

Advisory Committee on Nuclear and Radiation Safety Minutes of Meeting

Monday 18 September 2023, via Teams

1. Welcome

Per Strand, DSA Director General, welcomed participants and introduced the Committee Chairperson, Carl-Magnus Larsson. The Chairperson explained that the purpose of the meeting was an to introduce both the work of the Committee and the current situation in Norway to all participants.

2. Introductions

The members of the Committee introduced themselves and the areas of their expertise and experience.

3. Terms of Reference, conflicts of interest, practicalities

The Chairperson presented key features of the Terms of Reference and noted that the main current topics considered by the Committee were: nuclear safety and licensing, waste strategy and implementation and enhancing technical support capabilities. Other topics will be discussed in due course, as determined by the Director of DSA and/or the Chair or other members of the Committee. Members were requested to identify any conflicts of interest that may arise and to recuse, as necessary.

It was noted that this is not a statutory committee. The Committee's purpose is to provide external advice to DSA's top management in an open, and largely informal manner. DSA remains responsible for regulatory decision-making and the Committee's advice is not binding, Committee members will not be held liable for advice provided and Chatham House rules will be followed; minutes will reflect collective discussions and views and advice will not be attributed to individuals. The extent of and mechanism for making advice and minutes publicly available will be discussed and agreed in due course.

4. Introduction and recent developments

DSA provided an overview of the Norwegian nuclear programme, regulatory structure and relevant organizations, including DSA, the Institute for Energy Technology (IFE) and Norwegian Nuclear Decommissioning (NND). Key recent developments were identified including: the Government White Paper on decommissioning (2021); the IRRS mission in 2019; preparation of a draft waste strategy and implementation plans. Current and future challenges were identified, including maintaining and strengthening the independence of the regulatory body; enhancing competence related to decommissioning and waste management; and development of regulatory procedures and guidance for transition situations.

In discussion, it was noted that there had been recent proposals to amalgamate DSA within the Public Health Institute but that these had been reversed. DSA receives budgetary funding from the Ministries of Health and Care Services, Climate and Environment and of Foreign Affairs. Additional funding is received from fees paid for regulatory services.

5. Licensing issues

DSA outlined key safety issues related to the Norwegian nuclear sites, and challenges associated with transferring the facilities from the present operator (IFE) to the future operator (NND). Maintaining competence, design and operational knowledge of ageing facilities, through a change in licensee, is a significant challenge. Some facilities, notably spent fuel storage facilities, need upgrading and safety assessments for existing and potential new facilities need to be developed further. There are restrictions on fuel movements, pending further assessment. Disposals at Himdalen have stopped, also pending further assessment. There is therefore additional pressure on existing storage arrangements.

It was noted, in discussion, that the recent relicensing process included specific improvement conditions, notably on criticality assessments and periodic safety reviews. DSA's enforcement powers have been strengthened, following IRRS recommendations. Some fuel remains within the Halden reactor, with the need for enhanced safety requirements, e.g., 24 h staffing. IFE and NND have made progress in building necessary competence, but some challenges remain.

6. Radioactive Waste Management

DSA provided an overview of the origin of the radioactive waste in Norway (industry, medicine, NORM++) and proposals for a strategy to manage radioactive waste. Instructions regarding spent fuel storage, criticality and inventory assessments have been sent to IFE. A stepwise transition period of responsibilities for radioactive waste management from IFE to NND is anticipated. Regulatory priorities include development of requirements for new storage and disposal facilities for radioactive waste. DSA has developed proposals that demonstrate the long-term planning process and identified decision-points.

In response to questions, it was confirmed that nuclear sites are inspected and guidance meetings between DSA and both IFE and NND are held regularly. The earlier than planned shutdown of the reactors resulted in decommissioning plans not being as advanced as might be expected at that stage. The operator is working on improving the spent fuel inventory, by reviewing archived information and the history of the fuel, but it is a complex process and progress has been slow. There is evidence of an improved understanding of the challenges on all sides and actions have been taken to reduce risks. Work on the national strategy has helped to demonstrate the need to consider and evaluate a full range of management options and the role of the various stakeholders in this process.

7. Technical Support Organization (TSO)/Function

DSA introduced the ongoing work on investigating possible options for establishing a TSO function in Norway. Some of the challenges Norway is facing were identified, related not only to decommissioning and waste management, but also to emergency preparedness, international nuclear and radiation safety during war situations and new methods in medicine. The key challenges for the provision of technical and scientific support to DSA have been analyzed by, among other things, an IAEA workshop using the TOSCA approach¹. Several options for provision of the TSO function in the future are being identified.

The role of DSA in this process and the different arrangements in place in other countries were discussed. A range of options are possible, and the result will need to be commensurate with the scale of support needed.

8. Summary and plans for next meeting

The next meeting is planned for 17 – 19 October 2023. On the first day, NND will introduce themselves and their perspectives and the DSA project to review the license application will be introduced. More information regarding the radioactive waste strategy and its implementation will also be provided. A site visit to Kjeller and a meeting with IFE will take place on the second day. The third day will include a follow-up to the visit and further discussion on the TSO aspects.

It is likely that the next physical meeting will be in the second quarter of 2024, perhaps in June. One or more digital meetings may be held in the interim.

¹ TSO Self-Capability Assessment
<https://www.iaea.org/sites/default/files/20/10/tsof.pdf>

Present:

Committee Members:

Name	Organization
Carl-Magnus Larsson	Chair, DSA
Jussi Heinonen	STUK, Finland
Karin Liljequist	SSM, Sweden
Allison Macfarlane	University of British Columbia, Canada
Øystein Nordgulen	Norwegian Geological Survey, Norway
David Senior	Consultant, UK
David Winfield	Consultant, Canada
Simon Wisbey	Consultant, UK

DSA Staff

Name	Office/Department
Per Strand	Director General
Kristin Elise Frogg	Director of the Department of Radiation and Environmental Safety
Tone Bergan	Director of the Department of Nuclear Safety and Control of Sources
Ingeborg Mork-Knutsen	Head of Section for Pollution Control and Decommissioning
Edward Bray	Head of Section for Nuclear Safety
Giedrius Paskevicius	Section for Nuclear Safety
Anne Marie Frøvig	Section for Research and Development

Secretariat

Carol Robinson	Office of the Director General
Hege Sofie Haugan	Department of Nuclear Safety and Control of Sources
Ole Stian Bockelie	Department of Radiation and Environmental Safety
Yngvild Sauge	Department of Radiation and Environmental Safety