

Radioactive Substances¹⁰

1. Objectives

1.1 The OSPAR Commission's strategic objective with regard to radioactive substances is to prevent pollution of the OSPAR maritime area from ionising radiation through progressive and substantial reductions of discharges, emissions and losses of radioactive substances, with the ultimate aim of concentrations in the environment near background values for naturally occurring radioactive substances and close to zero for artificial radioactive substances. In achieving this objective the following issues should, *inter alia*, be taken into account:

- a. radiological impacts on man and biota;
- b. legitimate uses of the sea;
- c. technical feasibility.

1.2 The Radioactive Substances Strategy will be implemented progressively by making every endeavour, through appropriate actions and measures to ensure that by the year 2020 discharges, emissions and losses of radioactive substances are reduced to levels where the additional concentrations in the marine environment above historic levels, resulting from such discharges, emissions and losses, are close to zero.

2. Guiding principles

2.1 When making assessments and adopting programmes and measures in relation to radioactive substances, including waste, the Contracting Parties will be guided by the general principles described in section 3 of Part I. In addition, the Contracting Parties will take account of:

- a. the recommendations of other appropriate international organisations and agencies;
- b. the monitoring procedures recommended by these international organisations and agencies;
- c. scientific assessments of dose and risk as part of the tools for setting priorities and developing action programmes;
- d. the relevant international conventions and Contracting Parties' obligations under international law relevant to this OSPAR thematic strategy.

3. Main strategic directions

3.1 To achieve its objectives and in accordance with the findings of the Quality Status Report 2010, the OSPAR Commission will, where appropriate, develop and maintain programmes and measures to identify, prioritise, monitor and control (*i.e.* prevent and/or reduce and/or eliminate) the emissions, discharges and losses of radioactive substances caused by human activities which reach, or could reach, the marine environment.

3.2 To this end, the OSPAR Commission will focus on the following main strategic directions in the period up to 2020:

- a. continue monitoring programmes, to improve the evidence base and further develop assessment tools;
- b. monitor the international development of environmental quality criteria¹¹ to evaluate the impacts of discharges on the marine environment and adopt such criteria as they become established;

¹⁰ A number of terms used in this strategy are defined in Annex 1.

¹¹ E.g. the International Commission on Radiological Protection (ICRP), initiatives by the European Commission implementing the Euratom Treaty, and the International Atomic Energy Agency under its Plan of Activities on the Radiation Protection of the Environment.

- c. assess the contribution of the oil and gas industry to marine radioactive pollution and, where appropriate, develop and implement suitable management measures;
- d. continue to scrutinise the development in, and encourage Contracting Parties to apply, best available techniques to control (*i.e.* prevent and/or reduce and/or eliminate) discharges of radioactive substances from the nuclear and non-nuclear sectors.

4. Timeframe and implementation

4.1 The Radioactive Substances Strategy will be implemented and further developed in line with the OSPAR Commission's commitments to an Ecosystem Approach and according to the Joint Assessment and Monitoring Programme and the periodic Programmes of Work, which will establish priorities, assign tasks and set appropriate deadlines and targets. These commitments will concentrate on substances and human activities of the highest concern to the marine environment, as identified in the Third Periodic Evaluation of Progress (Publication number 455/2009), making best use of resources.

4.2 The OSPAR Commission will, by 2020, improve and further develop tools for data collection and assessment of progress towards the objectives of the Radioactive Substances Strategy, by the following actions:

- a. to apply statistical trend analysis techniques to assess progress in reduction of discharges, emissions and losses;
- b. by 2012, to review and if necessary, conclude on:
 - (i) an appropriate method of reporting exceptional discharges arising either from the decommissioning of nuclear installations or from operations to recover old waste; and
 - (ii) a method to take account of the variability in the level of operation of nuclear installations;
- c. by 2014, to develop agreed baseline values for discharges and concentrations, where possible, from the non-nuclear sector;
- d. by the time environmental quality criteria are established as referred to in § 3.2(b), to consider programmes and measures to apply such criteria;
- e. by 2018, to review progress with tritium abatement techniques that might allow further consideration of appropriate evaluation of tritium discharges through an agreed methodology.

4.3 The OSPAR Commission will continue monitoring programmes and annual data collection to improve the evidence base. The main actions are:

- a. to continue and improve the annual collection of data on discharges and concentrations from the non-nuclear sector;
- b. to continue to collect data and monitor discharges of the radionuclides from the nuclear sector;
- c. to establish routine monitoring and data collection of concentrations data and cooperate with the International Atomic Energy Agency (IAEA) in making such data available through the IAEA MARiS database;
- d. to assess the contribution of the non-nuclear sector, especially the oil and gas industry, to the pollution of the OSPAR area by radioactive substances.

4.4 The OSPAR Commission will assess the impacts to man and biota of:

- a. environmental concentrations of radionuclides associated with the nuclear industry in the OSPAR maritime area;
- b. discharges of radionuclides associated with the non-nuclear sectors in the OSPAR maritime area.

4.5 The OSPAR Commission will carry out periodical evaluations of progress as specified in the Joint Assessment and Monitoring Programme and assess progress in implementing the strategy against baselines agreed by the Commission for discharges of radioactive substances, their concentrations in the marine environment and the resultant doses to members of the public.

4.6 Effective action is to be taken by Contracting Parties concerned, when there are reasonable grounds for concern that radioactive substances introduced into the marine environment, or which reach or could reach the marine environment, may bring about hazards to human health, harm living resources and marine ecosystems, damage amenities or interfere with other legitimate uses of the sea.

4.7 As a result of monitoring and assessment, the OSPAR Commission will identify and adopt relevant measures to deal with the problems, including:

- a. continuing to apply and further develop BAT to minimise discharges of radioactive substances from the nuclear sector;
- b. reviewing periodically the development of abatement techniques for tritium discharges;
- c. identifying appropriate management measures for the non-nuclear sources;
- d. addressing measures regarding radioactive substances from offshore oil and gas activities under the offshore industry strategy.

5. Interrelation with other international institutions

5.1 In implementing the Radioactive Substances Strategy, the OSPAR Commission will draw upon the work of and cooperate with relevant international organisations and agencies. The Commission will take account of relevant recommendations, methodologies and/or legally binding documents. Examples of relevant documents are the recommendations of the International Commission on Radiological Protection (ICRP), the Safety Standards Series of the International Atomic Energy Agency (IAEA), the Joint Convention on the Safety of Spent Fuel Management and the Safety of Radioactive Waste Management and the EURATOM Basic Safety Standards.

5.2 The OSPAR Commission and Contracting Parties, jointly or individually, should continue to encourage international organisations and agencies, such as the IAEA and the ICRP, to develop further the scientific tools for assessing radiation exposure and risk especially to marine organisms.