

Overview of the NKS-R programme and summary of ongoing activities

Karin Andgren

NKS-R Programme Manager

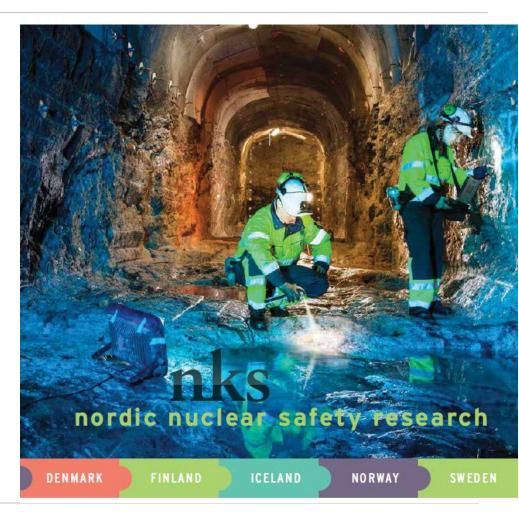


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NKS – Nordic Nuclear Safety Research



- Has for decades supported Nordic co-operation in nuclear safety research
- The aim is to maintain and strengthen Nordic competence in the area of nuclear safety research,
- And to develop close informal networks between scientists, workers and end users from the relevant Nordic authorities, organisations, industries and universities



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Owners and co-financiers

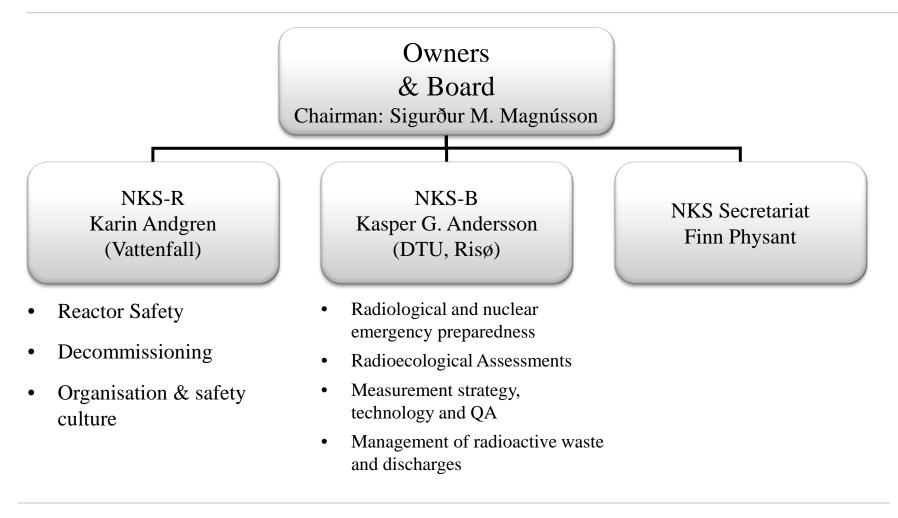




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Organisation





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Karin Andgren NKS-R Programme Manager NFSF Conference, Roskilde, 24 August 2015

Funding

NKS funds:

- Research activities
- Seminars and workshops
- Travels for young scientists

www.nks.org



Through the annual open Call for proposals

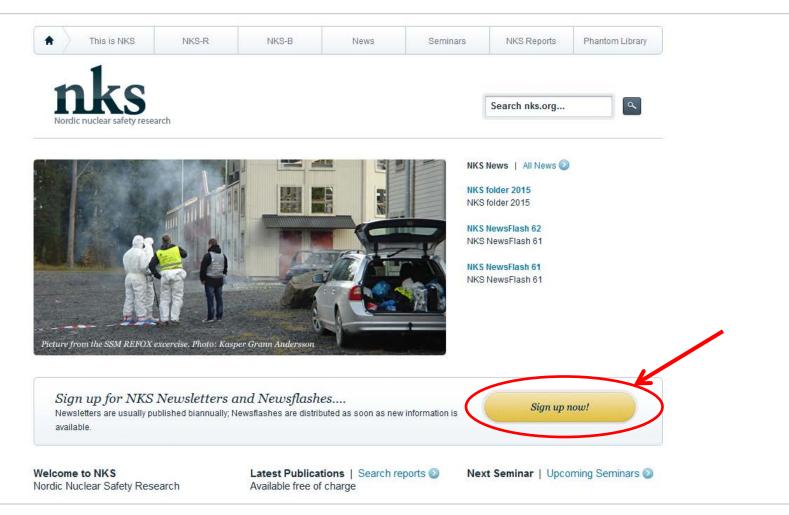
Funding Requirements:

- Preferably at least three Nordic countries (minimum two)
- Results of NKS activities are publicly available for free
- 50 % of the funding from own contribution



Web page



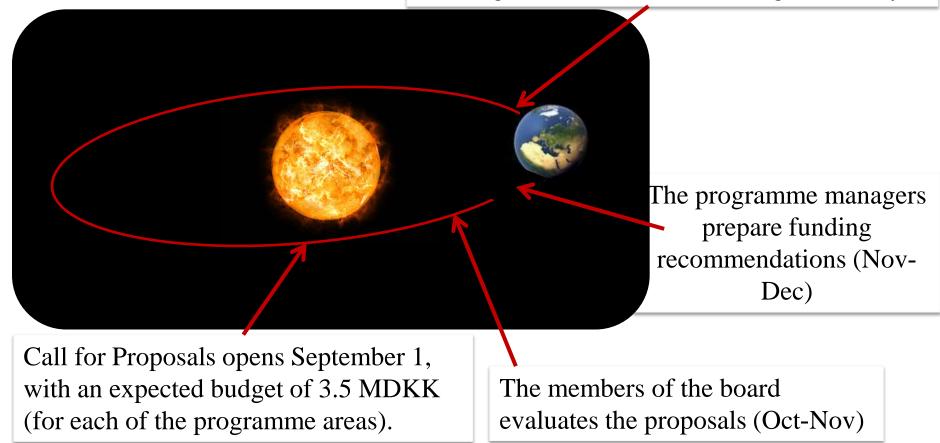


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Funding decision at board meeting in January

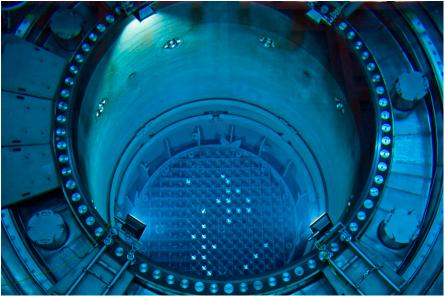


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Research areas of the NKS-R programme

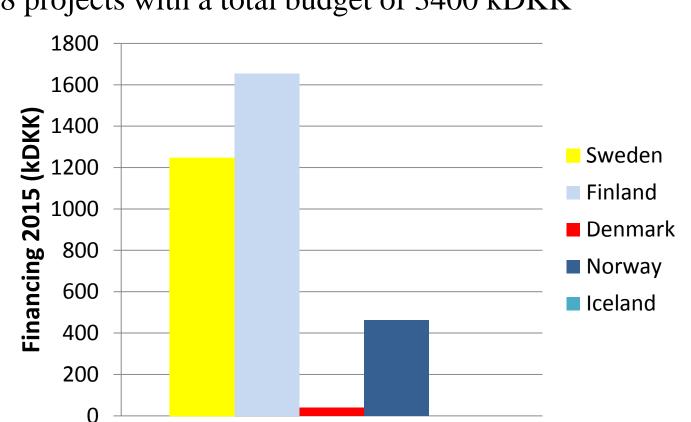


- Severe accidents
- Thermal hydraulics
- Reactor physics
- Probabilistic methods/ risk analysis
- Decommissioning
- Plant life management
- Organisational issues and safety culture



NKS-R programme 2015



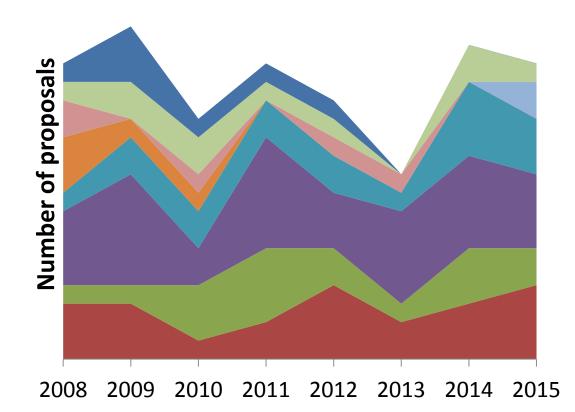


8 projects with a total budget of 3400 kDKK

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NKS-R proposals per area 2008-2015



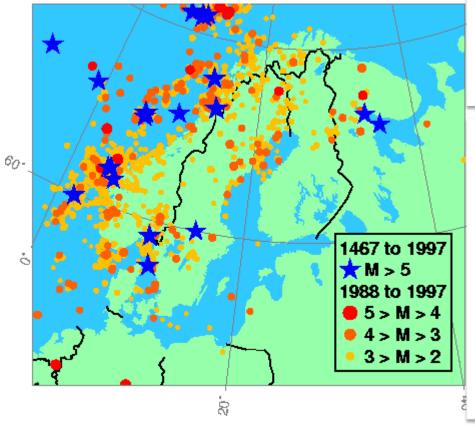


- Unspecified / cross over
- Plant life management and extension
- Decommissioning and radwaste
- Reactor physics
- Automation and control room
- Organisation and Safety Culture
- Risk Analysis
- Severe accidents
- Thermal Hydraulics

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Earthquake location and magnitude



Research area: Risk analysis

Potential of numerical methods to supplement empirical earthquake observations.

Project partners:

VTT Technical Research Centre, Finland

University of Helsinki, ÅF, Aalto university, Finland

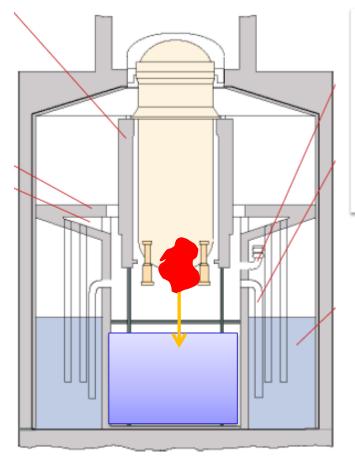
Uppsala university, Sweden

Geological Survey of Denmark and Greenland, Denmark

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Ongoing activities 2015: DECOSE





Research area: Severe accidents Debris coolability and steam explosion in Nordic BWRs

- Is the debris bed coolable?
- Is there a risk of steam explosion? Experimental and numerical investigations

Project partners:

KTH Kungliga Tekniska Högskolan, Sweden

VTT Technical Research Centre, Finland

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Ongoing activities 2015: LESUN



Research area: Organisational issues and safety culture Learning from successes in nuclear power plant operation to enhance organisational resilience.

Case studies at Ringhals and Loviisa

Develop methodology to identify successful performance



Project partners:

IFE Institute for Energy Technology, Norway

VTT Technical Research Centre, Finland

Vattenfall (Ringhals NPP), Sweden

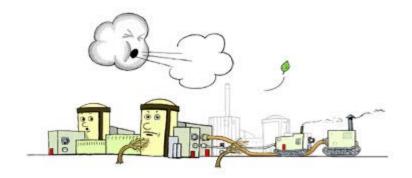
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Nordic perspectives of Fukushima: Where are we now and where do we go?

Joint NKS-R and NKS-B Seminar, Stockholm, 12-13 January 2016





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Thank you for your attention!

For more information on the NKS-R programme,

Contact <u>karin.andgren@vattenfall.com</u>

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