STRATEGIC ACTION PLAN
2018–2020
Societal developments are necessitating greater effort on the part of the Norwegian Radiation Protection Authority (NRPA) in a number of key areas. Some examples are changes in threat scenarios, an increase in cancer incidence, new uses for radiation in medicine and increases in the risk of incidents linked to nuclear facilities and radiation sources.

The NRPA fulfils its societal remit as an independent authority by administering relevant regulations and monitoring and guiding activities which involve the use and handling of radiation sources and radioactive and nuclear material. The NRPA informs and communicates with its surroundings, gives advice, administers and develops knowledge.

The NRPA is a directorate under the Ministry of Health and Care Services, the Ministry of Climate and Environment and the Ministry of Foreign Affairs, and performs tasks on behalf of and supports other ministries as and when necessary. These tasks are set out in the authority’s mandate and the annual letters of allocation.

The NRPA places great emphasis on bilateral, Nordic, European and international collaboration. Through this approach, our own administration also benefits from the experience and knowledge of others. At the same time, we contribute to nuclear safety and radiation protection outside our national borders.

One of the NRPA’s tasks is to reduce the negative consequences of radiation. Fundamental to the organisation’s work is expertise within a specialised discipline and a set of core values which safeguards administration in the interests of society in general. Such values are partly linked to the NRPA’s corporate social responsibility, the rule of law, equality and freedom of information.

The NRPA shall act in a professional and outward-looking manner and be open and visible in the public space. The NRPA’s common identity shall be characterised by diversity, engagement and respect.

The ministries’ expectations of the NRPA over time cover all aspects of the organisation’s work. The Strategic Action Plan sets out the key results to which the NRPA is expected to contribute over the next three years, covering the period 2018–2020. The annual overarching management of the organisation’s work is anchored in Report to the Storting No. 1, the letter of allocation and the business plan.

Bærum, Tromsø, Sør-Varanger, 15 October 2017
Ole Harbitz
Director-General
Medical exposure is a discipline in constant development and; new technologies, techniques and methods are constantly being introduced in diagnostics and treatment. The introduction of new methods in medical exposure is associated with new radiation protection challenges for both patients and staff. This will impact on the NRPA’s administrative and regulatory tasks during the impending planning period.

Proton therapy will be introduced in Norway in 2022. Proton therapy facilities will generate new radiation protection challenges during the planning, establishment, operating and disposal phases. The professional communities are preparing for the introduction of proton therapy by becoming even better at personalised radiotherapy using both conventional and new techniques. This results in greater use of medical imaging in diagnostics, planning and performance of the treatment.

Radiotherapy is becoming more personalised and specialised, with new challenges and altered risk scenarios, regardless of the timeframe and scope of the implementation of proton therapy in Norway. The NRPA must also take this development into account in the administration of medical exposure in general and in radiotherapy in particular. The NRPA must prepare itself to establish its role as the regulatory authority for proton therapy in Norway.

**GOALS**

- Established authority role and administrative practice concerning the approval of proton facilities which take into account the radiation protection challenges associated with the method.
- Established method and service for measuring, calibration, quality control of proton radiation and clinical proton dosimetry.
- Stronger collaboration and coordination with other Norwegian health authorities and professional communities regarding the introduction of new methods within radiology, nuclear medicine and radiotherapy.

**PLAN FOR THE THREE-YEAR PERIOD**

- Prepare guidelines and application forms for the approval of proton centres in Norway; covering construction, accelerator acquisition, test operation, clinical operation and a decommissioning/disposal plan.
- Establish collaboration for the exchange of knowledge and quality assurance with foreign authorities and institutions that use proton therapy.
- To further develop assessments of new methods and the development of professional guidelines, which ensure justified and optimized use of radiation within radiology, nuclear medicine and radiotherapy.
Norway has two nuclear facilities which are owned and operated by the Institute for Energy Technology and which have been in operation for over 50 years. The age of these facilities necessitates close monitoring to ensure that satisfactory safety levels are maintained during operation. Most of the fuel that has been used over this period is still stored at the two nuclear facilities, and a storage and disposal solution must be found. The age of the facilities also renders it necessary to focus on decommissioning/disposal.

The Institute for Energy Technology itself is responsible for nuclear safety and safety culture. The task of the NRPA is to ensure that satisfactory safety levels are maintained at the nuclear facilities in Norway in line with applicable regulations, international recommendations and obligations. This applies both during operation and in connection with decommissioning/disposal of the facilities to ensure that society in general and the environment are safeguarded.

The number of nuclear-powered vessels visiting Norwegian ports is rising steadily. The NRPA is responsible for ensuring that safety and preparedness linked to the docking of these vessels is safeguarded and for quickly identifying any incidents or near-accidents.

**GOALS**

- Safety levels at the ageing nuclear facilities in Norway are safeguarded.
- Spent fuel and other radioactive waste from all phases are dealt with appropriately.
- Adequate safety and preparedness levels are maintained in connection with the increasing number of visits by nuclear-powered vessels.

**PLAN FOR THE THREE-YEAR PERIOD**

- Guide, impose requirements and follow up all actors with responsibility for nuclear safety and the environment.
- Strengthen monitoring and control, with special emphasis on safety culture and the challenges associated with the ageing of the facilities.
- Carry out a comprehensive review - a «Topical peer review» - of the challenges linked to ageing, in partnership with EU Member States.
- Build up expertise and capacity within decommissioning and waste management.
- Further develop procedures and preparedness linked to visits by nuclear-powered vessels.
The situation regarding security policy is changing. The general picture today is one of a higher threat level, greater unpredictability and uncertainty and more military activity in our region. The threat scenario also encompasses an increased threat of terrorism involving the potential use of nuclear and radioactive material. On an international level, there is considerable concern that nuclear and radioactive material could go astray and be used by terrorists in nuclear weapons or dirty bombs. The non-proliferation of such materials generally is the subject of increasing focus internationally. This places demands on Norway as a nuclear nation.

The NRPA must act as a driving force in safeguarding nuclear and radioactive material both nationally and internationally.

In recent years, greater efforts have been made at national level. This particularly applies to the nuclear facilities, the strongest radioactive sources in the country and border controls.

GOALS

- Nuclear facilities are protected from sabotage and acts of terrorism.
- Nuclear and radioactive materials are protected from theft, sabotage, acts of terrorism and loss.
- Sufficient capacity is in place to identify nuclear and radioactive materials that have been lost.
- Strong non-proliferation regime for nuclear material, technology and knowledge.

PLAN FOR THE THREE-YEAR PERIOD, NUCLEAR MATERIALS

- Fulfil the requirements imposed following the IAEA’s review in 2015 (International Physical Protection Advisory Mission, IPPAS), with the result that the follow-up review indicates marked improvements.
- Fulfil the mandate of the authority forum for the protection of nuclear facilities and nuclear fuel in Norway.
- Revise the regulations concerning physical protection in line with international recommendations.
- Strengthen the safety culture within the organisations.
- Identify nuclear material that has been lost and detect smuggling, partly through strengthened border controls and the ability to detect material.
- Contribute to the prevention of terrorist acts by developing a regime for the analysis of nuclear material for use in investigations.

PLAN FOR THE THREE-YEAR PERIOD, RADIOACTIVE MATERIALS

- Review the need for further protection of radioactive sources in Norway during use, transport and waste management.
- Review the use and development of alternative technology both nationally and internationally, and contribute to substitution.
- Assess whether current regulations are adequate with regard to protection and impose requirements and monitor protective measures regarding radioactive sources; import, transport, use and disposal.
- Identify radioactive material that has been lost.
PREPAREDNESS; CHANGING THREATS

The changes and development trends that are taking place at both national and international level are impacting on the demands made on both the NRPA’s preparedness and the national nuclear preparedness. In addition to an ageing portfolio of nuclear power stations in our region, the threat picture also encompasses a greater risk of terrorism involving the use of nuclear and radioactive material. The possible use of nuclear weapons in our region presents a new challenge both for national preparedness and for the NRPA.

Norwegian nuclear preparedness is based on the sector principle and coordination between the various sectors. Effective nuclear preparedness is dependent on regular activities and coordinated plans for all agencies within the area of nuclear preparedness (the Crisis Committee for Nuclear and Radiological Preparedness with advisers and the County Governor as the Crisis Committee’s regional link). As chair and secretariat for the Crisis Committee, the NRPA is an important driving force behind this. The NRPA maintains 24/7 preparedness and an updated threat picture at all times.

GOALS

- Effective and operational nuclear preparedness amongst all the Crisis Committee’s agencies and the regional County Governor Offices.
- Strong and professional emergency management capacity and operational measurement preparedness.

PLAN FOR THE THREE-YEAR PERIOD

- Investigate scenarios for the use of nuclear weapons close to or on Norwegian territory and describe necessary measures.
- Complete and follow up the Crisis Committee’s national measurement strategy.
- Prepare detailed plans for the implementation of protective measures linked to nuclear incidents with all the Crisis Committee’s organisations.
- Strengthen expertise and collaborate concerning marine scenarios (both accidents and malicious actions) with all relevant stakeholders.
- Carry out a major nuclear preparedness exercise at national, regional and local level, followed by evaluation and implementation of the lessons learned.
- Enhance the NRPA’s collaboration with the Directorate of Health and the National Institute of Public Health.
ULTRAVIOLET RADIATION FROM THE SUN AND SOLARIUMS; NATIONAL SKIN CANCER STRATEGY

Norway has one of the highest incidences of skin cancer and such incidences are increasing. Ultraviolet radiation from the sun and solariums are a contributory factor behind around 90% of all skin cancer cases.

The NRPA has been tasked by the Ministry of Health and Care Services with developing proposals for a national strategy to reduce the incidence and mortality of skin cancer in Norway. The NRPA is leading and coordinating this work and has set up a working group with a broad composition of representatives of relevant authorities and agencies with instruments which can support the work. In addition, actors from voluntary organisations and stakeholder groups will take part in a reference group. The working group will prepare proposals for a national strategy which includes goals, key priorities and measures to reduce the incidence and mortality of skin cancer caused by UV exposure from the sun and solariums.

A corresponding strategy for reducing lung cancer caused by radon exposure was developed by a broad collaboration in 2007–2009. Phase 2 of the implementation of the radon strategy is in progress.

GOALS

▪ Reduced incidence and mortality of skin cancer due to UV exposure from the sun and solarium.
▪ Reduced incidence of other UV-induced health-related effects.
▪ Overview of doses for the population and knowledge about effects of UV.

PLAN FOR THE THREE-YEAR PERIOD

▪ Prepare proposals for a national strategy which includes goals, key priorities and measures to prevent and detect skin cancer earlier than at present. The strategy will be completed in 2018 and applies for the period 2019-2023.
▪ Contribute to the work of relevant authorities and professional communities in the follow-up of measures under the UV and skin cancer strategy.
▪ Increase knowledge about effects of UV and doses for the population.
▪ Renew national monitoring of natural UV.
NRPA – FURTHER DEVELOPMENT:

DIGITALISATION

The public sector has an obligation to facilitate the public administration’s communication with the general population and industry through digital online services - within the framework of the security requirements applicable to the public administration (the Public Administration Act and special legislation) and using common ICT-based infrastructure - such as web portals, databases, secure digital mail, digital signatures, etc.

GOALS
- Digitalised administration and supervision.
- Effective and clear directorate.

PLAN FOR THE THREE-YEAR PERIOD
- Develop a digital scorecard for the NRPA, i.e. determine which areas and working procedures must be digitalised.
- Establish electronic application forms, reply forms on the internet and digital solutions for internal case processing.
- Establish a national occupational dose register and system for receiving data from the Norwegian Patient Registry.
- Establish a result archive for the Norwegian Protection Authority’s data.

COMMUNICATION:

The primary aim of the NRPA’s overall communication strategy is to disseminate knowledge to society. In this way, the NRPA aims to contribute to a knowledge-based public debate and to influence decisions and behaviour so that they protect health and the environment.

GOALS
- Clear authority and a preferred information source.
- Maintain or improve the level of trust with our users.
- Have appropriate, accurate and comprehensive information within our remit.

PLAN FOR THE THREE-YEAR PERIOD
- Develop new websites with clear and comprehensive information.
- Increase the proportion of self-initiated media cases.
- Conduct user surveys amongst selected target groups.
INTERNATIONAL AUDIT OF THE ADMINISTRATION:

Within the field of atomic safety and radiation protection, Norway is subject to international obligations which are laid down in conventions. The NRPA’s administration is based on the International Atomic Energy Agency’s (IAEA’s) safety standards and recommendations concerning nuclear activity, radiation, radioactive waste and transport. This is the starting point when IAEA carries out reviews - «Integrated Regulatory Review Service» (IRRS).

GOALS

▪ Effective and clear directorate for nuclear safety, environment and radiation protection in line with international obligations and recommendations.

PLAN FOR THE THREE-YEAR PERIOD

▪ Facilitate and receive an IRRS audit in 2019.
▪ Prepare an action plan for implementing recommendations and proposals from the IRRS audit.

SAFETY:

The altered threat picture and requirements concerning asset protection also present new internal challenges within the NRPA.

GOALS

▪ Enhanced safety.

PLAN FOR THE THREE-YEAR PERIOD

▪ Conduct an overarching evaluation of the security and safety regime.
▪ Implement new measures relating to physical protection and security culture as necessary.