



OUTCOME OF THE FIFTH MEETING OF
EXPERT GROUP ON MONITORING OF RADIOACTIVE SUBSTANCES
IN THE BALTIC SEA (HELCOM MORS EG)

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OUTCOME OF THE FIFTH MEETING OF THE EXPERT GROUP ON MONITORING OF RADIOACTIVE SUBSTANCES IN THE BALTIC SEA (HELCOM MORS EG)

Introduction

0.1 In accordance with the decisions by the Fourth Meeting of the Expert Group on Monitoring of Radioactive Substances in the Baltic Sea (Outcome of HELCOM MORS EG 4-2014, Paragraph 7.4) and HELCOM HOD 46-2014 (Outcome of the Meeting, Paragraph 6.4), the Fifth Meeting of the HELCOM Expert Group on Monitoring of Radioactive Substances in the Baltic Sea (HELCOM MORS EG 5-2015) was held on 19-21 May 2015 in Oulu, Finland, at the premises of Hotel Scandic Oulu.

0.2 The Meeting was attended by representatives of the HELCOM Contracting Parties Denmark, Estonia, Finland, Germany, Lithuania, Poland, Russia and Sweden. The Meeting was also attended by a representative of the International Atomic Energy Agency Environment Laboratories (IAEA-EL) as well as by invited guests from the Norwegian Radiation Protection Authority and Fennovoima Oy. Furthermore, the Discharge Database Manager, Mr. Vesa-Pekka Vartti, Finnish Radiation and Nuclear Safety Authority (STUK) and the Environmental Database Manager, Mr. Joni Kaitaranta, HELCOM Data Coordinator, participated in the Meeting. The participants of the Meeting are listed in **Annex 1**.

0.3 The Meeting was opened and chaired by Ms. Tarja Ikäheimonen, Chair of the HELCOM MORS Expert Group. In her welcoming address she recalled that this is the 30th meeting of the MORS group. Ms. Teija-Liisa Lehtinen, HELCOM Professional Assistant, acted as secretary of the Meeting, assisted by Mr. Joni Kaitaranta, HELCOM Data Coordinator.

Agenda Item 1 Adoption of the Agenda

Documents: 1-1, 1-2

1.1 The Meeting adopted the Agenda as contained in document 1-1.

Agenda Item 2 Information by the Secretariat, the Contracting Parties and IAEA

Documents: 2-1, 2-2, 2-3, 2-3-Rev.1

2.1 The Meeting took note of the information by the Secretariat (**Presentation 1**) on the following issues:

- updated Roadmap of HELCOM activities (document 2-1);
- renewed HELCOM working structure;
- HELCOM Monitoring Manual;
- outcomes of recent HELCOM meetings relevant for MORS EG (documents 2-3 and 2-3-Rev.1).

2.2 The Meeting took note of the following information on recent environmental or other issues of interest submitted by the Contracting Parties:

Denmark (Presentation 2)

Denmark informed about a potential risk from radioactive waste stored at Risø site since 1958 and that a heavy storm on 5 December 2013 raised water level in Roskilde Fjord 2.1 m above normal but below waste barrels, which require an assessment to be made of potential radiological consequences of water level 3 m above normal.

Estonia

Estonia informed that in 2013 Estonia purchased a new radiological measurement vehicle “RanidSONNI” and that in 2014 upgrading of the Estonian Radiation Monitoring Network was carried out, including the establishment of 15 new stations for spectroscopic and gamma dose rate monitoring in air and the replacement of one old large volume air sampler with a new one “Snow White”.

Finland

Finland informed that development of the Finnish marine strategy has been continued. In 2014 the Finnish government issued a resolution on the monitoring programme of the marine strategy. It consists of 39 sub-programmes of which 2 deals with radioactivity: 1) Radioactivity in the Baltic Sea and 2) Radioactive discharges into the Baltic Sea. Currently the programme of measures for achieving a good environmental status in marine water is under preparation, but this has no implications related to radioactivity in the Baltic Sea.

Germany

Germany informed that it is still following its way of phasing out of the use of nuclear energy. Germany also informed about the study of the German Federal Office for Radiation Protection concerning the transport of I-131 from medical installation to the North Sea. Furthermore, the basic German reference methods (Messanleitungen) used by labs of the German Federal States, were translated into English and will soon be published on the website of the German Environmental Ministry (www.bmub.bund.de).

Furthermore, the German Integrated Measurement and Information System, where most of the German monitoring data are merged, is upgraded. The upgrade should be completed in 2018.

Lithuania (document 2-2, **Presentation 3**)

Lithuania submitted information on radiation protection of environment in Lithuania, e.g. that the Environmental Protection Agency, Environment Research Department, Radiology Division was accredited in accordance with standard LSTENISO/IEC17025:2005 for gamma spectrometry in surface water and biota. In November 2014 the network of automatic gamma dose rate measurement stations was modernized with new installations.

Poland

Poland informed about the new Baltic Sea monitoring programme taking into account the requirements of the EU Marine Strategy Framework Directive (MSFD). The list of monitored hazardous substances has been expanded and new elements: marine litter and underwater noise were added to the Polish monitoring programme.

Sweden

The regulations in Sweden concerning radiation protection have during the last couple of years been undergoing extensive revision, from the law down to details.

A new proposal concerning environmental surveillance around nuclear facilities has been formulated. In short, the licensee will become responsible for designing their site-specific environmental programme and adapt it to the different phases in the facility’s life span, e.g. during normal operation or during decommissioning. Up until now the designing of the environmental programme has been the responsibility of the authority SSM. In the future SSM will review and comment and make sure that the programme maintains a minimum requirement level, as yet to be decided.

The licensee will still also be responsible for performing, analysing and reporting the results to SSM.

2.3 The Meeting took note of the following information by IAEA:

- IAEA’s Environment Laboratories (EL) contribute to the Nuclear Safety Action Plan through a project on “Marine Monitoring: Confidence Building and Data Quality Assurance” (July 2014-July 2017). Two sampling missions are organised every year jointly by Japan and the IAEA offshore the Fukushima prefecture to collect marine samples for interlaboratory comparisons. Every year a

proficiency test is organised for the analysis of radionuclides in seawater, in which Japanese laboratories involved in marine monitoring participate together with similar laboratories worldwide, including HELCOM MORS EG labs;

- During the past year IAEA-EL took part in a sampling cruise to the coastal area of Namibia for a baseline radioactivity study in view of supporting the design of the country's marine radioactivity monitoring programme; and in a Joint Norwegian-Russian sampling mission to the Barents Sea to investigate radioactivity in the area of the sunken nuclear submarine K-159;
- IAEA-EL is under accreditation for reference material production (ISO 17025 and ISO Guide 34). In the future accreditation will also be sought for PT organisation;
- IAEA-EL replaced its old air sampling system in Monaco with a "Snow White" air sampler and will continue its 30-year time-series of aerosol and deposition radioactivity monitoring;
- The Agency has released to Member States on 14 May 2015 a report on the accident at the Fukushima Daiichi Nuclear Power Plant, assessing the causes and consequences of the accident triggered by a tsunami that followed a massive earthquake on 11 March 2011. Based on data and information from many sources, the report is the result of a collaboration of more than two years involving some 180 experts from 42 Member States and several international bodies;
- The IAEA recently concluded the International Experts' Meeting on Assessment and Prognosis in Response to a Nuclear or Radiological Emergency (IEM 9). The meeting was organized in conjunction with the Nuclear Safety Action Plan, which aims to strengthen nuclear safety worldwide. The Action Plan expanded the IAEA Secretariat's response role in a nuclear or radiological emergency to cover the need "...to provide Member States, international organizations and the general public with timely, clear, factually correct, objective and easily understandable information during a nuclear emergency on its potential consequences, including analysis of available information and prognosis of possible scenarios based on evidence, scientific knowledge and the capabilities of Member States." IEM9 provided a forum for experts to discuss issues, challenges and solutions related to the assessment and prognosis process in response to a nuclear or radiological emergency.

2.4 The Meeting took note of the information by the representative of the Norwegian Radiation Protection Authority on the marine monitoring in Norway (**Presentation 4**), including i.a.:

- RAME–Radioactivity in the Marine Environment: Barents Sea 2015, North Sea 2016, Norwegian Sea 2017, Barents Sea 2018;
- Institute of Marine Research (IMR) and its research vessels;
- water and sediments sampling;
- Russian-Norwegian cooperation;
- discharge from offshore oil and gas industry;
- integrated marine management plans for all Norwegian marine areas.

2.5 The Meeting noted that the concentrations of Cs-137 in the Baltic Sea area are approximately ten times higher than in the North Sea area.

2.6 The Meeting took note of the presentation by the representative of Fennovoima Oy about Hanhikivi 1 Nuclear Power Plant, which is planned to be built in Northern Finland in the coastal municipality of Pyhäjoki (located in Northern Ostrobothnia on the shore of the Baltic Sea) and the effects of the new power plant to the marine environment (**Presentation 5**).

2.7 The Meeting took note of the information by Russia on the Russian presidency in the Council of the Baltic Sea States Expert Group on Nuclear and Radiation Safety (CBSS EGNRS) and the Russian chairmanship programme and future plans of EGNRS, as presented by Mr. Andrey Stepnov (Presentation 6).

Agenda Item 3 Scientific reports by the Contracting Parties and IAEA

Documents: 3-1, 3-2, 3-3, 3-4, 3-5, 3-6, 3-7

- 3.1 The Meeting took note of the information on Danish monitoring data 2015, as presented by Mr. Sven Nielsen, DTU Nutech (**Presentation 7**).
- 3.2 The Meeting took note of the information on the Estonian results on monitoring of radionuclides in the Baltic Sea in 2014, as presented by Ms. Eia Jakobson, Estonian Environmental Board, Radiation Safety Department (document 3-3, **Presentation 8**).
- 3.3 The Meeting took note of the information on the Finnish results on monitoring of radionuclides in the Baltic Sea in 2014, as presented by Ms. Iisa Outola, STUK (document 3-1, **Presentation 9**).
- 3.4 The Meeting took note of the information submitted by Finland on a comparison of marine radionuclide dispersion models for the Baltic Sea in the frame of IAEA MODARIA program, as presented by Ms. Iisa Outola (**Presentation 10**).
- 3.5 The Meeting took note of the results of German MORS monitoring in 2013 and 2014, as presented by Ms. Stefanie Schmier, Federal Maritime and Hydrographic Agency (BSH) (document 3-4).
- 3.6 The Meeting took note of the results of radiological monitoring in the Baltic Sea during 2014 by Lithuania, as presented by Ms. Beata Vilimaite Silobritiene, Environmental Protection Agency (document 3-6, **Presentation 11**).
- 3.7 The Meeting took note of the results by Poland on monitoring of radioactive contamination of bottom sediments and fish in the Southern Baltic Sea in 2014, carried out by the Central Laboratory for Radiological Protection, as presented by Ms. Tamara Zalewska, Institute of Meteorology and Water Management (document 3-2, **Presentation 12**).
- 3.8 The Meeting took note of the monitoring results on the concentrations of Cs-137 and Sr-90 in seawater and fish in the Polish economic zone in 2014, compiled by the Institute of Meteorology and Water Management - National Research Institute, Maritime Branch, Gdynia, as presented by Ms. Tamara Zalewska (document 3-5, **Presentation 13**).
- 3.9 The Meeting took note of the information by Russia that their environmental monitoring results are not yet available, due to some organizational problems, but all the analyses have been made and the report will be sent to the HELCOM Secretariat in two weeks.
- 3.10 The Meeting took note of preliminary results from Sweden of certain biota, sea water and sediment data in 2014, as presented by Ms. Maria Lüning, Swedish Radiation Safety Authority (document 3-7, **Presentation 14**).
- 3.11 The Meeting concluded that monitoring of radionuclides in the Baltic Sea is well covered within MORS EG and the results show generally a slightly decreasing trend. However, the total content of Cs-137 in sediments remains high compared to other regional seas.

Agenda Item 4 Data collection, databases and ongoing monitoring programme

Documents: 4-1, 4-2, 4-3, 4-4, 4-5

- 4.1 The Meeting took note of the presentation by HELCOM Data Coordinator Mr. Joni Kaitaranta, on the online [HELCOM Monitoring Manual](#) and the integration of the general information from the MORS Guidelines into the Monitoring Manual sections under Contaminants Programme and relevant linkages to the MORS Guidelines.
- 4.2 The Meeting reviewed the latest version of the Guidelines for Monitoring of Radioactive Substances (document 4-1) including the new sub-basin division (and new codes) that were agreed in the previous meetings.

- 4.3 The Meeting agreed that the following changes should be made to the Guidelines:
- correct the sub-basin ID for Station SW7 (151 → 15);
 - correct the Station names in seawater and sediment station maps (CVI → A5 and vice versa);
 - modify the reporting template to clarify that MORS_SUBBASIN and HELCOM_SUBBASIN code are mandatory fields.
- 4.4 The Meeting agreed that it is not required to add new sediment types to the Guidelines as the current list of sediment types is comprehensive and suggested to modify German sediment data containing sediment types “Turf” and “Mud and turf” (ID: SDHIG1998289- SDHIG1998298) to be inserted in MORS database as sediment type “Soft”.
- 4.5 The Meeting took note of and considered the compilation of HELCOM MORS environmental data reported to the database before 27 April 2015, as presented by HELCOM Data Coordinator Mr. Joni Kaitaranta (document 4-2, **Presentation 15**).
- 4.6 The Meeting welcomed the annual report of the MORS environmental data containing the basic graphs for verification of the MORS environmental data of 1984-2013, as presented by HELCOM Data Coordinator Mr. Joni Kaitaranta (document 4-4, **Presentation 16**).
- 4.7 The Meeting agreed that the following changes should be made to the annual report:
- Stations in the Curonian lagoon (LT10) should not be averaged to open sea sub-basins (Southern Baltic Proper);
 - All values below detection limit should be omitted to the calculations and there is no need to display in the charts the possible omitted data.
- 4.8 The Meeting welcomed the inventory of discharge data from nuclear facilities in the Baltic Sea catchment area from 1994-2014, as presented by the Discharge Database Manager Mr. Vesa-Pekka Vartti, STUK (document 4-3).
- 4.9 The Meeting requested the Discharge Database Manager to check and insert missing information on Finnish Strontium results from 2013 and 2014 to the database. The Database Manager will investigate how missing data versus data with no discharge will be displayed in tables and graphs.
- 4.10 The Meeting took note of the information by IAEA on the update on the MARIS database (**Presentation 17**). It was agreed that MARIS will be updated with the 2015 version of the HELCOM MORS database.
- 4.11 The Meeting took note of the information on air releases and liquid discharges from Leningrad NPP in 2014 provided by the Russian Federation, as presented by Mr. Andrey Stepanov, Khlopin Radium Institute (document 4-5).

Agenda Item 5 Analytical quality assurance, reliability of data and intercalibrations

Documents: 5-1

- 5.1 The Meeting took note of the information by Finland on the results of the work on compilation of information and data for intercomparison of sea water samples, as presented by Ms. Tarja Ikäheimonen, STUK (**Presentation 18**). The Meeting concluded that the results of the intercomparisons generally show good agreement across the participating laboratories, which means that the quality of the monitoring data is acceptable.
- 5.2 The Meeting took note of the information on the next large volume sampling for MORS seawater intercomparison to be arranged by BSH on the German research vessel DENEb during a cruise on 15-26 June 2015 (document 5-1). The Meeting requested the Contracting Parties to update the information on the shipping addresses. The shipping will start at the beginning of July and the Contracting Parties will be informed about the estimated arrival of the sample container.

- 5.3 The Meeting took note of the information by Ms. Iolanda Osvath, IAEA Environment Laboratories, on the update on the IAEA proficiency test exercises (**Presentation 19**).
- 5.4 The Meeting also took note of the information on the IAEA-465 Baltic Sea sediment sample exercise, for which the invitation and information sheet will be submitted shortly to the MORS EG members.
- 5.5 The Meeting was shown a short video of the seawater sampling carried out in November 2014 offshore the Fukushima Prefecture for interlaboratory comparison of Japanese and IAEA laboratories. The exercises are being expanded to more sample types (sediment, biota) and additional participating laboratories. The Meeting was informed about the results of the previous year's seawater proficiency tests in Japanese laboratories.
- 5.6 The Meeting took note of the requests received by IAEA to conduct fish intercomparison exercises and the lack of suitable sample material. Finland offered to check their possibilities to provide some dried material (freshwater fish) from their storage for the purpose of conducting the exercises.

Agenda Item 6 Indicator reports and assessments

Documents: 6-1, 6-1-Rev.1, 6-2

- 6.1 The Meeting took note of the information on the current version of the the core indicator "*Radioactive substances: Caesium-137 in fish and surface waters*", as presented by Ms. Tamara Zalewska (document 6-2 and **Presentation 20**). The Meeting did not propose any comments or updates to be made to the indicator report, before its adoption and publishing in June 2015.
- 6.2 The Meeting expressed its appreciation for the excellent work done by the authors of this core indicator.
- 6.3 The Meeting considered the updating of the following Baltic Sea Environment Fact Sheets, for which MORS EG is responsible:

[Total amounts of the artificial radionuclide caesium -137 in Baltic Sea sediments](#)

[Liquid discharges of Cs-137, Sr-90 and Co-60 into the Baltic Sea from local nuclear installations](#)

- 6.4 The Meeting decided that MORS EG will continue updating both fact sheets, and pointed out that the sediment fact sheet might not need annual updating.
- 6.5 The Meeting discussed the preparation and status of work of the thematic assessment of long-term changes in radioactivity in the Baltic Sea covering the period 2011-2015 on the basis of the draft outline (document 6-1) and updated the outline with regard to the content of the chapters, responsible authors and the estimated schedule for the work (document 6-1-Rev.1). Draft chapters will be prepared and circulated to the members in time for the next MORS meeting in May 2016, where the draft assessment will be discussed.

Agenda Item 7 Future work

Documents: 7-1

- 7.1 The Meeting took note of the updated Terms of Reference of HELCOM MORS EG (document 7-1) and that according to the new HELCOM working structure, MORS EG is now reporting to the HELCOM Working Group on the State of the Environment and Nature Conservation (WG STATE & CONSERVATION), instead of the previous Group MONAS.
- 7.2 The Meeting took note that the next meeting of the Working Group on the State of the Environment and Nature Conservation (STATE-CONSERVATION 3-2015) will be held on 9-13 November 2015 in Finland. The Meeting requested Ms. Tarja Ikäheimonen, Chair of MORS EG, to participate in the meeting on behalf of MORS EG and to present the work of the group.

7.3 The Meeting welcomed the confirmation by Sweden to host the next meeting of MORS EG in 2016 and agreed that MORS EG 6-2016 will be held on 24-26 May 2016, the last day being also a full day (instead of half a day). Sweden will give information on the place of the meeting as soon as it has been decided.

7.4 The Meeting welcomed the offer of Estonia to investigate their possibility to host the MORS EG meeting in 2017.

Agenda Item 8 Other business

Documents: 8-1

8.1 The Meeting updated the list of HELCOM MORS EG contact addresses (document 8-1) as contained in **Annex 2**.

8.2 The Meeting discussed the proposal for informal communication between the MORS EG members to exchange information on exceptional observations in relation to atmospheric monitoring of radioactive substances (in addition to the formalized seawater monitoring) and agreed to use an unofficial e-mail forum for this purpose.

8.3 The Meeting thanked Finland for the excellent arrangements and generous hosting of the Meeting as well as for the wonderful excursion to the island "Hailuoto". The Meeting also thanked the Chair and the Secretariat.

Agenda Item 9 Outcome of the Meeting

Documents: 9-1

9.1 The Meeting adopted the draft Outcome of HELCOM MORS EG 5-2015 containing the main decisions of the Meeting (document 9-1). The Outcome of the Meeting will be made available in the HELCOM Meeting Portal, together with the documents considered (**Annex 3**) and presentations given (**Annex 4**) during the Meeting.

ANNEX 1

LIST OF PARTICIPANTS

| Representing | Name | Organisation | E-mail address |
|----------------------------|------------------------------|--|---|
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| IAEA | | | |
| | Iolanda Osvath | International Atomic Energy Agency (IAEA) Environment Laboratories | i.osvath@iaea.org |
| Invited guests | | | |
| | Hilde Skjerdal | Norwegian Radiation Protection Authority | hilde.kristin.skjerdal@nrpa.no |
| | Minttu Hietamäki | Fennovoima Oy | minttu.hietamaki@fennovoima.fi |
| HELCOM Secretariat | | | |
| Data Coordinator | Joni Kaitaranta | HELCOM Secretariat | joni.kaitaranta@helcom.fi |
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ANNEX 2

CONTACT ADDRESSES OF HELCOM MORS EG

| Representing | Name | Organisation | E-mail address |
|----------------------------|-------------------------------|--|---|
| Chair | Tarja Ikäheimonen | STUK - Radiation and Nuclear Safety Authority Environmental Radiation Surveillance and Emergency Preparedness | tarja.ikaheimonen@stuk.fi |
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| Denmark | Sven Nielsen | DTU Nutech | spni@dtu.dk |
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| European Union | Vesa Tanner | European Commission Directorate-General for Energy | Vesa.Tanner@ec.europa.eu |
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| Sweden | Maria Luning | Swedish Radiation Safety Authority | maria.luning@ssm.se |
| IAEA | | | |
| | Iolanda Osvath | International Atomic Energy Agency (IAEA) Environment Laboratories | i.osvath@iaea.org |
| MORS DATA CONTACTS | | | |
| Discharge data | Vesa-Pekka Vartti | STUK - Radiation and Nuclear Safety Authority Environmental Radiation Surveillance and Emergency Preparedness | vesa-pekka.vartti@stuk.fi |
| Environmental data | Joni Kaitaranta | Helsinki Commission | joni.kaitaranta@helcom.fi |

ANNEX 3

LIST OF DOCUMENTS

| Title | Submitted by |
|--|------------------|
| 1-1 Provisional Agenda.pdf | Secretariat |
| 1-2 Annotations to the Provisional Agenda.pdf | Secretariat |
| 2-1 Updated Roadmap of HELCOM activities.pdf | Secretariat |
| 2-2 Radiation protection of environment in Lithuania - news and changes.pdf | Lithuania |
| 2-3 Information on outcomes of recent HELCOM meetings of relevance to MORS EG.pdf | Secretariat |
| 2-3-Rev1 Information on outcomes of recent HELCOM meetings of relevance to MORS EG.pdf | Secretariat |
| 3-1 Monitoring of Radionuclides in the Baltic Sea in 2014 by Finland.pdf | Finland |
| 3-2 Monitoring of radioactive contamination in the Southern Baltic Sea in 2014.pdf | Poland |
| 3-3 Monitoring of radionuclides in the Baltic Sea 2014.pdf | Estonia |
| 3-4 Results of German MORS monitoring in 2013 and 2014.pdf | Germany |
| 3-5 Cs-137 and Sr-90 in the Polish economic zone in seawater and fish in 2014.pdf | Poland |
| 3-6 Results of radiological monitoring in the Baltic Sea during 2014 by Lithuania.pdf | Lithuania |
| 3-7 Preliminary results of Swedish data 2014.pdf | Sweden |
| 4-1 Guidelines for Monitoring of Radioactive Substances.pdf | Secretariat |
| 4-2 HELCOM MORS environmental data compilation 2015.pdf | Data Coordinator |
| 4-2Att1 MORS Environment reported data 2015.xlsx | Data Coordinator |
| 4-3 Inventory of discharge data 1995-2014.pdf | STUK |
| 4-4 Annual report of the MORS environmental data 1984-2013.pdf | Data Coordinator |
| 4-5 Gas and Aerosol Releases and Liquid Discharges - LNPP 2014.pdf | Russia |
| 5-1 Large volume sampling for HELCOM MORS seawater intercomparison.pdf | Germany |
| 6-1 Draft Outline for thematic assessment of radioactivity 2011-2015.pdf | Secretariat |
| 6-1-Rev1 Draft Outline for thematic assessment of radioactivity 2011-2015.pdf | Secretariat |
| 6-2 Core indicator Radioactive substances.pdf | Secretariat |
| 7-1 Terms of Reference of MORS EG.pdf | Secretariat |
| 8-1 Contact addresses of HELCOM MORS EG.pdf | Secretariat |

ANNEX 4

LIST OF PRESENTATIONS

| Presentation No. | Title | Presenter |
|------------------|---|---|
| 1 | Information by the Secretariat | Joni Kaitaranta, Secretariat |
| 2 | Potential risk from radioactive waste stored at Risø, Denmark | Sven Nielsen, Denmark |
| 3 | Radiation protection of environment in Lithuania | Beata Vilimaite-Silobritiene, Lithuania |
| 4 | Marine monitoring in Norway | Hilde Skjerdal, NRPA |
| 5 | Hanhikivi 1 project | Minttu Hietamäki, Fennovoima Oy |
| 6 | Information on CBSS EGNRS | Andrey Stepanov, Russia |
| 7 | Danish data 2015 | Sven Nielsen, Denmark |
| 8 | Monitoring of Radionuclides in the Baltic Sea 2014 by Estonia | Eia Jakobson, Estonia |
| 9 | Monitoring of Radionuclides in the Baltic Sea in 2014 by Finland | Iisa Outola, Finland |
| 10 | Information on IAEA MODARIA programme | Iisa Outola, Finland |
| 11 | Results of radiological monitoring in the Baltic Sea during 2014 by Lithuania | Beata Vilimaite-Silobritiene, Lithuania |
| 12 | Monitoring of radioactive contamination of bottom sediments and fish in the Southern Baltic Sea in 2014 by Poland | Tamara Zalewska, Poland |
| 13 | ¹³⁷ Cs and ⁹⁰ Sr in the Polish economic zone (seawater and fish) in 2014 | Tamara Zalewska, Poland |
| 14 | Preliminary results of Swedish data 2014 | Maria Lüning, Sweden |
| 15 | MORS Environmental data compilation 2015 | Joni Kaitaranta, Secretariat |
| 16 | MORS Environmental data 1984-2013 | Joni Kaitaranta, Secretariat |
| 17 | Update on MARiS - IAEA Marine Radioactivity Database | Iolanda Osvath, IAEA-EL |
| 18 | Sea Water Intercomparison Results | Tarja Ikäheimonen, Finland |
| 19 | Update on IAEA proficiency test exercises | Iolanda Osvath, IAEA-EL |
| 20 | Core indicator on Radioactive substances: Cs-137 in fish and surface waters | Tamara Zalewska, Poland |