for information messages; and an inventory of typical questions. The project will be finalized in 2010.

Conclusion

EPPR took note of the presentations from US on the 5 ongoing projects related to this issue.

In addition US informed about the recently finalized projects. The secretariat informed that a minimum of 1 original report/folder/CD should be submitted to Arctic Council secretariat in Tromsøe.

7.2 Possible new projects: Radiological/other hazards

7.2.1 Emergency Rescue Team Equipment

One of the results of exercise "Arctic-2008" conducted at the CS «Zvezdochka» in 2008 was that equipment for monitoring, such as radiation monitors, sensors, spectrometers, etc. to be used by emergency rescue teams of the enterprise could be augmented. Success of emergency rescue works depends, in many respects, on how fast and accurately radiation conditions are assessed. Radiation surveillance of the contaminated area using various radiation devices and monitors should be organized for correct estimation of radiation situation, evaluation of type and amount of rescue works.

Under this project, the equipment of emergency rescue teams of CS “Zvezdochka” will be augmented to ensure efficiency of the personnel actions to measure and identify radiation conditions during the stages of mitigation and liquidation of emergency radiation situation.

The expected results of the project are:

- Development of an automated system for individual dose monitoring, providing accurate monitoring for emergency response personnel.
- Modernization of dosimetric and radiation measuring equipment, providing radiation monitoring capabilities in the surrounding territories and equipping 3 emergency and rescue teams.
- Providing multifunctional spectrometer equipment, enhancing efficiency of emergency responders in radionuclide identification and distribution.

The work under the project will be carried out in three stages:

- At the first stage, the analysis of requirements of emergency rescue teams of CS «Zvezdochka» in instrument gauges to assess the radiation conditions and in radiation monitoring equipment will be performed, and recommendations and technical decisions will be developed.
- At the second stage, technical equipment will be purchased and delivered to CS «Zvezdochka».
- At the third stage, methodology and instructions on how to use the equipment to carry out the radiation measurements will be formulated, and personnel will be trained in application of this new equipment.

7.2.2. Radiation Survey Simulation System

To improve training conditions for emergency responders, the Radiation Survey Simulation System project will equip the radiation safety services of two facilities “Mashinostroitelny Zavod” (MSZ, machine engineering works), Moscow Region, Electrostal, and Center of Shipbuilding “Zvezdochka”, Archangelsk Region, Severodvinsk, with computer systems for dynamic modeling of the results of primary measurements of the radiation conditions, which are intended for trainings and exercises. The simulation systems will raise the level of preparedness of the radiation safety services in the field of planning and conduct of radiation survey, exercising skills in field measurements using specialized equipment. Application of the computer systems will raise the efficiency and quality of exercises and trainings by creating realistic conditions for making decisions and taking actions.

The project will be carried out in two stages:

- In stage one, it is planned to analyze and choose scenarios of various severity involving radiation releases at the facilities, to develop and incorporate data on both the facility and the region and, to update the attributive database on measuring devices, available radiation survey groups, etc.
- At the second stage, it is planned to install the site specific programs at the

facilities, to train the personnel, to prepare and transfer engineering specifications and instructions for users, to prepare the final report.

This project will be completed in 2010.

Conclusion

EPPR accepted the two proposed projects from US. The chair underlined that project proposals should, according to EPPR's operating Guidelines, be submitted 30 days ahead of the meeting. US will submit the proposals to EPPR members as soon as possible.

The project names are:

- 1. Emergency Rescue Team Equipment*
- 2. Radiation Survey Simulation System*

6.3 Country reports under this subject

6.3.1 Plutonium in the environment at Thule, Greenland

Denmark gave a presentation of an activity with background from an aircraft on 21 January 1968 near Thule Air Base of a B52 bomber carrying nuclear weapons. After the accident several activities were initiated to clean up the area.

The project is led by and is supported by the Danish Environment Protection Agency. The aim of the project is to investigate radiation in the sediments.

7.3.2 Waste treatment after a radiological accident

Finland gave a presentation on this project. The starting point and scope of the work is: After a radiological accident the area has to be cleaned and waste is generated. The generated waste contains small amounts of radioactive substances which has to be taken into account during waste treatment. The amounts of waste generated might be huge. Most preparedness plans cover only the early phase of radiological accidents - the later phase (clean-up) is seldom covered.

The scope is therefore: How should waste treatment be organized after a radiological accident?

The study covers:

- Legislation applied and authorities and their responsibilities. In addition
- Waste generation: where, what and how much?
- General principles of waste treatment: what can be done to different types of waste?
- Waste treatment in practice: what would be done?

The recommendations from the project are:

- How and where waste is treated depends on the type and amount of waste generated.
- Central for the waste treatment is that:
 - The local/regional waste treatment possibilities (eg. Dumping grounds, incineration)
 - The capability of transportation and treatment and the need for additional

- instruments (eg. Radiation measuring equipment)
- The changes of the level of radiation during different phases of waste treatment chain
- The appropriate dumping of waste from the beginning so, that radioactive substances are hindered from drifting into ground- and surface water and, that the radioactive material is finally covered with enough non-radioactive material to damp the outer radiation

7.3.3 Towards Long Term Stewardship: Amchitka Island, Alaska

US gave a presentation on monitoring activities related to this island which they also suggested as EPPR projects.

Amchitka Island, the southernmost island of the Rat Island Group of the Aleutian Islands, was the site of three underground nuclear tests. The Work Towards Long Term Stewardships is related to the following activities:

- Surface sampling and 1996 Sampling (APIA and ADEC)
- DOE's modeling efforts
- Fairbanks Workshop (2002)
- Development of an Independent Science Plan (2003)
- 2004 Sampling, physical measurements, and modeling
- DOE's draft stewardship plan (July 2006)
- Community and Consortium comments on the plan
- Draft 2011 sampling plan

There has also been an Independent Science Assessment with the purpose to assess the risk to humans and biota from radionuclides in the marine environment surrounding Amchitka and to determine if any radionuclides present can be attributed to nuclear testing on Amchitka.

The results of the assessment are:

- Food supply is safe
- Wide range of biota in benthic and intertidal habitats
- No evidence of seepage zones
- Radionuclide travel times are possibly longer than first assumed
- Better understanding of hydrogeology
- Potential for bioaccumulation and biomagnifications

The future plans for Amchitka are to monitor mud pits covers every 5 years, marine biota and non-marine biota sampling every 5 years, event response related to earthquake greater than 6.7 and measurement of radionuclides above a standard.

There are plans to revisit the island every 5 years.

7.3.4 General presentations on the Wreckage of the Russian war cruiser Murmansk that grounded in northern Norway and the exercise Barents rescue 2009

Norway gave a short oral presentation on this issue.

Conclusion

EPPR took note of the following presentations:

- *Towards Long Term Stewardship Amchitka Islands by US*

- *Waste treatment after radiological accidents by Finland*
- *Plutonium in the environment at Thule, Greenland by Denmark*
- *General presentations on the Wreckage of the Russian war cruiser Murmansk that grounded in northern Norway and the exercise Barents rescue 2009.*

7.4 Briefings from Remote Sensing Laboratory (RSL)

Experts from RSL gave very useful and interesting briefings on the following topics:

- Federal Radiological Monitoring and Assessment Center (FRMAC)
- Operation Morning Light
- Sensor Demonstration and discussion on FRMAC Supporting equipment
- Aerial Measuring System Overview
- Emergency Communication and Emergency Operations Center Discussions
- Network Operations Center Demonstration
- Spatial Sciences- GIS Demo

For further details, see copy of the presentations on EPPR's web page.

8. EPPR Web Site.

8.1 Arctic Guide for Emergency Prevention, Preparedness and Response

The Updating of the Arctic guide is the responsibility of the EPPR secretary or (if no secretary) Sweden. Updating should be made on a yearly basis in accordance with information received at the EPPR- meeting. The latest update of EPPR's Arctic Guide was made in December 2008. The document is available on EPPR's web site.

Conclusion:

All of the delegations were asked to send updated information to the EPPR secretariat within 1 month (April 25th 2009). EPPR decided to discuss the purpose of the Arctic guide and what kind of information that should be included in the guide in the next meeting.

8. 2 Host for EPPR's web page

The secretariat had prepared a document for discussion based on the discussions in the EPPR meeting in Luleå.

Conclusion

EPPR welcomed Sweden's offer to continue as host for EPPR's web page after 2010. EPPR agreed that there is a need to change the design of the web page to make it more user-friendly and easier to keep up to date. The next chairmanship was asked to prepare a document/proposal related to this at the next annual meeting.

9. The 2009 Ministerial meeting

The secretariat informed about the draft progress report from EPPR to the 2009 Ministerial submitted to Arctic Council secretariat in January 2009. The report should be updated by the secretariat based on the output of the Las Vegas meeting.

10. Election of Chair and vice Chair

Ann Heinrich from US was elected as the new EPPR chair. Ole Kristian Bjerkemo from Norway was elected as vice chair. The new chair and vice chair will act from the 2009 Ministerial to the 2011 Ministerial.

11. Any other business

12. Next meeting

The next annual meeting will be arranged in Russia, possibly in the late spring/early summer 2010. Russia will inform about further details in due time.

The fall meeting could be a back to back meeting with the fall SAO meeting if the venue is easy accessible. The meeting may also be back to back with the possible workshop on co-operation on oil spill and HNS response in the Arctic.

13. Record of Decisions

A draft record of decisions was handed out. Based on input from the delegations, the draft was corrected. The document is attached to this report.

14. Closing of the meeting

The chairman, Mr. Johan Marius Ly, thanked the participants for fruitful discussions, that all contributed to a good progress and that we have obtained some results in the meeting. He also thanked US for hosting the meeting and the interesting presentations at RSL and the trip to Nevada Test Site.

Everybody was wished a safe trip back home.

Annex 1 Timed Agenda

Monday, March 16

- 3 – 5 pm Meeting with Oil Industry in Ambassador Board Room (see invitation in e-mail of March 3rd. 2009)
- 7 – 8 pm Short meeting for Chairman, HoD and secretariat at hotel in Ambassador Board Room

Tuesday, March 17

| Time | Agenda item | Text |
|----------------------------|-------------|---|
| 9 am | 1 | Opening of the Meeting by Rear Admiral Joseph J. Krol Jr. |
| 0915 - 0920 | 2 | Approval of the Agenda |
| 0920 – 0930 0930 - 0945 | 3 | Chair's and Secretariat report including Arctic Council activities <ol style="list-style-type: none"> 1. Chair's and Secretariat Report by Ole Kristian Bjerkemo <i>Document EPPR/2009/3.1.1</i> 2. PAME – Important information from Arctic Marine Shipping Assessment- AMSA which is relevant for EPPR by Secretariat/Canada |
| 0945 – 1145 | 4 | EPPR Strategic Plan and Work Plan 2009 – 2011. <ol style="list-style-type: none"> 1. Draft Strategic Plan – ref. 2008 meeting. Draft proposal from Norway. <i>Document EPPR/2009/4.1</i> 2. EPPRs draft work plan 2009 – 2011. Draft proposal from Secretariat. <i>Document EPPR/2009/4.2</i> |
| 1145 – 1155 | 5.1 | Project Updates and new projects on Oil and gas <ol style="list-style-type: none"> 1. Circumpolar Map of Resources at Risk from Oil spills in the Arctic Presentation by Norway/sec.- <i>Document EPPR/2009/5.1.1</i> 2. Arctic Rescue by Russia <i>Document EPPR/2009/5.1.2</i> 3. Development of Safety Systems in the Arctic while implementing infrastructural and other Economic Projects by Russia <i>Document EPPR/2009/5.1.3</i> |
| 1155 – 0015 0015 – 0035 | | |
| 0035 – 2 pm | | Lunch |

Tuesday, March 17 ctd.

| Time | Agenda item | Text |
|-------------|-------------|---|
| | | Project Updates and new projects on Oil and gas |
| 0200 – 0220 | | 4. Guidelines and Strategies for Oily Waste Management in the Arctic Regions by Canada |
| 0220 – 0240 | | 5. Project “gather and synthesize knowledge and expertise on the behavior of oil and other hazardous substances in Arctic waters, and to promote the development and use of technologies and working methods that improve the capability to respond to accidents that involve such substances by Norway. <i>Document EPPR/2009/5.1.6</i> |
| 0240 - 0300 | | 6. Possible multilateral agreement or MoU on oil spill response in the Arctic. Introduction by Norway |
| 0300 - 0330 | 5.2 | Information exchange on Oil and Gas |
| | | 1. Joint Industry Project (JIP) “Oil in Ice” by Norway (Ole Kristian Bjerkemo) <i>Document EPPR/2009/5.2.1</i> |
| | | 2. JIP “Coastal oil spill” by Norway (Ole Kristian Bjerkemo) |
| | | 3. NOFO-NCA: Oil Spill Response - Technology Development Programme - Oljevern2010 by Norway (Ole Kristian Bjerkemo) <i>Document EPPR/2009/5.2.3</i> |
| | | 4. The MareSafeNorth project by Norway (Ole Kristian Bjerkemo) <i>Document EPPR/2009/5.2.4</i> |
| | | 5. Manual for restoration after oil spills in ice by Sweden (Karl-Erik Kulander) <i>Document EPPR/2009/5.2.5</i> |
| | | 6. AMVER by USA (Benjamin Strong) <i>Document EPPR/2009/5.2.6</i> |
| | | 7. Short updates from US on: <ul style="list-style-type: none"> ▪ Safe Tug II prevention program by Walter paker ▪ Gap analysis examining responses, equipment and weather by Walter Parker ▪ Research on oil simulation material for oil spill response and training by Roy Robertson ▪ Study on remote sensing of oil at night and during adverse weather by Roy Robertson ▪ Terrestrial oil spills and remediation by Dave Barnes |

| Time | Agenda item | Text |
|-------------|-------------|--|
| 0330 - 0400 | 6.1 | Project Updates Natural disasters 1. Prevention network concerning catastrophic flooding on northern rivers (Northern Forum Flood Working Group) by Northern Forum 2. Managing the cold conditions – a systematic approach by Finland |
| 0400 – 0435 | 6.2 | Possible new projects Natural disasters |
| 0435 - 0500 | 6.3 | Information exchange on Natural disasters 1. Arctic SAR MoU by US (Paul Cunningham) 2. Update from Sweden on natural disasters 3. Update from Norway on natural disasters |

Wednesday, March 18

| Time | Agenda item | Text |
|-------------------|-------------|--|
| 0715 am | | Meet bus at Hotel North Tour Entrance and transport to RSL |
| 0800 am | | Arrive at the Remote Sensing Laboratory-Nellis. BADGING |
| 0900 am | | Remote Sensing Laboratory Welcome Brent Park, Director Remote Sensing Laboratory |
| 0910 am – 1030 | | <i>EPPR chair opens the meeting</i> |
| | 7.1 | Project Updates Radiological/Other Hazards 1. Portable analysis capability (lap top based) by US/Russia 2. Technical Crisis Center support on the EMERCOM Crisis Situation Management Center by US/Russia 3. Conduct of radiation emergency exercise in 2010 at Nerpa Shipyard by US/Russia 4. Source Control prevention related to transportation by US/Russia |
| 1030 – 1045 | | Break |
| 1045 – 1050 | 7.2 | Possible new projects Radiological/Other |

| | | |
|-------------|-----|---|
| 1050 – 1130 | 7.3 | Information exchange Radiological/Other Hazards Finnish study regarding waste treatment after a radiological accident by Finland (Miliza Malmelin) All of the countries are asked to give a short (5minutes) update on important activities related to this. |
| 1130 - 1200 | | Informational briefings from RSL specialists Federal Radiological Monitoring and Assessment Center Briefing by Rhonda Hopkins, Manager, Radiological Response Department |
| 1200 – 0100 | | Lunch and Operation Morning Light Brief by Jack Doyle |
| 0100 – 0200 | | Sensor Demonstration and Discussion FRMAC supporting equipment by Craig Marianno, Manager, Nuclear Instrument Section |
| 0200 - 0245 | | Aerial Measuring Systems Overview Briefing and Aviation Tour by Joe Candlish, Manager, Aviation Section |
| 0245 – 0300 | | Coffee break |
| 0300 - 0345 | | Emergency Communications and EOC Discussions with Network Operations Center Demonstration by Bill Nickels, manager Network Technologies section |
| 0345 - 0430 | | Spatial Sciences – GIS Demo by Ben Sher, Spatial Sciences Section |
| 0430 – 0440 | 8 | EPPR web-page 1. Arctic Guide for Emergency Prevention, Preparedness, Prevention and Response by secretariat 2. Host for EPPR web page by secretariat |
| 0440 - 0500 | 9 | The 2009 Ministerial Meeting |
| 0500 – 0505 | 10 | Election of Chair and Vice Chair |
| 0505 – 0515 | 11 | Any other business |
| 0515 – 0520 | 12 | Next meeting |
| 0520 - 0525 | 13 | Records of Decisions |
| 0525 – 0530 | 14 | Closing of meeting |
| 0530 | | Depart Remote Sensing Laboratory for Hotel |

Thursday, March 19

| | |
|------|---|
| 0730 | Pick up at North Tour Lobby Entrance of the hotel |
| | Visit Nevada Test site |
| 0445 | Back at hotel |

Annex 2: Records of decisions

3. Chair's and Secretariat report including Arctic Council activities

3.1 Report from EPPRs secretariat

EPPR noted the report from the secretariat.

3.2 PAME – Important information from the AMSA report with relevance for EPPR

EPPR noted the general recommendations related to EPPR activities in the AMSA report. It was underlined that the finding and recommendations are still drafts. When the final AMSA report has been submitted to the Ministers, EPPR need to evaluate what will be important for EPPRs future work related to Arctic Marine Shipping Assessment. Final drafts for the AMSA report are proposed for April 1st.

It was also decided that EPPR should establish closer liaison with PAME and other working groups where relevant. In principle should EPPR have one representative at every PAME meeting. It was not decided whether it should be a permanent or rolling liaison. To avoid traveling, the preferable option was to have a liaison from the country where PAME have their meeting. The secretariat was asked to follow up on this decision.

4. EPPR Strategic Plan (SP) and Work Plan 2009 – 2011.

EPPR agreed to the approach for a closer link between the description in EPPRs SP and the output from other WGs reports. It was also underlined from many countries that this may lead to more work for EPPR and the secretariat.

To finalize the SP, the secretariat should prepare a draft framework and headlines based on this principle, and circulate this to the HoDs for comments. A correspondence group, with representatives from Canada (Nora), USA (Ann), Russia (Igor) and Norway (Ole) will continue this work and prepare a final draft that will be discussed and hopefully accepted in the fall 2009.

EPPR agreed to hold HoD meetings between the Annual WG meetings. The fall 2009 meeting will be a mandatory EPPR- HoD meeting with possibilities for others to attend.

5.1 Project Updates and new projects on Oil and gas

Circumpolar Map of Resources at Risk from Oil spills in the Arctic

EPPR noted the information from Norway on this issue. EPPR supported the initiative from the Nordic Mapping Agencies on an Arctic SDI.

The possibilities for further improvement of EPPRs Circumpolar Maps of Risk should be based on the progress of the project of the Nordic Mapping Agencies and the

possibilities that might arise through this project. On behalf of EPPR Norway will be the contact point related to the initiative and report back to EPPR.

Because of this should the project be deleted in EPPR work plan. The work plan should be updated with a new section "Liaison with others". Under this section the headline for this activity will be: "Liaise with the project established by the Nordic Mapping Agencies on the Arctic SDI project."

Arctic Rescue by Russia

*EPPR took note of the presentation. The secretariat is asked to upload the report from the Dudinka seminar on to the EPPR web page.
The Arctic rescue activity for 2009 will be a seminar in Anadyr in the Far East of Russia in August 2009.*

Development of Safety Systems in the Arctic while implementing infrastructural and other Economic Projects

*EPPR took note of the presentation on the project.
The 2009 activity related to this project will be the Exercise Barents Rescue 2009 which will be held in the Kola area in early September. In addition to Russia will Norway, Sweden and Finland participate in the exercise.*

Guidelines and Strategies for Oily Waste Management in the Arctic Regions by Canada

*The meeting welcomed Canada's successful finalization of the project. The Norwegian chairmanship of EPPR will bring the report to the 2009 Ministerial meeting.
The secretariat should upload the report and the waste calculator on to EPPR's web page as soon as it has been approved by the SAO's.*

Project "gather and synthesize knowledge and expertise on the behavior of oil and other hazardous substances (BoHASA) in Arctic waters, and to promote the development and use of technologies and working methods that improve the capability to respond to accidents that involve such substances"

EPPR took note of the presentation from Norway and agreed to the proposed plan. Norway underlined that the funding of the project will be clarified in late May 2009. The goal will be to finalize the project before the next AC Ministerial (2011 – 2012). The HNS descriptions will be an important part of the report. In addition to Norway, Sweden and Canada, will Finland participate in the project.

Co-operation on oil spill and HNS response in the Arctic.

EPPR conducted a GAP analysis on this issue before 2000. Because of the recommendations in OGA 2007 and the draft AMSA report related to this issue, EPPR agreed that the GAP analysis 2000 should be reconsidered. Possible next steps will be to hold a workshop on this issue before the next annual EPPR meeting. Norway was

asked to prepare a draft agenda for a workshop. The content for a workshop could be the GAP analysis, information from each country on response and bilateral agreement and discussions based on a scenario. The future steps will be decided based on e-mail communication between the HoDs.

5.2 Information exchange on Oil and Gas

EPPR took note of the different presentations under this agenda item. Further updates on the different activities will be welcomed.

6.1 Projects updated Natural disasters

2. Managing cold conditions – a systematic approach

EPPR took note of the report from Finland and the fact that they still are in the application process. Finland was asked to involve indigenous people in this project. Finland will inform about the progress in next EPPR meeting.

6.3 Information exchange Natural disasters

1. Arctic SAR MoU or Agreement

EPPR took note of the oral presentation from US about the task force that should work on this issue. EPPR must consider the work related to SAR when the task force has been finalized.

2. Report from Norway on a new report about vulnerability and preparedness in the Norwegian Arctic

EPPR took note of the presentation. There were discussions on EPPR's future approach related to the work on natural disasters, but there were no conclusions on how EPPR should bring this forward. Norway was asked to consider the possibility to prepare a discussion document on this issue to the next Annual meeting.

7.1 Project updated Radiological/other hazards

EPPR took note of the presentations from US on the 5 ongoing projects related to this issue.

In addition US informed about the recently finalized projects. The secretariat informed that a minimum of 1 original report/folder/CD should be submitted to Arctic Council secretariat in Tromsøe.

7.2 Possible new projects: Radiological/other hazards

EPPR accepted the two proposed projects from US. The chair underlined that project proposals should, according to EPPR's operating Guidelines, be submitted 30 days ahead of the meeting. US will submit the proposals to EPPR members as soon as possible.

The project names are:

- *Emergency Rescue Team Equipment*
- *Radiation Survey Simulation System*

7.3 Information exchange Radiological

EPPR took note of the following presentations:

- *Towards Long Term Stewardship Amchitka Islands by US*
- *Waste treatment after radiological accidents by Finland*
- *Plutonium in the environment at Thule, Greenland by Denmark*
- *General presentations on the Wreckage of the Russian war cruiser Murmansk that grounded in northern Norway and the exercise Barents rescue 2009 .*

8.EPPR web page

8.1 Arctic Guide

All of the delegations were asked to send updated information to the EPPR secretariat within 1 month (April 25th 2009). EPPR decided to discuss the purpose of the Arctic guide and what kind of information that should be included in the guide in the next meeting.

8.2 Host for EPPR's web page

EPPR welcomed Swedens offer to continue as host for EPPR's web page after 2010. EPPR agreed that there is a need to change the design of the web page to make it more user-friendly and easier to keep up to date. The next chairmanship was asked to prepare a document/proposal related to this at the next annual meeting.

9. Ministerial meeting

The secretariat is asked to update the draft EPPR report sent to AC secretariat in early January 2009 based on the output and discussions from the EPPR meeting.

10. Election of Chair and Vice Chair

Ann Heinrich from US was elected as the new EPPR chair. Ole Kristian Bjerkemo from Norway was elected as vice chair. The new chair and vice chair will act from the 2009 Ministerial to the 2011 Ministerial.

12. Next meeting

The next annual meeting will be arranged in Russia, possibly in the late spring/early summer 2010. Russia will inform about further details in due time.

The fall meeting could be a back to back meeting with the fall SAO meeting if the venue is easy accessible. The meeting may also be back to back with the possible workshop on co-operation on oil spill and HNS response in the Arctic.

Annex 3: List of participants

*: Head of Delegation (HoD)

CANADA:

*Ms. Bonnie Leonard
Transport Canada
Marine Safety. Environmental Response
330 Sparks St. 10th Fl.
Ottawa, Ontario, Canada K1A 0N8
email: leonarb@tc.gc.ca
tel. +1-613-990-4887
fax +1-613-993-6196

Ms. Nora McCleary
Canadian Coast Guard
Safety and Environmental Response Systems
Centennial Towers
200 Kent Street, 5th. Floor.
Ottawa, Ontario, Canada K1A 0E6
e-mail: Nora.McCleary@dfo-mpo.gc.ca
tel: + 1-613-990-6718

Dr. Norm Snow
Joint Secretariat, Inuvialuit Renewable Resources Committees
Box 2120 Inuvik,
Northwest Territories, Canada X0E 0T0
email: execdir@jointsec.nt.ca
tel: +1-867-777-2828

Mr. Larry Trigatti
Department of Fisheries & Oceans
S 20 Exmouth St.
Sarnia, Ontario Canada N7T 8B1
Email: Larry.trigatti@dfo-mpo-gc.ca
tel: +1-519-383-1954

Mr. Edward H. Owens
Polaris Applied Sciences, Inc.
#302, 755 Winslow Way East
Bainbridge Island
WA 98110, USA
Direct: (206) 842-2951
Mobile: (206) 369-3679
Fax: (206) 842-2861
EHOwens@polarisappliedsciences.com

DENMARK

Mr. Svein Poul Nielsen
Riso National Laboratory for Sustainable Energy,
Technical University of Denmark
Frederiksborgvej 399
DK-4000 Roskilde, Denmark
e-mail: spni@risoe.dtu.dk
Tel: + 45

Mr. Steen Hoe
Danish Emergency Management Agency
Ministry of Defence
Datavej 16
3460 Birkerød, Denmark
e-mail: hoe@beredskabsstyrelsen.dk
Tel: + 45

Mr. Kaare Ulbak
National Institute of Radiation Protection
Knapholm 7
DK-2730 Herlev, Denmark
e-mail: ku@sis.dk
Tel: + 45 44 54 34 54

Mr. Carsten Israelson
National Institute of Radiation Protection
Knapholm 7
DK-2730 Herlev, Denmark
e-mail: Cis@sis.dk
Tel: + 45

*Mr. Claus S. Rasmussen
Defence Command Denmark,
Postboks 2153
1016 Copenhagen K, Denmark
e-mail: c.s.rasmussen@mil.dk
Tel: + 45

FINLAND:

*Mr. Tiimo Viitanen
Ministry of the Interior, Department of Rescue Services
P.O.Box 26, FI-00023 Government , Helsinki, Finland
e-mail: timo.viitanen@intermin.fi
Tel: + 358 9 160 44575
Cell: + 358 50 456 0012
Fax: + 358 9 160 44672

Janne Teemu Koivukoski
Ministry of the Interior/Department for Rescue services Unit
P.O.Box 26, FI-00023 Government , Helsinki, Finland
e-mail: Janne.koivukoski@intermin.fi
Tel: + 358 9 160 42962
Cell: + 358 500 478 252
Fax: + 358 9 160 44672

Ms. Miliza Malmelin
Ministry of the Environment/Environmental Protection Department
PO Box 35, FI-00023 GOVERNMENT, Finland
e-mail: miliza.malmelin@ymparisto.fi
tel: +358 20 490 7334
Cell: +358 50 534 6821
fax: +358 9 1603 9346

NORWAY:

Mr. Ole Kristian Bjerkemo – EPPR secretary
Norwegian Coastal Administration
Department for Emergency Response
Servicebox 2
NO-6025 Ålesund
Norway
e-mail: ole-kristian.bjerkemo@kystverket.no
tel: + 47 33 03 48 08
cell: +47 97 04 26 40
fax: + 47 33 03 49 49

*Johan Marius Ly – EPPR Chair
Norwegian Coastal Administration
Department for Emergency Response
Servicebox 2, NO-6025 Ålesund, Norway
e-mail: johan.m.ly@kystverket.no
tel: + 47 33 03 48 08
Cell: +47 95 70 93 35
fax: + 47 33 03 49 49

Mr. Morten A.K. Sickel
Norwegian Radiation Protection Authority,
Department for Emergency Preparedness and Environmental radioactivity
P.O. Box 55, NO-1332 Østerås, Norway
e-mail: Morten.Sickel@nrpa.no
Tel: +47 67 16 25 51
Cell: + 47 95 92 72 84
Fax +47 67 14 74 07

RUSSIA

*Dr. Igor Veselov
Ministry of Russian Federation for Civil Defence, Emergencies and Elimination of
Consequences of Natural Disasters (EMERCOM of Russia)
Terralny proezd,3
Moscow, Russia 103012
Tel: + 7 495 626 35 93
Fax: + 7 495 625 56 76
e-mail: veselov@mchs.gov.ru

SWEDEN

*Mr. Bernt Stedt
Swedish Coast Guard HQ
Stumholmen Box 536
371 23 Karlskrona
Sweden
Tel: +46 455353453/ + 46 709153555
e-mail: bernt.stedt@kustbevakningen.se

Mr. Kenneth Neijnes
Swedish Coast Guard, Region Nord
Box 145
871 23 Härnösand
Sweden
+4661185501/+46706090074
e-mail: kenneth.neijnes@kustbevakningen.se

Mr. Karl-Erik Kulander
Räddningsverket
651 80 Karlstad
Sweden
+4654135000
e-mail: karl-erik.kulander@srv.se

Mr. Jonas Lindgren
Swedish Radiation Safety Authority
Emergency Management and Response
Solna strandväg 96
SE-171 16 Stockholm
Tel: + 46 8 799 42 72
Mob: + 46 70 398 57 06
Fax: + 46 8 799 40 10
e-mail: Jonas.Lindgren@ssm.se

USA

*Ms. Ann Heinrich
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
tel: +1 202 586 8165
Fax: +1 202 586 2164
e-mail: Ann.heinrich@nnsa.doe.gov

Mr. Walter B. Parker
Prince William Sound Regional Citizens' Advisory Council
3724 Campell Airstrip Road
Anchorage, Alaska
USA 99504
Tel: +1-907 333 51 89
Fax: +1-907 333 51 53
e-mail: wbparker@gci.net

Mr. Roy Robertson
Prince William Sound Regional Citizens' Advisory Council
P.O. Box 3089 130 South Meals
Suite 202
Valdez, AK 99686
e-mail: robertson@pwsrca.org
Tel: +1- 907-835-3898

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Mr. Paul Cunningham
Office of Ocean and Polar Affairs
Bureau of Oceans and Environment and Science (OES/OPA)
U.S. Department of State
2201 C St. NW, Room 2665
Washington, DC, 20520-0000
e-mail: CunninghamPM2@state.gov
Tel: + 202-647-4972
fax: + 202 647 4343

Mr. Dave Barnes
Department of Civil & Environmental Engineering Water
and Environmental Research Center
University of Alaska Fairbanks
Fairbanks, Alaska 99775
e-mail: ffdlb@uaf.edu
Tel:+1 907 474 6126

Mr. Benjamin Strong
United States Coast Guard
Amver Maritime Relations
1 South Street
New York, NY 10004 USA
e-mail: Benjamin.Strong@uscg.mil
phone: (212) 668-7762

Annex 4 Work plan 2008 - 2009

EPPR Workplan 2009 – 2011

OIL POLLUTION: L – LEAD P- PARTICIPANT

| Project | Canada | Denmark/ Greenland | Finland | Iceland | Norway | Russian Federation | Sweden | USA |
|--|--------|-----------------------|---------|---------|--------|-----------------------|--------|-----|
| Ongoing | | | | | | | | |
| Arctic rescue | | | | | | L | | |
| Development of Safety Systems in the Arctic while Implementing Infrastructural and Other Economic Projects | | | | | | L | | |
| Behavior of Oil and other Hazardous Substances in Arctic Waters (BoHaSA) (New 2009) | P | | P | P | L | | P | |
| Co-operation on oil spill and HNS response in the Arctic (New 2009) | | | | | L | | | |

RADIOLOGICAL AND OTHER HAZARDS: L – LEAD P- PARTICIPANT

| Project | Canada | Denmark/ Greenland | Finland | Iceland | Norway | Russian Federation | Sweden | USA |
|--|--------|-----------------------|---------|---------|--------|-----------------------|--------|-----|
| Ongoing | | | | | | | | |
| Portable analysis capability (Laptop based) | | | | | | L | | L |
| IBRAE Technical Crisis Center (TCC) support to the EMERCOM Crisis Situation Management Center. | | | | | | L | | L |
| Conduct of radiation emergency exercise | | | | | | L | | L |
| Source Control prevention related to transportation | | | | | | L | | L |
| Emergency Rescue Team Equipment (New 2009) | | | | | | L | | L |
| Radiation Survey Simulation | | | | | | L | | L |

| | | | | | | | | |
|-------------------|--|--|--|--|--|--|--|--|
| System (New 2009) | | | | | | | | |
|-------------------|--|--|--|--|--|--|--|--|

NATURAL DISASTERS L – LEAD P- PARTICIPANT

| Project | Canada | Denmark/ Greenland | Finland | Iceland | Norway | Russian Federation | Sweden | USA |
|---|--------|-----------------------|---------|---------|--------|-----------------------|--------|-----|
| Ongoing | | | | | | | | |
| "Managing the cold conditions – A systematic approach | | | L | | | | | |

CO-OPERATION WITH OTHERS AND LIAISON ACTIVITIES

| Project | Canada | Denmark/ Greenland | Finland | Iceland | Norway | Russian Federation | Sweden | USA |
|--|--------|-----------------------|---------|---------|--------|-----------------------|--------|-----|
| Ongoing | | | | | | | | |
| Northern Forum on catastrophic flooding | | | | | | P | | L |
| Nordic Mapping Agencies on Arctic Mapping | | | | | L | | | |
| PAME working group | | | | | | | | |
| Oil Industry | | | | | L | | | |
| University of Arctic | | | | | | | | |
| AMAP and CAFF on Arctic Council Spatial Strategy | | | | | L | | | |

OTHER ISSUES L – LEAD P- PARTICIPANT

| Project | Canada | Denmark/ Greenland | Finland | Iceland | Norway | Russian Federation | Sweden | USA |
|--|--------|-----------------------|---------|---------|--------|-----------------------|--------|-----|
| Ongoing | | | | | | | | |
| Host EPPR web site | | | | | | | L | |
| EPPR secretariat | | | | | | | | L |
| Update the Strategic Plan of EPPR in process with the other EPPR | P | | | | P | P | | P |

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| | | | | | | | | |
|---|--|--|--|--|--|--|---|---|
| countries | | | | | | | | |
| Update the Arctic Guide for Emergency Prevention, Preparedness and Response | | | | | | | P | L |