

## Minutes of the board meeting in Copenhagen 4 June 2019

Present: Sigurður M. Magnússon (Chair, IRSA), Anneli Hällgren (SSM), Carsten Israelson (DEMA), Ole Harbitz (DSA), Pia Vesterbacka (STUK), Jens-Peter Lynov (DTU), Mette Øhlenschläger (SIS), Mikael Meister (Vattenfall), Nici Bergroth (Fortum), Ole Reistad (IFE), Petri Kinnunen (VTT), Christian Linde (SSM), Kasper Andersson (DTU), Ari Leppänen (STUK), Palle Sundstrøm (auditor, Dansk Revision, present until meeting item 7) and Finn Physant (meeting secretary, FRIT).

Apologies: Annelie Bergman (SSM), Astrid Liland (DSA)

### 1 Opening

The Chair opened the meeting and welcomed the participants. Thanks were given to the host Carsten Israelson and DEMA. Special welcomes were given to Ari Leppänen, who will start as programme manager for the R-part after Christian Linde in 2020. The Chair also expressed special welcomes to the auditor Palle Sundstrøm. Regrets had been received from Annelie Bergman and Astrid Liland.

### 2 Practical remarks

Practical remarks about the meeting were given by the Chair and the host. Finn Physant was appointed meeting secretary.

### 3 Approval of the agenda

The agenda was approved with one addition. A request from KTH for changes of NKS standard contracts will be handled under meeting item 14 "Other issues".

### 4 Minutes of the last board meeting (Stockholm 17 January 2019)

The minutes were approved. The actions A and B noted in the appendix of the minutes of the January board meeting have been noted in parenthesis in these minutes.

## 5 Accounts 2018

The auditor Palle Sundstrøm presented the distributed material: the Financial Statements 2018 and the Long-form audit report both dated 4 June 2019. The distributed material and Palle Sundstrøm's presentation did not contain any qualifications, special remarks etc. One new section had been included in the Long-form audit report – namely section 1.3 “EU General Data Protection Regulation” addressing NKS compliance with the regulation. The board took note of the auditor's presentation and recommended the 2018 accounts to be approved by the owners.

## 6 Financial status for the current year

Finn Physant presented the Financial status report dated 16 May 2019. The reserve at present is estimated to approximately DKK 680,000 / EUR 91,000 – in accordance with this year's budget decision of 17 January 2019.

The board took note of the financial situation.

## 7 News since last board meeting

### a) Report from the owners' group

The Chair reported that the owners had a good meeting yesterday discussing the draft policy paper and the discussion paper “summary of views on NKS after 2020”. A few editorial changes were made to the policy paper and the owners feel that it can be approved as a living document to be reviewed and revised regularly i.e. every year. As for the discussion paper the owners feel that, given the strong support for a board and an advisory group, the changes can be approved at the January 2020 meeting. The chair and Anneli Hällgren will develop the discussion paper further and work on a procedure document. More on this under agenda item 8. The owners had approved Ari Leppänen as PC-R from 1.1.2020. The owners approved that the chair had provided a grant of 5,000 EUR to the Bo Lindell translation project since the last board meeting. The owners also discussed the request from KTH for a change in the wording of a contract to be signed with NKS. More under agenda item 14.

### b) News from board members' organisations

The members informed each other about relevant news.

### c) Administrative news

Finn Physant presented the 2019 version of the pamphlet, which was published in December 2018 before the R and B seminar in January 2019. The status of this document as policy document will end with the approval of the new policy document under meeting item 8 “NKS after 2020”. The same change of status effects the 2019 version of “This is NKS”, which was presented at this year's January meeting. The printed version of the pamphlet will still be used for instance for distribution at the NSFS conference in Helsinki 10-14 June 2019. It was noted that the 2018 version of the “Handbook for NKS applicants and activity leaders” is still valid and fully updated. The handbook will be updated if needed.

Finn Physant also presented a new bank agreement, which was signed by the boardmembers (Action A).

The board took note of the administrative news.

## 8 NKS after 2020

### a) The policy paper

The Chair informed of the editorial changes to the draft policy paper that the owners had agreed on. After a short discussion the policy paper was approved as a living document to be reviewed and revised regularly i.e. every year. Approved policy paper in Appendix A.

b) The discussion paper.

The Chair introduced the paper and changes to the draft document that the owners had agreed on at their meeting yesterday i.e. an upper number of representatives from co-financiers from one country in the Advisory Group. The discussion focused on the change for a board consisting of the owners and an advisory group composed of representatives of the owners and co-financiers. While there was strong support for the change different views were expressed concerning the composition of the advisory group.

There was a decision to ask for the views of the board, in particular the representatives of the co-financiers on composition and role of the Advisory Group as well as working methods including need for and issues to be addressed at meetings in particular related to the evaluation process. Views to be submitted to the Chair before 15 September 2019.

The discussion paper will be developed further with a new draft submitted to the board for comments before end of October. Comments due before end of November.

The aim is to approve changes at the 2020 January meeting.

Revised discussion paper in Appendix B.

(Action B).

## 9 Research activities in 2020

The Chair and Kasper Andersson informed the board about this year's call for proposals (CfP). There will be a CfP for both the B- and R-part opening on 2 September with deadline 15 October. The deadline for submission of evaluations from board members will be before 15 November and the next coordination meeting will take place end of November.

The Chair proposed the budget for 2020 for each programme's activities to be set to DKK 3,000,000. The board agreed to this.

The Chair will ask the owners and co-financiers for a possible raise of funding in 2020 compared to their funding in 2019. The owners indicated that the contributions in 2020 will be at the same level as in 2019.

Nici Bergroth asked for an overview of the development in funding from both owners and co-financiers over the last 10 years. The secretariat will provide such an overview for the next board meeting.

## 10 R-part:status

Christian Linde made a presentation of the status of the ongoing R-part activities. Overall the work in NKS-R is progressing according to plan.

Status for the activities from CfP 2019: Contracts signed for all 6 activities (one contract from KTH for THEOS not signed yet). No major delays reported. Fortum and TVO support agreements submitted 25 April.

Status for the activities from CfP 2018: 4 out of 6 activities completed and reports published on website, 1 draft report received (FIREBAN) and 1 activity to be completed (SPARC).

Status for the activities from CfP 2017: 2 draft reports received (FIREBAN and WRANC).

Planned PROSAFE seminar: Interim workshop in December 2019.

The NKS-R article has been published in the June issue of Nuclear Engineering and

Technology (Volume 51, Issue 3, pp. 647-653, <https://doi.org/10.1016/j.net.2018.11.013>).

The board took note of the R-part status.

## 11 B-part: status

Kasper Andersson presented the status of the NKS-B activities. Overall, the work in NKS-B is progressing well.

Since the last NKS-B status report: 6 final reports published on the website and 1 received but on request not yet published.

Delayed activities (from before 2018): None.

Activities commencing in 2018: 7 (of 8) completed and 1 nearing completion (NORCO II).

Activities commencing in 2019: All 8 contracts signed, work on schedule.

A presentation has been prepared for next week's NSFS conference.

The board took note of the B-part status.

## 12 NKS R and B seminar

On behalf of the coordination group Finn Physant presented the results and conclusions of the survey carried out after the January 2019 seminar including comparisons with the results and conclusions of the surveys carried out after the 2013 and 2016 seminars.

The responses and results of the surveys were reported to the board concerning: overall rate, seminar attendance, relevance, usefulness, quality of presentations, seminar organization, scheduling, timing, facility/venue, handouts of books of abstracts and pamphlets, networking possibilities/opportunities and poster session. Finally one outstanding response - out of the many very positive responses - was the average rating of 4,3 (of 5) on "How likely are you to attend future NKS seminars?" An overall conclusion from the coordination group therefore was to start working for a 2022 seminar.

There was an extensive support from the board to start the planning of a 2022 seminar with the same venue as in 2019.

The board discussed some of the feedbacks from the 2019 seminar and possible themes for the 2022 seminar.

The delicate balance between the seminar blocks of presentations and time for questions and answers were discussed and must be addressed and handled again for the next seminar.

Carsten Israelson stressed that the presence of invited speakers is important.

Ari Leppänen suggested that short poster presentations could be made in relevant parts of the seminar.

There was a discussion concerning themes for the upcoming seminar at a broad level.

## 13 Information activities

Finn Physant informed the board about the website, newsletters etc. – Website visitor statistics were presented concluding that the level of use of the website has been quite normal this year with relatively many visitors in January in connection with the R and B seminar.

Seen over a period from 2012 to 2019 there is a clear tendency that the website has relatively many visitors every year in September and October in connection with the CfP and in January in seminar years (2013, 16 and 19).

With a lot of possible statistics presentations available Finn Physant asked for new ideas concerning these presentations.

Anneli Hällgren suggested that the statistics presentations maybe didn't need to be made on all board meetings.

Mikael Meister asked for statistics on downloads of NKS-reports.

The secretariat will include such statistics for the next board meeting.

Since the last board meeting one NewsFlash has been distributed. On January 24:

Presentations from the R and B seminar were made available at [www.nks.org](http://www.nks.org) and a summary report was presented from the board meeting in Stockholm, January 17, 2019. On

May 28: A NewsLetter was distributed a week before this board meeting with presentation of many new publications.

There is a list of more than 540 e-mail addresses, to which NKS electronic letters are distributed.

Furthermore material had been produced for distribution at the NSFS 2019 conference, and it was noted that NKS has 53 followers on LinkedIn.

14            **Other issues**

The Chair informed about a request from KTH for two major changes in a contract to be signed concerning the THEOS project. One concerns the introduction of a comprehensive liability clause and the other when the 2nd and final payment of the contract is due. After a long discussion it was decided to ask for advice from the legal department of SSM concerning the liability clause and that the PC-R and Anneli Hällgren, representing the owners, would open a dialogue with KTH with the aim of clarifying the request and come to an agreement on text that both parties can accept. The NKS Chair is to be informed of development and involved in the process as needed.

Ari Leppänen – as upcoming R-part programme manager - made a short presentation of himself to the board.

15            **Next meeting**

Next meeting will be in Helsinki 14 January 2019 (dinner) and 15 January (meeting) with the Finnish owner as host.

16            **End of meeting**

Many thanks for a good meeting – in particular to the host DEMA – were expressed by the Chair.

Sigurður M. Magnússon  
Chair

Finn Physant  
Meeting secretary

Appendix A: "Policy for Nordic Nuclear Safety Research (NKS). Approved 04062019".

Appendix B: "Reflections on the structure and organizations of NKS after 2020 – Discussion paper based on views expressed by the NKS board. Anneli Hällgren, SSM, Sigurdur M Magnusson, IRSA". Revised 07062019.

Appendix C: Actions from the board meeting.

## **Appendix A**

### **Policy for Nordic Nuclear Safety Research (NKS).**

**Approved 04062019.**

#### **This is NKS**

NKS is 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. This is achieved by joint activities of interest to the financing organisations and other end users resulting in scientific articles and technical reports. The results are used by the participating organisations in their competence building, decision making processes and information activities. All NKS results are available free of charge not only for the NKS family but also internationally providing an international benefit of NKS work.

Within NKS, valuable networks are built: between younger and more senior researchers; between industry, universities and authorities; between neighbouring countries. Important links are also created between those who need to cooperate in case of a nuclear accident within the NKS countries or elsewhere in the world. As NKS makes people connect, problems are tackled quicker, more efficiently, more consistently, and at a lower cost than if acting alone – with benefits for both humans and the environment.

NKS is committed to good public governance, including transparency, efficiency, and sound financial planning. Decisions concerning strategic aspects of NKS economy are made by the owners, while a board consisting of owners and co-financiers make decisions on e.g. projects eligible for funding.

#### **The purpose of NKS**

The purpose of NKS is to facilitate a common Nordic view on nuclear and radiation safety and at the same time creating networks that are easily activated, e.g. in the case of a nuclear accident. The co-operation builds on the foundation of a common cultural and historical heritage and a long tradition of collaboration between the five Nordic countries: Denmark (also the Faroe Islands and Greenland), Finland, Iceland, Norway and Sweden.

#### **The challenges addressed by NKS**

The Nordic countries face common challenges in relation to Nordic nuclear installations as well as those in neighbouring countries. While nuclear power plants are in operation in Finland and Sweden, research reactors are in operation or have been operated in Denmark, Finland, Norway and Sweden. In Finland new reactors are being built, whereas for Sweden, Denmark and Norway decommissioning of research reactors and of the oldest nuclear power plants is on the agenda.

By exchanging experiences, a common understanding of rules, practices and measures, and how they might differ between the neighbouring countries, can be achieved. By building competence together, each country benefits and has the opportunity of financing both more and bigger research projects since co-operation creates synergy and new approaches.

Nuclear accidents have highlighted the need for effective emergency preparedness. By continuously improving detection, response and decision aiding tools while maintaining an informal collaborative network between relevant stakeholders in the Nordic countries, the capacity and capability to

respond optimally to an emergency is enhanced. Experience has shown that nuclear challenges to society are far from static, and the response systems require continuous development.

### **The activities of NKS**

NKS activities are divided into two program areas:

**NKS-R:** The NKS-R program is focusing on the area of reactor safety throughout the lifecycle of a nuclear installation. The program covers the topics thermal hydraulics, severe accidents, reactor physics, risk analysis and probabilistic methods, organisational issues and safety culture, and plant life management and extension. Decommissioning of nuclear power plants and other nuclear installations/facilities and management of nuclear waste and spent fuel is also included in the NKS-R program, whereas measurements related to these topics are covered by the NKS-B program. Activities within NKS-R typically involve experimental and computational studies of phenomena related to reactor safety, model development for risk and uncertainty assessments, analysis of human and organisational factors, or development of new methods for surveillance and enhancement of safety in daily and long-term reactor operation or within decommissioning and waste management.

**NKS-B:** The NKS-B program is focusing on nuclear and radiological emergency preparedness, radioecology and environmental assessments and measurement strategies, technologies and quality assurance. The key area of interest in the context of emergency preparedness is the impact on society (humans and the environment). Radioecology provides information on the fate, transport and effects of radionuclides and other influencing contaminants in the environment. Measurements are an integral part of both emergency management and radioecology, and also needed to secure compliance with standards and regulations concerning radioactive material, for example in decommissioning and reactor waste management. All such measurement issues are included in the NKS-B program as are measurement projects related to recovery of sources.

### **Owners and Financiers of NKS**

The owners and main financiers are:

[Danish Emergency Management Agency](#) (DEMA, Denmark)

[The Ministry of Economic Affairs and Employment](#) (TEM, Finland)

[Icelandic Radiation Safety Authority](#) (GR, Iceland)

[Norwegian Radiation and Nuclear Safety Authority](#) (DSA, Norway)

[Swedish Radiation Safety Authority](#) (SSM, Sweden)

The co-financiers are:

[Fennovoima Oy](#) (Finland)

[Fortum Power and Heat Ltd.](#) (Finland)

[TVO](#) (Finland)

[Institute for Energy Technology](#) (IFE, Norway)

[Forsmark Kraftgrupp AB](#) (Sweden)

[OKG AB](#) (Sweden)

[Ringhals AB](#) (Sweden)

[SKB](#) (Sweden)

## Appendix B

Revised draft 07062019.

### Reflections on the structure and organizations of NKS after 2020.

**-Discussion paper based on views expressed by the NKS board.**

**Anneli Hällgren, SSM**

**Sigurður M Magnússon, IRSA**

This discussion paper consists of an introduction, providing background on NKS policy discussions since June 2017, summary of views expressed by NKS board members and their views in full.

#### **Introduction.**

The policy discussion on the future structure and direction of NKS (NKS after 2020) began at the **NKS owners and board meetings on 7 and 8 June 2017.**

In February 2017 Eva Simic had distributed the SSM report "Evaluation of the Swedish participation in the Nordic Nuclear Safety Research (NKS) collaboration" by Oxford Research to the board members.

At the NKS board meeting on 8 June 2017 Hjalmar Eriksson from Oxford Research gave comprehensive presentation on the evaluation of the added value for Sweden from participating in NKS.

**The report by Oxford, the presentation by Hjalmar and the discussion that followed was the starting point for the discussion on the future structure and direction of NKS in the NKS board.**

At the meeting there was also a decision to establish a working group to review and revise the role of the PC's with a deadline for report before the January 2018 board meeting. Nici Bergroth was the chair the working group.

For more information see:

[http://www.nks.org/download/styrelsesmoeder/Board\\_meeting\\_170608/nks-17-05-minutes\\_board\\_meeting\\_20170703\\_final.pdf](http://www.nks.org/download/styrelsesmoeder/Board_meeting_170608/nks-17-05-minutes_board_meeting_20170703_final.pdf)

At the **January 2018 meetings** there were comprehensive agreements at the owners meeting regarding the finances and chair of NKS for the next three years (end of 2020). These agreements provide stability in NKS for the next three years ensuring ample time for a thorough discussion and implementation of NKS future strategy and direction.

There was an extensive discussion on the report from the working group to review and revise the role of the PC's at the board meeting.

The owners and board members had been asked for their reflections on the future of NKS prior to the meeting. On basis of their reflections a discussion document "Proposals and suggestions from reflections over NKS future directions by owners and board members" dated 17 January 2018 had been developed. All proposals and suggestions concerning policy and content of the NKS program in the document were discussed and preliminary conclusions reached for all except three that required



more work. The outcome “Conclusions – NKS Board 18 January” was an appendix to the minutes of the meeting.

The remaining three were

**Length, number and funding of projects:**

**Conclusion:** Discussion reflected different views within the NKS Board. PC’s to develop a discussion paper based on the discussion in consultation with the Chair. Draft paper to be circulated to board for comments in good time before June meeting. Decision at June meeting.

**Prioritized areas:**

**Conclusions:** The discussion reflected different views in the Board and that “prioritized areas” are implicit in our evaluation i.e. relevance for end users and mean ranking as well in final ranking. PC’s, in consultation with the Chair, to develop a discussion paper taking into account the discussion at the board meeting. Draft paper to be circulated to board for comments in good time before June meeting.

**Division between NKS B and NKS R.**

**Conclusions:** The discussion confirmed the growing importance of decommissioning and management of radioactive waste. PC’s to develop this issue further before June board meeting.

For more information see:

[http://www.nks.org/download/styrelsesmoeder/Board\\_meeting\\_180118/nks-18-01-minutes\\_board\\_meeting\\_20180307\\_rev2.pdf](http://www.nks.org/download/styrelsesmoeder/Board_meeting_180118/nks-18-01-minutes_board_meeting_20180307_rev2.pdf)

At the **June 2018** meeting the discussion continued. At the owners meeting 27 June there was a decision to develop a policy document “NKS after 2020”.

The discussion at the board meeting on 28 June focused on the preliminary conclusions of the discussions on NKS future direction at the January 2018 board meeting and the remaining three issues. There was a conclusion on all issues.

For more information see:

[http://www.nks.org/download/styrelsesmoeder/Board\\_meeting\\_180628/nks-18-04-minutes\\_board\\_meeting\\_20180814\\_final.pdf](http://www.nks.org/download/styrelsesmoeder/Board_meeting_180628/nks-18-04-minutes_board_meeting_20180814_final.pdf)

At the **January 2019** meeting the discussion focused on the draft policy paper that had been circulated prior to the meeting. On basis of the discussion the draft was revised and circulated to board members for comments. A final draft is expected to be approved at the 2019 June meeting.

There was a decision that the next steps in the discussion on “NKS after 2020” would be to ask owners and board members to give their views on the present structure and organization of NKS and NKS activities including proposals for improvement/change.

**This discussion paper is based on the views expressed by board members (p.3-5) and is an input to the discussions at the meeting of the NKS owners on 3 June 2019 and the NKS board on 4 June 2019. The full text of the views from NKS board members is in an appendix to this discussion paper, p. 6-12.**

In general there is broad support to continue the present structure and organization of NKS. The main proposals for change address the composition and role of the board as well as to establish an Advisory Group.

## **Summary of views expressed by board members.**

### **NKS Board.**

It is proposed that the owners of NKS, appoint one member each to the NKS board. The board appoints one board member as chair. The NKS board is responsible for the NKS business's framework including strategies, budget, finances incl. contracts with PC's and secretariat etc. The NKS board approves the research projects to be funded, based on the recommendation of the PC's after evaluation of applications by the NKS advisory group.

### **Advisory Group.**

There is a proposal to establish an Advisory Group. Each owner will have the opportunity to nominate up to two members of the Group, one for each program area. Each co-financier will have the opportunity to nominate one member of the Group for one program area. There can be at most two members of the Group from co-financiers in each country. If there are more than two co-financiers in a country they need to agree on a rotation scheme for membership as needed.

In order to achieve a better balance within the Advisory Group the owners can, by consensus, invite an organisation that does not provide funds to NKS to join the Group for a specified time.

The main role of the Advisory Groups is to evaluate proposals for research projects and advise the board on the research program. The chair of NKS is also the chair of the Advisory Group.

### **Coordination Group**

There is strong support for continuation of the coordination group, consisting of PCs, secretariat and chairman, for continued efficiency and progress in the work of NKS.

### **Secretariat**

There is strong support for the NKS Secretariat to continue, in an efficient way, to take care of the administrative issues, including financial issues and the website.

### **Program Coordinators**

The function of Program Coordinators (PCs) is considered to be important and that the function is still needed at an approximate half-time (of a full position) per program. Thus PCs are able to read through and quality assure the project results. The fact that the quality assurance takes place at PCs guarantees a consistent quality. Having the same PC for both NKS-R and NKS-B is not feasible given the broad and at the same time deep expertise that a person would then need to possess. It would also make NKS too vulnerable to changes in staffing.

### **Time limits:**

## **Time limit for Chair**

A time limit for the Chair is proposed. There is an expectation that a chair serves for a minimum of 3 years with a possible extension of another 3 years. The role of Chair rotates between the Owners.

## **Time limit for PC's**

A time limit for PC's appointment is proposed. There is an expectation that a PC stays for a minimum of three years, and, to promote rotation and competence building, not more than 6 years. The role of PC's rotates between the countries on a regular basis. Change of PC's needs to be coordinated to ensure continuity in functioning of NKS.

## **Regular meetings:**

### **Flexibility and form of meetings:**

Flexibility is recommended so that meetings can be planned in an optimal way.

For all meetings there is a recommendation to consider if the meeting can be a video meeting rather than a face to face meeting.

## **The NKS board and Advisory Group.**

**The regular meeting schedule can be as follows:**

### **January**

In January there is a board meeting with participation of the Advisory Group, the secretariat and the PC's.

In the joint session the PC's present status of ongoing projects and their recommendations for funding based on evaluation of the proposed projects by the Advisory Group followed by a discussion. Other topics on the agenda for the joint session may include strategic issues, impact of and future needs of research, emerging technologies and competence building, possible changes in policy documents and the research program for next year, the evaluation process, as well as other issues the participants wish to raise.

Following the joint session the board meets, with the Secretariat and the PC's, to decide on funding of projects, the annual budget and address other financial issues as well as other issues the participants wish to raise.

The PCs distribute a status report of ongoing projects and a report with funding recommendations no later than two weeks before the board meeting.

The Secretariat distributes a budget proposal, status of the financial situation and draft contracts no later than two weeks before the board meeting.

Other documents to be addressed need to be distributed two weeks before the meeting.

### **June**

In June, the Board, the PCs and the Secretariat meet to review the annual report, monitor the economy and ongoing projects. Other issues on the agenda may include strategic issues, budget for

next year and any other issue raised by board members or issues raised by members of the Advisory Group prior to the meeting.

The PCs distribute to the board and Advisory Group a status report of ongoing projects no later than two weeks before the board meeting. Members of the Advisory Group are invited to send their comments regarding status of ongoing projects before the board meeting and to raise other issues within their remit.

The Secretariat distributes all financial documents to be addressed no later than two weeks before the board meeting.

### **The coordination group.**

The coordination group meets 4 – 6 weeks before a board meeting.

### **Other meetings.**

The NKS chair, in consultation with the NKS board, can call for other meetings as needed.

### **Other issues.**

#### **Rules of procedure:**

It is suggested that it could be good to develop a procedure document that clarifies the roles of the various actors, and describes the criteria for their participation – that is, how many participants from each country, from each utility, from each authority etc. The discussion paper may well be developed into such a document.

#### **Public governance.**

The importance of NKS living up to the standards for good public governance and transparency that apply to public sector in the Nordic countries, demonstrating that funds are spend correctly (i.e. on nuclear safety research) and efficiently (i.e. avoiding excessive costs) is raised as an issue for the NKS board to address since good public governance is included in recently agreed NKS policy

#### **NKS Workshop.**

There is a strong recommendation for continuation of the NKS workshops every third year.

#### **Call for proposals.**

The process for call for proposals is considered to function well and there is no need for changes.

#### **The evaluation process.**

It was commented that researchers (*SMM: no information on how many or how often*) have commented that the evaluation of the proposals appear to vary strongly between evaluators, even on relatively objective criteria like for instance the contributions from young scientists.

It is therefore suggested to review the evaluation process and possibly provide guidance to the evaluators on how the various criteria should be evaluated.”

## **Appendix: Views from NKS board members**

### **Anneli Hällgren SSM**

NKS owners have asked for their views on NKS organization - is there a need to change? The Swedish Radiation Safety Authority has gathered relevant employees for discussion. The most urgent point made is about the board's unclear role. Below are suggestions aimed at clarifying the roles and cooperation of the various actors.

#### **Roles**

##### **Board of Directors**

The owner group - one representative from each country's most influential authority - becomes the new board with responsibility for the business's framework including strategies, budget, finances etc, and which decision-making rights of course also includes the research projects.

##### **Evaluation panel**

Today's board becomes the evaluation panel regarding the research projects and proposes the upcoming research plan to the board. The owner representatives that belongs to the new board do not participate, but are replaced by other owner representatives. There are uncertainties about the number of participants, which actors should be represented and the number of evaluators per country. Here, a discussion and clarification are needed.

##### **Coordination Group**

The coordination group, consisting of PCs, secretariat and chairman, continues their coordinating work as today, for continued efficiency and progress in the business.

##### **Secretariat**

We appreciate that there is a secretariat to, in an efficient way, ensure the logistics around for example meetings and website. We have experience of other working groups where attempts have been made to cut down the administrative function, with the result that the logistics work poorly and meetings are inefficient.

##### **Program Coordinators**

We find the function of Program Coordinators (PCs) important and believe that the function is still needed at an approximate half-time per program. Thus PCs are able to read through and quality assure the project results. The fact that the quality assurance takes place at PCs guarantees a consistent quality. Having the same PC for both NKS-R and NKS-B is not feasible given the broad and at the same time deep expertise that a person would then need to possess. It would also make NKS too vulnerable to changes in staffing.

## **The year's meeting schedule**

### January

In January, the board, the coordination group and the evaluation panel meet. The PC:s present the proposal for financing research projects for the coming year, which is based on the input from the evaluation panel, and the board makes decisions. Other topics on the agenda may include strategic issues that need to be discussed and anchored, uncertainties regarding the evaluation process, etc. The PCs distribute a status report and a report with funding recommendations before the meeting.

### June

In June, the Board and the secretariat meets to review the annual report and monitor the economy. Other issues on the agenda might be strategy, budget, overall activities etc as well as a situation update regarding the projects from PCs.

### September

In September, the coordination group and maybe the evaluation panel meet before the autumn's calls. The PCs provide and update on ongoing activities. The board receives a written report from the PCs on the progress of the research projects so far.

### November

The coordination group meets to prepare for the January board meeting, which includes producing a summary of the input from the evaluation panel and having discussions on preliminary funding recommendations.

## **Other thoughts**

Thoughts that were also aired were the following:

### Rules of procedure

Regardless of how the work with the NKS organisation continues, it would be good to develop a procedure document that clarifies the roles of the various actors, and describes the criteria for their participation. Today it is not clear what is the responsibility for NKS for those board members that are not in the owners' group (and are thus not signing any papers). Also, it is not clear which decisions that are made by the board and which decisions are made by the owners' group. If we go for a new structure, we need to discuss for example, which actors are to be represented in the board or in the evaluation panel, and how many from each actor.

### Limitations in PC's ordinances

Should there be time limits for PC's appointment? One suggestion is to express more clearly the expectation that a PC should stay for three years, and also - to promote rotation and competence building - say that the position can be held for the longest time for five years. It would also be good to discuss how the PC role could be shifted between the countries on a regular basis. The four countries which do not fill the chairman role, could have a schedule how to shift the PC roles between them. For example, the PC-R could alternate between two of the countries and the PC-B between the other two. Or, there could be a "waiting list" for each of the roles. For consideration of the length of the PC role, we propose such discussions to be held in the owners' group, or at least not on the board as long as the PCs are part of the meeting.

## External quality assurance

Do we want to secure the quality by also inviting representatives from European, relevant universities to the evaluation panel?

## Secretariat

For consideration of the NKS secretary, we propose that discussions on reductions of the NKS secretariat be held in the owner group, or at least not on the board as long as the secretary is part of the meeting.

## **Petri Kinnunen VTT**

As a contribution to the request made by Sigurdur, I put here my views on the organization and activities:

- the basic organization of the programmes and projects is good. The PCs are good in their work and make good summaries about what is going on.
- now the future organization of the MB is more balanced when the Ministry in Finland gives their role to STUK. According to my understanding now each country has a representative from the authority, industry and research (right?)

➔ I do not see any big changes needed for the organization of the NKS activities.

Then about the activities:

- The seminar is needed every other year. It was also good this time.
- We spend quite a lot time in the MB discussing about the economics of NKS. In my opinion this discussion could be decreased, e.g. from the summer meeting.
- I would like that we discuss more about the impact of the research. As you know in Finland the NKS research is strongly linked to SAFIR and KYT programmes. But we should also get to know how much the NKS benefits from that work or how much the Finnish programmes benefit from the NKS connection. And the same in other countries with their own connections.
- Another topic, that I would like us to discuss, is the future needs for research. E.g. the Halden reactor situation in Norway has recently changed the Norwegian needs (I think). In Finland we talk a lot about SMRs, lot about OL3 (which seems to be starting soon eventually),... I know that this discussion may not be appealing to all Nordic countries because of the way the politics towards nuclear have been set, but if we want to discuss about future aspects for the NKS, I think we cannot reject these topics but to see what they may mean to the NKS.
- Thirdly, very many of us are connected to different European forums and platforms. Related to the previous point, understanding the activities in those other forums, even briefly, might be helpful for us to consider our own future in the NKS. So perhaps worth discussing?

These are my thoughts at the moment. In any case the ultimate goal for the NKS is to keep it active and up-to-date.

**Mikael Meisner - Vattenfall:**

Some general thoughts on organization and activities which also are in line with previous declared positions from the Swedish industry.

The aim of NKS to facilitate and improve Nordic networking in nuclear and radiation safety areas is in line with the expectations of the four supporting organisations (Ringhals, Forsmark, Orskarshamn and SKB) in Sweden. Additional benefits from participating in the NKS network is learning from specialists in certain areas, that are mainly to be found outside of Sweden. The Swedish industry do not have any major objections to how the executive part of NKS is organised today and are satisfied with the way the owners are handling the management, and is further fine with following the lead of SSM in these matters.

Further, regarding the organizational structure, having two programs (R&B) and a manager for each provides a critical mass of the executive part of NKS. The setup also has the advantage of redundancy, i.e. if one of the program managers suddenly would have to leave, the risk of being left with a non-functional organisation is smaller. We are supportive of keeping the distribution between the R- and the B-program as it is (50/50).

The present process of Call for proposals to decision to fund is sufficiently applicable as is. However, it might be appropriate to make comparisons/benchmarking with the [yearly]research plans of each national authority, in order to understand in what direction each nation is heading towards. I don't know whether this has been the case previous years, but one way of doing this is allowing each authority to make a short summary during the June meeting on present, needed and prioritized research areas taken from each national research plan respectively. The outcome of subsequent discussions during the same meeting could then, if possible, be reflected in the Call for proposals. I guess that such a benchmarking (i.e. having a direct link and coupling between national needs and NKS activities) would also be mutual beneficent for authorities and NKS.

The current model with one-year projects/contracts is fine. Single exceptions might possibly be justified if there is a clear reason to.

If manageable, the current arrangement with a joint NKS-R/B seminar every second year should be continued.

Finally to conclude, we do not see needs for major organizational changes of NKS, but looking forward to continued discussion

**Mette Øhlenschläger SIS:**

Brief comments on NKS after 2020 from The Danish Health Authority (DHA) – non-owner and non-funding organization (ikke-tillægsfinansierer)

- NKS is a well-established and important player in Nordic research in the nuclear area.
- In the opinion of the DHA, the basic organization: the secretariat and the PCs - is well functioning. The function of the PCs is important and they are doing a tremendous job.



- DHA supports a continuation of the present arrangement with a permanent secretariat, ensuring a harmonized and consistent handling of the tasks laid out by the Owners Group and the NKS Board.
- DHA recommends careful consideration of the present structure and representation within the two fora: the Owners Group and the NKS Board.
- DHA recommends restructuring the NKS into two fora: The Owners Group and a separate Advisory Board.
- DHA strongly advocates for a decision on the participation and role of non-owners as well as non-funders - like the DHA in the NKS-Board (or an established Advisory Board).
- In the opinion of the DHA, discussions and reports on NKS-economy should be limited to the Owners Group and discussions on research programs, future needs etc. would be the logical task of an Advisory Board.

**Pia Vesterbacka - STUK:**

Here are some general thoughts mainly on activities of NKS. Since I am new member I do not have experience on organization and its functioning so much yet.

I have found regularly arranged NKS seminars very useful and good way to keep compact co-operation between Nordic countries and share the common knowledge.

I was very happy that radiation safety was added in the policy paper. Now the area of NKS research covers more wide range of issues and I think is more useful for all Nordic countries. I am personally worried about deep know-how about the radiation protection. This is important area and its deep know-how is needed especially in case of emergency preparedness.

In the last meeting one of the college from Sweden raised up criteria's in evaluation process and comparison between various research projects. I think this is important issue to discuss and if NKS evaluation board has clear criteria's it would be good.

We also discuss about the themes. Would it be useful to emphasise themes in different years. This could be useful if NKS wants to point out issues which are key issues in certain years. Shows also agility of NKS.

Since I have not been evolved in NKS work, I was wondering has NKS research been evaluated regularly, like every five years. During evaluation NKS could get knowledge about the impressiveness of the NKS research. Has NKS SRA (strategic research agenda) or has NKS though that it would need such?

I think Finland do not see needs for big changes in NKS organization.

**Anne Liv Rudjord - DSA**

*"The administrative procedures and management works smoothly. There are no specific comments to the process with the calls for proposals.*

*However, researchers have commented that the evaluation of the proposals appear to vary strongly between evaluators, even on relatively objective criteria like for instance the contributions from young scientists.*

*It is therefore suggested to review the evaluation process and possibly provide guidance to the evaluators on how the various criteria should be evaluated.”*

### **Carsten Israelson – DEMA**

The input from DEMA falls in three parts:

#### **NKS activities**

We agree with most board members that the NKS seminars every 3<sup>rd</sup> year are a success and that we should continue with this activity, so that we plan for the next seminar in 2022.

We also find it relevant to have a broader discussion of future research subjects and the impact of the research from NKS. VTT has mentioned an interest in Finland for SMR and in Denmark there are several small groups working with molten salt reactors. We see a way to broaden the scoop of NKS by adding a new subject which could be called: “Emerging technologies”. Furthermore, several board members has mentioned “competence building” (or something similar), which is another wording that we could consider to have more focus on in the future.

However, we should be aware not to move to far away from the original focus of NKS, which is safety research, and thereby possibly scaring away the main funders of the program. Looking at national research focus is an idea that we can support but still with the focus of the NKS main scope: Safety research.

In general, DEMA finds it important that NKS strives to obtain as many relevant applications for projects as possible. This years’ relatively small amount of applications is worrisome and we should take steps to ensure more awareness about NKS. Too few applications and hence less competition among the applicants brings a risk of not being able to maintain a high enough scientific standard of NKS projects. A somewhat broader scoop will hopefully bring in more applications and thereby aid to maintain the high level of research. All board members are encouraged to look for new research groups and organization that can submit quality applications for NKS projects.

#### **NKS organization**

DEMA agrees with SSM that the roles and division of responsibilities between the owners and the board could be clearer. We support the suggestions by SSM, DSA and DHA with some minor adjustments. A future organization of NKS could look like this:

- The Owner Group (or Board of Directors), one representative from each governmental funding organization, which is DSA, GR, STUK, SSM and DEMA . The Owner Group is responsible for the NKS strategies, budget, finances, contracts with PC’s, chairman and secretariat, etc.
  
- The Evaluation Panel (DEMA has previously suggested the name, Advisory Group) should evaluate proposals and propose research plans. The Panel should consist of what today is called The Board. Owner Group member should, however, also be allowed to serve in the

Evaluation Panel. All members of the Evaluation Panel should be approved by The Owner Group. As DSA, we see no need for new members to this group (from outside the Nordic Countries).

- The Coordination Group. More or less as suggested by SSM.

The meeting schedule for the owners and coordinators can be agreed between the members of these groups. Given the relatively few members, video conferencing is effective for smaller meeting, and helps to keep down travel expenses.

The Evaluation Panel probably only needs to meet at the January meeting, when the project proposals are discussed. However, a seminar on evaluation criteria in September 2019 or 2020 could be relevant.

DEMA is also positive towards the proposal by SSM and DSA about fixed term appointment for chairman and PC's. We find that a reasonable amount of rotation is good for the organization and that it should apply for all positions within The Coordination Group.

### **Standards and practices for NKS administration**

We find it paramount that NKS lives up to the standards for good public governance and transparency that apply to public sector institutions in our various countries. Consequently, NKS must, in our view, put in place practices that enables it to demonstrate that funds are spend correctly (i.e. on nuclear safety research) and efficiently (i.e. avoiding excess costs). In this context, we recently agreed that good public governance is part of NKS policy, and DEMA encourage that we follow up on this within The Owner Group.

