Enhancing Nordic cooperation in Nuclear and Radiation Safety

Nordic Strategy Group Report

Nordic Nuclear and Radiation Safety Authorities DEMA, DSA, GR, SIS, SSM, STUK

DANISH EMERGENCY MANAGEMENT AGENCY

DSA Norwegian Radiation and Nuclear Safety Authority

DANISH HEALTH AUTHORITY Radiation Protection

Strål säkerhets myndigheten Swedish Radiation Safety Authority

GEISLAVARNIR RÍKISINS ICELANDIC RADIATION SAFETY AUTHORITY

stuk RADIATION AND NUCLEAR SAFETY AUTHORITY

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1. Executive summary

At their annual meeting in Reykjavik in August 2023, the 'Nordic Chiefs', the directors of the Nordic radiation and nuclear safety authorities, discussed the existing cooperation frameworks and priorities and how to address the changes in the operating environment of the authorities, resulting from the current geopolitical situation and the increased interest in nuclear power. The Chiefs decided to explore possible common strategic priorities for Nordic authorities in the current context to determine if and how such priorities may be reflected in existing cooperation forums and ways of working. This task was assigned to an ad hoc working group – Nordic Strategy Group (NSG) – representing all Nordic nuclear and radiation safety authorities[1], with a mandate to report to the Chiefs meeting.

This report is the outcome of the Nordic Strategy Groups work. The working group has 13 recommendations to further develop Nordic radiation and nuclear safety cooperation. The working group focused on aspects of cooperation that are likely to be particularly affected by the change in the operating environment; it does not cover all aspects of nuclear and radiation safety. Its intention is neither to guide nor bind [activities or practices] in respective countries.

1.1. Key findings

The working group concluded that the current operational environment of the Nordic radiation and nuclear safety authorities is very dynamic and changing rapidly. These changes are driven by the growing energy needs, connected to the green transition and a potential revival of nuclear energy, as well by the changes in the global and regional security environment leading to the emergence of new threats and a need for deeper regional cooperation. To meet identified needs and challenges, the following actions are suggested for consideration:

1 Geislavarnir rikisins GR (Iceland), Beredskabsstyrelsen and Sundhedsstyrelsen DEMA and SIS (Denmark), Direktoratet for stålvern og atomsikkerhet DSA (Norway), Strålsäkerhetsmyndigheten SSM (Sweden) and Strålsäkerhetscentralen STUK (Finland).

Nuclear regulatory activities:

1. Establish a forum for knowledge sharing on nuclear regulation including public communications and stakeholder engagement on new build.
2. Explore possibilities to develop joint Nordic training programs (and consider the possible future role of NKS in this context).

Radiation protection activities:

3. Consider scope of working groups related to likely future developments including research needs (e.g. AI) in the respective areas.
4. Consider the need for a forum for exchange of information on radioactive waste management and decommissioning from all activities and facilities.

Emergency preparedness, prevention, and response:

5. Extend the cooperation on emergency preparedness to include all nuclear and radiological risks and threats.
6. Develop and improve necessary channels for the exchange of information including real time situational awareness and strategic overview on nuclear and radiological threats.
7. Establish a plan how to develop mutual assistance and response including prevention on regional level.
8. Strengthen the cooperation between NEP and NPC.

International assistance and development:

9. Strengthen the Nordic cooperation in supporting Ukraine.
10. Strengthen information sharing and potentially coordination of assistance and development projects to Black Sea area and Central Asia.

The working group propose the following general actions for consideration:

11. Strengthen the role of Nordic forums towards other multilateral cooperation and enhance Nordic influence and visibility in international cooperation fora related to nuclear and radiation safety.
12. Review existing and future funding sources or mechanisms to foster cooperation.
13. Raise visibility of the Nordic cooperation to political level and to general public.

Implementation of the recommendations is suggested to be executed through the authorities' regular work and in different Nordic cooperation forums and working groups.

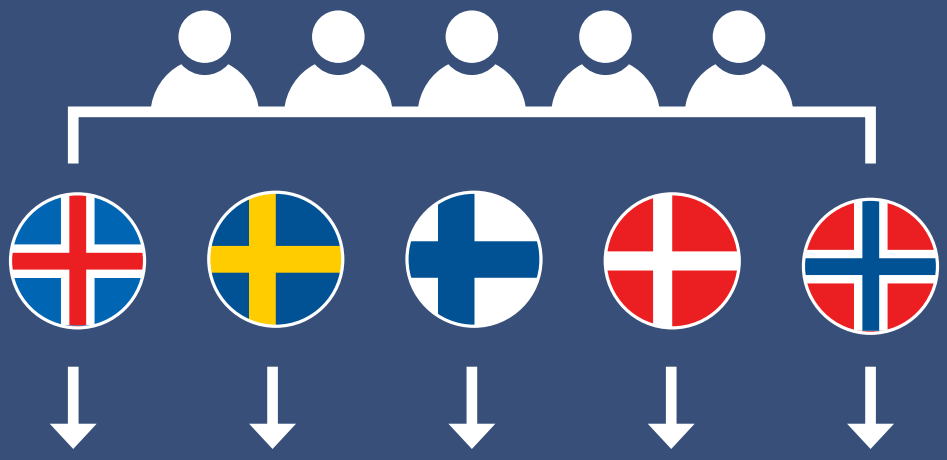
It is recognized that there are different levels of urgency associated with these recommendations. **It is proposed by the working group that the recommendations 1, 6 and 7 are implemented as a priority**.

2. Scope and objectives

The scope of the Nordic Strategy Group was to explore changes in the authorities' operating environment that may be relevant for the Nordic Cooperation to identify possible consequences on needs and priorities for future Nordic cooperation. The group was assigned to thoroughly review and evaluate the new situation and its challenges and opportunities as well as to suggest ways to enhance Nordic cooperation within areas that would improve the joint and national ability to meet the challenges.

The mandate was agreed by the Chiefs and group members were nominated by the end of October 2023. The working group has had in all five meetings, three in person (Vantaa, Copenhagen and Oslo). All Nordic Radiation and Nuclear safety authorities were represented in the working group, consisting of:

Peltonen Karim (chair)	Finnish Radiation and Nuclear Safety Authority
Niittymäki Henri (secretary)	Finnish Radiation and Nuclear Safety Authority
Hannesson Haraldur	Danish Health Authority
Hofvander Peter	Swedish Radiation Safety Authority
Israelson Carsten	Danish Emergency Management Agency
Jónsson Gísli	Icelandic Radiation Safety Authority
Mattsson Håkan	Norwegian Radiation and Nuclear Safety Authority
Robinson Carol	Norwegian Radiation and Nuclear Safety Authority



The Nordic Strategy Group was assigned to suggest ways to enhance Nordic cooperation within areas that would improve the joint and national ability to meet the challenges.

3. Background

3.1. Status of the Radiation and Nuclear Safety Cooperation

There is a **long tradition of successful cooperation among Nordic countries** sustained by the historical, cultural and geographical proximity of the countries. This tradition also carries through to the Nordic radiation and nuclear safety authorities, which have well established cooperation on multilateral and bilateral bases. Multilateral cooperation is taking place in several working groups[1], reporting on an annual basis to the meetings of the Nordic director generals. These groups deal with various aspects of radiation protection, including emergency preparedness. Authorities of the Nordic countries also cooperate in the funding and management of Nordic Nuclear Safety Research (NKS), a Nordic forum for research, competence building, experience exchange and networking in nuclear and radiation safety with focus on reactor safety, including decommissioning, and emergency preparedness.

Radiation and nuclear safety and security is also dealt under other cooperation forums, for example the Arctic Council and the Nordic Society for Non-Proliferation. In addition, Nordic authorities have had technical cooperation regarding safety of Russian nuclear power plants, and, since 2022, cooperation focusing on efforts to support Ukraine.

Existing forums and working groups continue to work well, enabling authorities to align their work and add value to EU and global cooperation. In addition, working groups and other cooperation have added value in enabling networking and providing meeting places for experts to share information and experiences. One undeniable strength of Nordic cooperation has been its openness and a bottom-up approach based on close interaction between peers.

1 The following groups report annually to the Nordic Chiefs meeting:
NORDOS (Dosimetry)
NEP Emergency Preparedness
Medical Applications
NORDIC-NAT (Natural Radiation Sources)
Non-ionizing radiation
Non-medical Applications
NPC (Public Communications)

3.2. Drivers for Change

The environment of radiation and nuclear safety in Nordic countries and surrounding areas is currently very dynamic and evolving rapidly. The working group identified two main external drivers; firstly, the globally growing need for energy and secondly, geopolitical changes with implications on international and Nordic safety and security.

The green transition, backed by the needs to secure nationally energy supplies, has led into a **growing demand for (nuclear) energy**. In combination with expectations linked to new nuclear technologies and needs to create balanced energy mix, enabled by the favorable public opinion in many countries, there is a growing interest towards expansion in the nuclear energy sector. This revival of nuclear energy is reflected in national energy policies focusing on new build.

Finland and Sweden have recently adopted energy policies enabling both construction of new nuclear power units as well as adoption of new nuclear technologies. In the Baltic Sea region, Estonia has taken the decision to establish a national nuclear energy program, while Poland has already launched such a program and is preparing significant investments in nuclear energy. This development also concerns other Nordic countries directly and indirectly. Although not currently producing nuclear energy, the topic has found its way into the public debate in Denmark and Norway. Nuclear energy is reflected in the emergence of new industries and companies active in this field in the region[2].

To respond in the societal needs related to revival of nuclear energy, authorities need to prepare for future development. On the regulatory side, there is a need to develop and harmonize international regulations concerning safety, security, and safeguards of new nuclear technologies, develop national practices for regulatory oversight, and ensure adequate competences. Authorities will also need to follow developments in neighboring countries to prepare for potential situations with cross-border effects and to contribute to public debate.

As indicated, the level of social acceptance of nuclear energy has been growing, but there remain significant differences between the Nordic countries. Once planned projects start, it is highly likely that public debates will increase. In a medialized environment, public debates are not restricted by the national borders and all authorities will need to prepare for stakeholder engagement, to be ready either to take part in the public debate or to respond to the public's questions and concerns.

An increased use of nuclear energy also means that, in the future, other activities such as transportation of nuclear fuel and radioactive materials and waste and the development of radioactive waste management technologies and facilities. Therefore, there is a need

2 e.g. there are currently two startup companies developing new reactor types in Copenhagen.

to increase authorities' capacity to follow and understand ongoing developments and to evaluate potential risks in order to provide adequate national regulation, even in countries that do not use, nor intend to use, nuclear energy.

Along with growing energy needs, **changes in the security environment** were identified as a second major driver for the enhancing cooperation among the Nordic authorities for nuclear and radiation safety. The hostile actions of Russia and open warfare in Ukraine have had an impact on the geopolitical position of the Nordic countries, posing new threats and hindering peaceful interactions within the region. The once open and active cooperation and exchange of information with Russian authorities and licensees has ceased[3]. The main regional concerns at present are the risks related to nuclear power plants in North-west Russia and nuclear waste storages in the Kola peninsula.

In addition to civilian risks, the storage of nuclear warheads close to Nordic countries, transport of nuclear weapons, development of nuclear-powered weapons systems, and increased traffic of nuclear-powered vessels in the Arctic, north Atlantic and Baltic Sea area, are also potential sources of hazards. Furthermore, Russian rhetoric concerning the possible use of nuclear weapons has strengthened such that the consequences of the use of (tactical) nuclear weapons and testing nuclear weapons need to be taken seriously. The intentional use of radioactive material for terrorist purposes must also be considered. Authorities thus need to prepare to work in disturbed, even war-like, conditions with heightened threats on nuclear security.

Geopolitical tensions have also led to increased friendly military activity in the region, setting new challenges for regulatory activities. Friendly nuclear-powered vessels are visiting Nordic ports more frequently and using shipping lanes along the coastlines. This particularly concerns the Atlantic ports but can be expected also in the Baltic Sea area.

When facing serious incidents, all countries have limited resources by their own. Real or perceived threats are not limited by national borders and serious events engage authorities widely abroad. This requires development of capabilities to efficiently exchange information in advance and during the events, to provide evaluations of their safety significance and meet the needs of different stakeholders, and communicate efficiently with the public, in a timely manner. To prepare for incidents or accidents with large (potential) radioactive releases there is a need to improve national capabilities to receive and provide international assistance.

3 Conventions regarding e.g. exchange of information remain nominally in force, but their effectiveness may be doubtful.

Rapid development of technologies. Recently there has been a rapid rate of development of technologies, especially in the medical and radiation protection areas. For example the development of AI and its applications, and new producers and nuclides are frequently coming into the market in the nuclear medicine area. The development is dynamic and likely affected by the security environment. Radiation protection has been the traditional core of the Nordic cooperation with several forums and working groups active. It is therefore important to continue to exchange information in the relevant working groups, and if necessary review the mandates of the relevant working groups to address the current challenges.

4. Enhancing cooperation

The status of Nordic cooperation, is presented below in four common working areas, where each area includes recommendations to enhance cooperation. In addition, there is also a section dealing with general enhancement of Nordic cooperation.

4.1. Nuclear Regulatory Activities

As stated above, Nordic regulators need to prepare for new nuclear developments in technologies, mainly SMRs, and the extension of the lifetime of existing units. In addition, there are several aged research reactors that will be undergoing decommissioning processes and there is a need to develop and exchange experiences on radioactive waste management in the region. Industrial and other stakeholders expect effective and efficient regulatory processes for safety reviews and licensing, and close cooperation between regulators. It is therefore important to ensure the competence of regulators, consistency of regulatory reviews and processes to the extent possible. Currently, there is no mechanism to share competence between the Nordic regulators in the nuclear field. Competence could be enhanced and shared through establishing a program for exchange of experts, or by developing Nordic training programs.

Along with the development of regulatory requirements and oversight competences, it is important to monitor public opinion and meet the needs of stakeholders. Concerns in one country could affect other countries in the area. Therefore, it is important to follow public opinion and exchange information on public debates. For regulators, it is important to ensure and convince stakeholders that e.g., commercial interests do not override safety of the population. The Nordic group for public communicators (NPC) has partly touched the topic of public communications on new-build and stakeholder engagement and could possibly be tasked with continuing work in this area.

Currently development of standards and guidance related to new nuclear technologies is taking place in various international fora, notably IAEA (NHSI), OECD/NEA and WENRA and ENSREG. There are also alliances among regulators grouped around particular facility concepts (e.g. French Nuward). Finland (STUK) and Sweden (SSM) have also started bilateral cooperation on new nuclear technologies (SMR). As there is no designated Nordic forum or working group(s) enabling exchange of experiences on nuclear regulation or regulatory practices there might be room for this kind of forum.

Considering the current needs to enhance Nordic cooperation and meet the identified changes in the operating environment, the working group recommends to:

1. Establish a forum for knowledge sharing on nuclear regulation including public communications and stakeholder engagement on new build.
2. Explore possibilities to develop joint Nordic training programs (and consider the possible future role of NKS in this context).

4.2. Radiation Protection Regulatory Activities

As indicated above, Nordic cooperation in radiation protection regulatory activities is longstanding and extensive, through the activities of several working groups. The changes in the current operating environment, resulting from new nuclear developments and the enhanced threats to nuclear safety and security, are not expected to have a directly effect on these radiation protection regulatory activities. Continued cooperation in these areas is necessary to establish and maintain regulatory competences through training, continuous professional development, and following Nordic regulators' best practices.

The strategy working group has not reviewed the scope of work of the existing working groups in detail and proposes that the working groups undertake a strategic review of their future priorities, considering future development in their respective areas and interactions with other groups and activities. This may involve identifying research needs and determining whether there is a need for further cooperation in other areas.

For example, use of artificial intelligence (AI) has also made its way into healthcare and is rapidly evolving. It is required that the radiation protection regulation is kept updated, considering that AI may have a huge impact on working processes and responsibilities in the hospitals. Good cooperation and sharing knowledge between the Nordic countries in this new area is of great importance. Nuclear medicine area is changing, with new producers and nuclides frequently coming into the market. The changing environment in this field, make it necessary to develop the competence in parallel with the development in the field. Among the Nordic countries, we could benefit from each other's experiences and competences, and in close collaboration address important issues. Also considering the changing security environment, attention should also be drawn to the production, transportation, import/export and storage of sources for medical use. The hospitals in the Nordic countries are in general publicly accessible and open environments, which could compromise the security measures needed.

One future trend to be highlighted, which is also ongoing activity in some Nordic countries, is nuclear decommissioning. Safe decommissioning overlaps with important aspects of radiation protection, practical aspects of dismantling and radioactive waste management.

Some installations or facilities require handling and regulation of both radioactive materials and nuclear-related items or materials.

In addition, regulatory aspects of visits of nuclear powered vessels to Nordic countries also require consideration from the radiation protection point of view.

Considering the current needs to enhance Nordic cooperation and meet the identified changes in the environment, the working group recommends to:

3. Consider scope of working groups related to likely future developments including research needs (e.g. AI) in the respective areas.
4. Consider the need for a forum for exchange of information on radioactive waste management and decommissioning from all activities and facilities.

4.3. Emergency Preparedness, Prevention and Response

As indicated above, rapid changes in the geopolitical situation and the effects on the security operating environment have emphasized the need to further develop emergency response capabilities to respond to events having transboundary consequences. It is possible to identify a range of situations that need to be considered, for example: accident-based emergencies on nuclear power plants and other facilities, including nuclear powered vessels; malicious acts such as security breaches of nuclear facilities; intentional use of radiological or nuclear material for terrorist purposes; and illicit trafficking of nuclear or radioactive material. There is also a need to extend the focus of emergency preparedness to other measures, like detection and early warning concerning nuclear and radiological threats. Regional exercises have, among other things, proved that there is room for improvement concerning cross-border preparedness and response, including exchange of information, material assistance and provision of experts.

Considering the anticipated effects of geopolitical tensions, particularly the lack of transparency in information exchanges with Russia and Belarus, and continuing hostile attitudes, it is important to develop further a joint situational awareness among the Nordic countries. This requires actions on two levels. For strategic decision making, a mechanism for regular exchanges of information is required regarding anticipated future developments. This would require establishing modalities for the exchange of sensitive information. The improvement of response to incidents and emergencies would necessitate development of effective real-time cross-border information exchange and communication channels.

The Nordic working group for emergency preparedness (NEP) has developed guidelines for protective measures and working group for public communicators (NPC) deals with, among other things, crisis communications. In the Arctic area, the EPPR working group under the

Arctic Council has been the forum for development of adequate response for radiological emergencies (expert group RAD EG). In the field of nuclear security, the Global Initiative for Combatting Nuclear Terrorism (GICNT) has also involved Nordic countries. For the provision of mutual assistance, the NEP -group has also developed guidelines, better known as NORMAN.

The existing working groups involve key Nordic experts and it is necessary to continue work of these groups or on these forums. However, there is also a need to revise the mandate of the two existing Nordic working groups (dealing with emergency preparedness and response and public communications), and possibly extend membership of the groups, to be able to respond to the new challenges. It will also be necessary to enhance cooperation between the groups. In modifying the scope of these groups, it will also be important to match Nordic mutual assistance with other mechanisms of international assistance such as European Union Civil Protection Mechanism (EUCPM) and IAEA´s Response and Assistance Network (RANET).

Considering the current needs to enhance Nordic cooperation and meet the identified changes in the environment, the working group recommends to:

5. Extend the cooperation on emergency preparedness to include all nuclear and radiological risks and threats.
6. Develop and improve necessary channels for the exchange of information including real time situational awareness and strategic overview on nuclear and radiological threats.
7. Establish a plan how to develop mutual assistance and response including prevention on regional level.
8. Strengthen the cooperation between NEP and NPC.

4.4. International development and assistance

The war in Ukraine has been characterized by targeting and weaponization of nuclear facilities, including the illegal seizure of a nuclear power plant, accompanied by numerous radiation sources falling outside regulatory control. Stabilization of the country is not only a prioritized interest of Nordic countries but of the whole western community. The European Union has made significant allocations of funding to the support of Ukraine, in the form of technical assistance. The IAEA has also been active, providing technical assistance, expert and diplomatic support and political intermediation. Besides European countries, USA and Canada have jointly provided civilian assistance to Ukraine to improve nuclear safety and security.

Currently DSA, SSM and STUK have projects with the Ukrainian authority SNRIU and its technical support organization SSTC NRS. The regulatory cooperations, sometimes bilateral and sometimes multilateral, plays a crucial role in supporting SNRIU, offering significant assistance, based on relationships developed over many years of joint work. DEMA is also participating, but so far on smaller scale, as a co-financer of one the projects. DSA and SSM also have projects with other authorities and institutions in Ukraine, including the operator of NPPs, Energoatom.

Nordic countries have been active in establishing and running the Ukraine Information Sharing Initiative (ISI) which is a multilateral working group of likeminded countries established in 2016 focused on coordination of nuclear safety and security programs within Ukraine. The scope of the group was recently expanded to include CBRN issues. Nordic countries have also coordinated their support to Ukraine by establishing an ad-hoc group "Nordic Follow-up of Ukraine group", to coordinate assistance for Ukraine. This working group has proved to provide added value. However, the group has no formal status or mandate at present.

As long as hostilities continue, there is a constant need to be ready to provide emergency assistance for relevant actors. Once hostilities cease, the needs of Ukraine will remain high both in the peace process and in rebuilding of the country's nuclear and radiation safety structures and arrangements. There is also a considerable legacy from the Soviet period, in addition to recent war damage.

To provide relevant assistance for Ukraine, it is also important to identify possible national priorities and discuss joint activities and projects and potential division of labour between the Nordic countries.

Some of the Nordic countries also have development activities in countries other than Ukraine. While there is a forum for Ukraine, there is no corresponding forum or mechanism for other assistance. There is also a need to review and coordinate this and discuss potential development programs jointly, particularly in the neighboring countries to Ukraine, Black Sea area and Central Asia.

Considering the current needs to enhance Nordic cooperation and meet the needs concerning Ukraine, the working group recommends to:

9. Strengthen the Nordic cooperation in supporting Ukraine.
10. Strengthen information sharing and potentially coordination of assistance and development projects to Black Sea area and Central Asia.

5. Additional considerations

In addition to previous needs and recommendations, the working group also discussed the needs to improve Nordic cooperation in general. For this purpose, following considerations were identified:

There are currently several global or European committees and working groups acting under different forums dealing either with nuclear safety or radiation safety or both. Some of these are formal intergovernmental organizations, such as IAEA or OECD, but there are also professional associations and associations established by the authorities, as well networks, such as HERCA, ENSREG or WENRA. All these committees and working groups have a relevance, and they serve certain purpose, but their relation to Nordic cooperation warrants clarification.

Together, Nordic countries can have significant impact on other international fora. It is therefore worth considering coordination to influence and share information on different activities and initiatives. Thus, in some cases, it would be beneficial if there could be a common Nordic voice in international fora.

Nordic cooperation is mainly funded by the authorities' regular budgets. In addition, part of this funding is channeled through NKS[1], which also benefits from some financing from industry and other organisations. On project level, there are numerous other financers, including the European Union. In order to support Nordic cooperation in general, and the above mentioned actions and recommendation relevant to the indentified work areas, it is recommended to undertake a review of existing funding sources and mechanisms, notably under the Nordic Council. Other European funding mechanisms and NATO financing may also be considered further.

There are existing and well-established Nordic cooperation forums such as Nordic Council and Nordic Council of Ministers. The recent NATO membership of Finland and Sweden also has the potential to further integrate the region and enlarge security cooperation and regional cooperation. The European Union has also established policies supporting cross-border cooperation on regional level. Although Iceland and Norway are not part of the Union, they are part of the European Civil Protection Mechanism. Other sectors have established Nordic networks with potential synergies and connections to nuclear and radiation safety. To enhance political support, and identification of different synergies, it would be helpful to raise visibility of the Nordic cooperation of nuclear and radiation safety authorities, in addition to strengthening cross-sectorial networks and cooperation.

1 NKS is a platform for Nordic cooperation and competence in nuclear safety including radiation protection and emergency preparedness. www.nks.org.

To enhance Nordic cooperation on strategic level, the working group recommends also to:

11. Strengthen the role of Nordic forums towards other multilateral cooperation and enhance Nordic influence and visibility in international cooperation fora related to nuclear and radiation safety.
12. Review existing and future funding sources or mechanisms for cooperation.
13. Raise visibility of the Nordic cooperation to political level and to general public.

Annex

Entities, current state, drivers, evaluation background and recommendations

Topics/Mans	Current Status	Drivers	Knowledge Sharing	Competence Building	Recommendations
Nuclear Regulatory Activities	No existing Nordic forums Bilateral forum between STUK and SSM exists	New technologies, SMR's Ageing research reactors Nuclear Powered Vessels	Regulatory control and licensing for testing of new nuclear technologies. More frequent traffic of NPV in Nordic territorial waters.	Support for availability of necessary competences.	**1. Establish a forum for knowledge sharing on nuclear regulation including public communications and stakeholder engagement on new build.** **2.** Explore possibilities to develop joint Nordic training programs (and consider the possible future role of NKS in this context).
Radiation Protection and Regulatory Activities	Several Nordic working groups and common workshops (HERCA, Nordic BSS)	Decommissioning of nuclear installations Radioactive waste management	Sharing Nordic knowledge of radiation protection in decommissioning, and radioactive waste management.	Support for availability of necessary competences.	**3.** Consider scope of working groups related to likely future developments including research needs (e.g. AI) in the respective areas. **4.** Consider the need for a forum for exchange of information on radioactive waste management and decommissioning from all activities and facilities.

Topics/Mans	Current Status	Drivers	Knowledge Sharing	Competence Building	Recommendations
EPPR	NKS, NEP, Norman (handbook on Nordic assistance). Nordic guidelines for protection actions (2024). Arctic Council (EPPR)	New technologies and programs. Nuclear powered vessels. Changes in the international security situation.	Situational awareness. Shared understanding of threats and consequences of incidents. Nuclear powered vessels, MORC, nuclear weapons.	Common exercises, crises management training and research (NKS).	**5.** Extend the cooperation on emergency preparedness to include all nuclear and radiological risks and threats. **6. Develop and improve necessary channels for the exchange of information including real time situational awareness and strategic overview on nuclear and radiological threats.** **7. Establish a plan how to develop mutual assistance and response including prevention on regional level.** **8.** Strengthen the cooperation between NEP and NPC.
International Development and Assistance	Support for Ukraine, Nordic follow-up Groups, ISS	Changes in the international security situation. Urgent need for assistance to Ukraine.	Development and future needs in Ukraine and possible other regions with conflict.	Use experience from new and ongoing projects.	**9.** Strengthen the Nordic cooperation in supporting Ukraine. **10.** Strengthen information sharing and potentially coordination of assistance and development projects to Black Sea area and Central Asia.

Topics/Mans	Current Status	Drivers	Knowledge Sharing	Competence Building	Recommendations
Development of the Nordic cooperation	Annual meeting of the Chiefs, Chefsmöte. Various working groups.	Changes in the environment. Need to enhance strategic governance of the cooperation.			**11.** Strengthen the role of Nordic forums towards other multilateral cooperation and enhance Nordic influence and visibility in international cooperation fora related to nuclear and radiation safety. **12.** Review existing and future funding sources or mechanisms for cooperation. **13.** Raise visibility of the Nordic cooperation to political level and to general public.

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Nordic Nuclear and Radiation Safety Authorities DEMA, DSA, GR, SIS, SSM, STUK

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DSA Norwegian Radiation and Nuclear Safety Authority

DANISH HEALTH AUTHORITY Radiation Protection

Strål säkerhets myndigheten Swedish Radiation Safety Authority

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