

INTRODUCTION AND WEBINAR AGENDAS

Third NEA Stakeholder Involvement Workshop on Optimisation in Decision-making

Preparatory Webinars





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Background and lessons learnt from previous NEA Stakeholder Involvement Workshops

Decision-making processes can be optimised across the whole spectrum of nuclear and radiation-related policy, regulation and practice. Optimisation has always been a fundamental concept in decision-making in all parts of society, but the way decisions are taken has changed in recent years. Societal considerations towards nuclear-related activities have evolved to promote more holistic, inclusive and sustainable decision-making perspectives, addressing the need to integrate many diverse aspects and stakeholder ¹ views (notably those of civil society) to reach more balanced and "optimised" (i.e. better) decisions.

The Nuclear Energy Agency (NEA) has played a pioneering role in encouraging these developments through the organisation of a number of workshops over the past years to shed light on the complex topic of stakeholder involvement and the concept of optimisation in policymaking. This included the first two editions of the NEA Stakeholder Involvement Workshop on "Stakeholder Involvement in Nuclear Decision Making" (2017) and on "Risk Communication – Towards a Shared Understanding of Radiological Risks" (2019). Other relevant workshops included the joint NEA and DSA (Norwegian Radiation and Nuclear Safety Authority) workshop on a "Regulatory Framework of Decommissioning, Legacy Sites and Wastes from Recognition to Resolution: Building Optimization into the Process" (2019), the NEA workshop on "Optimisation: Rethinking the Art of the Reasonable" (2020), and the NEA workshop on "Multifactor Optimisation of Predisposal Management of Radioactive Waste" (2020).

One of the conclusions of these events was that while optimisation is crucial in decision-making, there is no common understanding across nuclear sectors of what an "optimised" decision implies. A key aspect identified in this context was the involvement of stakeholders, and especially civil society, in the decision-making process. It was noted that there was room for improvement, for more transparency and greater stakeholder involvement, and that there was a lack of a robust framework in this context. While an optimised decision depends largely on the prevailing circumstances in which the decision is taken, there is a need for generic guidance in the implementation of more holistic, inclusive and sustainable decision-making processes. Better cross-sector communication was highlighted as one way to optimise decisions and appropriately consider and balance

^{1.} In addition to policy makers and regulators (e.g. safety authorities), stakeholders include but are not limited to (representatives of): elected governmental officials; civil society; Indigenous peoples; NGOs (including environmental groups); academic community; media; public opinion builders; businesses and industry (workers, unions, suppliers, professional associations, etc.); and the international community (including neighbouring countries) (adapted from IAEA [2021], "Stakeholder Engagement in Nuclear Programmes" and NEA [2021], "Towards a Shared Understanding of Radiological Risks"). More broadly speaking, a stakeholder is "any group or individual who feels affected by an activity, whether physically or emotionally". This can be "organisations and groups that are statutory stakeholders — those required by law to be involved in any planning, development or operation of a nuclear project — as well as non-statutory stakeholders — those who have an interest in or will be directly or indirectly impacted" (IAEA, Nuclear Communicator's Toolbox).

their societal, health, environmental, and economic impacts. The 3rd NEA Stakeholder Involvement Workshop will be an important step in identifying the key considerations that allow for a common approach to decision-making processes across the nuclear sectors and across the NEA member countries. This will support the objectives outlined in the new NEA Strategic Plan 2023-2028 (see pp. 8, 9, 20).

As countries aim to achieve the United Nations' Sustainable Development Goals, there is a growing need for more holistic, inclusive, and sustainable decision-making processes that account for national/cultural contexts and the complex interplay between economic, environmental, health and societal aspects. The ultimate goal is to reach a sustainable, transparent and widely accepted decision-making process. Such a process should balance the different factors and risks, depending on the prevailing circumstances, to identify the optimal solution or solutions for all stakeholders and society as a whole.

In other words, decisions should no longer be narrowly based on a limited number of aspects and views or on one specific sector. This applies to all kinds of decision-making processes and contexts. Inclusive and deliberative approaches and the management of the multiple consequences of decisions could lead to a holistic view of governance and make it a mutual learning process for policymakers, regulators, owners, practitioners, implementers, experts and civil society.

Workshop objectives

Based on the above, the 3rd Stakeholder Involvement Workshop will have the following three overarching objectives:

- Improve the common, practical understanding of what optimisation in decisionmaking means for policymakers, regulators and other stakeholders, notably civil society, across the nuclear sector and compare with non-nuclear sectors.
- Identify the foundation of a generic multidimensional framework to support the optimisation process for decision-makers across the nuclear sector to achieve more sustainable decisions.
- During 1 & 2, support inclusive stakeholder involvement, notably civil society, and identify the relevant tools/approaches to optimise decision-making using qualitative and quantitative elements across the nuclear sector and achieve more sustainable decisions.

General approach

The main workshop will be held in September 2023 with the aim of addressing objectives 2 & 3. To set the scene for the workshop and to prepare a common ground for discussions, objective 1 will be addressed through three preparatory webinars between December 2022 and February 2023. The improvement in the involvement of stakeholders, including civil society, will be the guiding theme for both the preparatory webinars and the workshop.

The discussion part of the preparatory webinars is open for participation upon invitation. This will limit the number of participations to permit an efficient exchange and engagement with participants from different fields. Invitations were issued on behalf of the Workshop Programme Committee, based on input from the different NEA Standing Technical Committee Bureaus to achieve participation from different fields and professional backgrounds.

Scope

The workshop and preparatory webinars will be based on active and constructive engagement between participants and aim for a better, cross-cutting understanding among the different nuclear sectors. This will not include the medical field, however, in order to limit the complexity of the subject matter. Regarding the preparatory webinars, the scope is reduced to finding a common practical understanding of what optimisation means in decision-making for the purposes of the workshop in 2023, i.e. describing a broad decision-making process, with its drivers and barriers, and the potential influencing factors, rather than developing a new definition of "optimisation" as such. For this purpose, the decision-making process will be broken down into three phases which will be analysed individually.

For the purposes of the webinars and the workshop, the terms "decision" and "decision-making" refer to decisions that will have, or can be expected to have, a direct impact on stakeholders. Decision-making entities are assumed to have the required legal authority. This does not include lower-level decisions in which there is no expectation for purposeful stakeholder engagement.

Preparatory webinars

Three phases, each addressed by a dedicated webinar

The process of optimisation in decision-making will be examined from an end-goal perspective, the end-goal being to make more holistic, inclusive and sustainable decisions that are understood and reasonably accepted by all parties involved, with a specific focus on all relevant stakeholders during the process. Each group of stakeholders is likely to have its own set of key considerations that are to be consolidated in a deliberative and sustainable manner with those of other stakeholders in order to reach an optimised decision. For the purpose of the preparatory webinars, the decision-making process will be broken down into three phases:

1. Identifying and framing the purpose of the decision (i.e. pre-decision-making activities). This includes how a problem, including its context, is identified and explicitly stated, along with the method(s) for its assessment. For example: What is the problem? Why should it be solved? What are the consequences if the problem is not considered? What are the legal/regulatory triggers? Who needs to be engaged in the problem formulation? Who would be impacted by the decision(s)?

- Guiding theme for the webinar on phase I: "How to better formulate problems for holistic, inclusive and sustainable decision-making?"
- 2. Finding and evaluating options for making the decision. This includes the identification of different options, their assessment regarding their risks, benefits, feasibility and impact in view of the prevailing circumstances, as well as the timeline for their potential implementation.
 - ► Guiding theme for the webinar on phase II: "How to balance competing aspects and interests (as defined by the prevailing circumstances) when evaluating options to reach holistic, inclusive and sustainable decisions?"
- 3. Selecting, executing and post-assessing the decision. This includes the selection of the "optimal" decision based on the analysis of options above, the implementation of that solution, and the post-assessment of the decision and the decision-making process during/after its implementation to extract lessons for future decisions.
 - Guiding theme the webinar on phase III: "How to transparently implement and post-assess decisions for their holism, inclusiveness and sustainability?"

During all three phases, the question should be how to involve and empower stakeholders to play a solution-oriented role in the decision-making process, and to identify the types of triggers or goals that drive the process and its influencing factors.

Each of the three phases will be analysed in more detail during a dedicated webinar. The webinars will aim to identify similarities and differences in approaches to implement each of the three phases across sectors and across countries.

Consider new policy developments and examples from the nuclear sector

Each webinar will start with a short introduction, followed by a general, cross-cutting and high-level presentation on best practices and emerging approaches in the international democratic decision-making fora. This will provide some broad perspective and will be followed by the analysis of a nuclear-specific situational example so as to draw the focus back to the nuclear sector. Participants will then discuss in breakout groups their own experience, best practices and examples from their sectors, guided by a number of questions (see draft agendas).

The discussion of these questions in the breakout groups, based on the impressions gained during the two keynote presentations of each webinar, will provide a basis to draw up a document to capture and outline a common understanding of optimisation in decision-making for the main workshop in September 2023. The insights will be summarised in a short final report, which will outline the characteristics of optimisation in the decision-making process, potentially broken down into the above phases.

Webinar agendas

Webinar I - 14 December, 13-15:35 CET

Phase I – "How to better formulate problems for holistic, inclusive and sustainable decision-making?"

The first part of the webinar is open to all registered participants

Торіс	Speaker	Time
Intro		
Welcome remarks	William D. MAGWOOD, IV Director-General, OECD Nuclear Energy Agency (NEA)	5′
Keynote remarks	Commissioner David A. WRIGHT Commissioner, US Nuclear Regulatory Commission	10'
Welcome remarks and short introduction	Haidy TADROS Director General, Directorate of Environmental and Radiation Protection and Assessment, Canadian Nuclear Safety Commission (CSNC)	5′
Keynote presentation:		
How can strategic foresight support more holistic policy decision making?	Alexander ATARODI Senior Foresight Expert, OECD Development Co-operation Directorate	15′
Q&A		15′
Presentation (situational example):		
Lessons learnt from the dialogue with civil society regarding the 4 th periodic safety review of French 900 MWe reactors	Véronique LEROYER Responsible for openness to society, French Institute of Radiation Protection and Nuclear Safety (IRSN)	15′
Q&A		15′
End of first part		

The second part of the webinar is open on invitation – starting at 14:30

Торіс	Speaker	Time
Breakout discussion on phase I – What do we mean by 'optimisation': How to better formulate problems for holistic, inclusive and sustainable decision-making?		45′
Breakout discussions on three specific questions applied to the pre-decision phase:	Moderated by members of the programme committee	
a) How to identify and give all relevant stakeholders the opportunity to engage (considering aspects such as time, region, distance)?		
b) How to foster mutual trust from the beginning of the decision-making process?		
c) What considerations are needed to build ethical and inclusive points of views from all involved stakeholders, empowering them to also raise sensitive questions?		
The above questions should lead to conclusions on what is common across sectors and what is different, and if possible, what comprises an optimal approach for being considered "holistic", inclusive and sustainable.		
Short presentation of group findings in plenary	Breakout group rapporteurs	15′
Summary and end of meeting	Haidy TADROS Director General, Directorate of Environmental and Radiation Protection and Assessment, CNSC	5′

Webinar II - 18 January, 13-15:35 CET

Phase II – "How to balance competing aspects and interests (as defined by the prevailing circumstances) in decision-making to reach holistic, inclusive and sustainable decisions?"

The first part of the webinar is open to all registered participants

Topic	Speaker	Time
Intro		
Welcome remarks	William D. MAGWOOD, IV Director-General, OECD Nuclear Energy Agency (NEA)	5′
Keynote remarks	Nobuhiko BAN Commissioner, Nuclear Regulation Authority, Japan	10'
Welcome remarks and short introduction	Haidy TADROS Director General, Directorate of Environmental and Radiation Protection and Assessment, Canadian Nuclear Safety Commission (CNSC)	5′
Keynote presentation:		
Challenges of using cost-benefit analysis and other approaches within the nuclear sector	Christian GOLLIER Professor of Economics, Toulouse School of Economics	15′
Q&A		15′
Presentation (situational example):		
Proposed tool for selecting protective actions in a nuclear emergency: balancing radiological and non-radiological (psychosocial) impacts	Tristan BARR Section Head, Planning, Outreach, Exercises and Training Section, Health Canada	15′
Q&A		15′
Break/End of webinar – continuation of the webinar upon invitation		10′

The second part of the webinar is open on invitation – starting at 14:30

Торіс	Speaker	Time
Breakout discussion on phase II – What do we mean by 'optimisation': How to balance competing aspects and interests in decision-making to reach holistic, inclusive and sustainable decisions?		45′
Breakout discussions on three specific questions applied to the decision phase:	Moderated by members of the programme committee	
a) What are competing aspects at play? How to best balance them?		
b) What mechanisms work best to transparently involve stakeholders in the process of balancing competing aspects?		
c) Making <u>one</u> decision after listening to <u>all</u> points of view: When and how to agree to disagree?		
The above questions should lead to conclusions on what is common across sectors and what is different, and if possible, what comprises an optimal approach for being considered "holistic", inclusive and sustainable.		
Short presentation of group findings in plenary	Breakout group rapporteurs	15′
Summary and end of meeting	Haidy TADROS Director General, Directorate of Environmental and Radiation Protection and Assessment, CNSC	5′

Webinar III - 8 February, 13-15:35 CET

Phase III – "How to transparently implement and post-assess decisions for their holism, inclusiveness and sustainability?"

The first part of the webinar is open to all registered participants

Topic	Speaker	Time
Торіс	Speaker	Tille
Intro		
Welcome remarks	William D. MAGWOOD, IV Director-General, OECD Nuclear Energy Agency (NEA)	5′
Keynote remarks	Christine NOIVILLE President, High Committee for Transparency and Information on Nuclear Safety, France	10'
Welcome remarks and short introduction	Haidy TADROS Director General, Directorate of Environmental and Radiation Protection and Assessment, Canadian Nuclear Safety Commission (CNSC)	5′
Keynote presentation:		
Introduction to and relevant findings from the new OECD Citizen Participation Guidelines	Alessandro BELLANTONI Head, Open Government, Public Communication, and Civic Space Unit, OECD Public Governance Directorate	15′
Q&A		15"
Presentation (situational example):		
Remediation experience from the Maralinga test site	Emma BARNES Assistant Director (Acting) – Health Physics Measurements, Radiation Health Services Branch, Australian Radiation Protection and Nuclear Safety Agency	15′
Q&A		15′
Break/End of webinar – continuation of the webinar by invitation		10′

The second part of the webinar is open on invitation – starting at 14:30

Торіс	Speaker	Time
Breakout discussion on phase III – What do we mean by 'optimisation': How to transparently implement and post-assess decisions for their holism, inclusiveness and sustainability?		45′
Breakout discussions on two-three specific questions applied to the implementation and post-assessment phase:	Moderated by members of the programme committee	
a) How to communicate the decision to all involved stakeholders?		
b) What are criteria to evaluate whether the decision-making process was holistic, inclusive and sustainable?		
c) How can we use the lessons learnt during and after the implementation of the decision to improve future decision-making processes?		
The above questions should lead to conclusions on what is common across sectors and what is different, and if possible, what comprises an optimal approach for being considered "holistic", inclusive and sustainable.		
Short presentation of group findings in plenary	Breakout group rapporteurs	15′
Summary and end of meeting	Haidy TADROS Director General, Directorate of Environmental and Radiation Protection and Assessment, CNSC	5′

Speaker biographies



William D. Magwood, IV, has been the NEA's Director-General since 2014. Prior to that, he served as Commissioner of the US Nuclear Regulatory Commission (NRC), appointed by the US President and confirmed by the Senate. In 2005-2010, he provided independent strategic and policy advice on energy, environmental and technology policy issues. From 1998 to 2005, Mr Magwood was Director of Nuclear Energy at the US Department of Energy, where he launched several important initiatives, including the Generation IV International Forum (GIF). He began his career working as a scientist for Westinghouse and Edison Electric Institute. Mr Magwood holds Bachelor's degrees in Physics and English from Carnegie Mellon University and a Master of Fine Arts from the University of Pittsburgh.



The Honourable **David A. Wright** was first sworn in as a Commissioner of the US Nuclear Regulatory Commission on 30 May 2018. He is currently serving a term ending on 30 June 2025.

Before joining the NRC, Commissioner Wright served as an energy and water consultant and policy advisor on nuclear waste issues. He is a former president of the National Association of Regulatory Utility Commissioners and served as Vice Chairman and Chairman of the South Carolina Public Service Commission. He was also elected councilman and mayor in Irmo, S.C. and to the South Carolina House of Representatives.

A colon cancer survivor, Commissioner Wright is an advocate for cancer awareness and education. He is a proud father and grandfather and has enjoyed umpiring baseball for nearly 50 years. He is a graduate of Clemson University.



Nobuhiko Ban has been involved in academic activities for many years as an expert in radiological protection, and he has served as a Commissioner of the Nuclear Regulation Authority since 2015. He is also a member of ICRP Committee 4 and the chair of the NEA Working Group on Safety Culture of the Committee on Nuclear Regulatory Activities.



Christine Noiville has a doctorate in law and is director of research at the French National Centre for Scientific Research (CNRS). She analyses the links between law and scientific developments. Her main research interests are biotechnology. bioethics. the precautionary principle, patents environment. Her main publications, alone or in collaboration, include Public interest stakes in times of pandemic ("Des enjeux d'intérêt public en temps de pandémie" - Mare et Martin, 2021), The biobanks ("Les biobangues" - Que Sais-Je? PUF, 2009), Bioequity, battles over the sharing of the living ("La bioéquité, batailles autour du partage du vivant" -Autrement, coll. Frontières, 2009), Contracts and living ("Contrats et vivant" - LGDJ, 2006), and On the good governance of risk ("Du bon gouvernement des risques" - PUF, 2003). Christine Noiville conducts her research at the Institute of Legal and Philosophical Sciences of Sorbonne which she directs at the University of Paris 1 (UMR CNRS 8103). She chairs the French High Committee for Transparency and Information on Nuclear Safety (HCTISN) and co-edits the "Cahiers Droit, Sciences et Technologies" journal with Florence Bellivier.



Haidy Tadros has been with the CNSC since 2006 and has held several technical and leadership roles in the areas of radiation protection, integrated management systems, organisational change management, licensing of nuclear fuel cycle facilities and licensing of new nuclear technologies. In her current role as Director General of the Directorate of Environmental and Radiation Protection and Assessment, she is responsible for overseeing all aspects of regulatory assessments and research in the fields of environmental and radiological protection, including geoscience, environmental risk, health science, and laboratory services. A main focus of her work entails ensuring regulatory, technical and scientific information and data are shared and communicated with Indigenous Nations and communities, the public and interested stakeholders.

Prior to joining the CNSC, Ms Tadros worked in the field of radiation protection and completed a Master's degree in biomedical sciences.



Alexander Atarodi is the Team Lead Foresight at the OECD's Development Co-operation Directorate. Before joining the OECD, he worked as Senior Advisor at the Swedish Prime Minister's Office and at the Swedish Ministry of Foreign Affairs. He further worked for the Swedish Ministry of Defence, the Swedish Defence Research Agency and for Microsoft.

Mr Atarodi holds a Master's degree in economics and a Bachelor's degree in international relations from the School of Economics in Gothenburg. He is pursuing a PhD at the School of Economics in Gothenburg, with a focus on political economy in the Middle East and North Africa, in addition to his work at the OECD.



Emma Barnes has over 25 years' experience working in the nuclear and radiation safety field. She has worked for the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), located in Melbourne, Australia, for over 17 years.

During this time, she has worked within health physics monitoring, environmental monitoring, radiation emergency preparedness and response, and performed Radiation Safety Officer (RSO) roles. She currently manages the Comprehensive Nuclear Test Ban Treaty Organisation's (CTBTO) Australian expert laboratory (AUL02).

While employed at ARPANSA, she has undertaken several radiation monitoring trips to Maralinga, the former British nuclear weapons test site in Australia. These monitoring trips have also involved close stakeholder engagement with various organisations overseeing and regulating the former test site, as well as representatives from the Maralinga Tjarutja community who are the traditional owners of the land on which the nuclear tests were undertaken at Maralinga and Emu Field.

In addition to her work at ARPANSA, during 2017-2018, she undertook a secondment to the Comprehensive Nuclear Test Ban Treaty Organisation (CTBTO), based in Vienna, as Operations Officer within the International Data Centre of the CTBTO, overseeing 30+ radionuclide monitoring stations, as part of the international monitoring system of the CTBTO.

Prior to working at ARPANSA, she was employed for over 8 years as an analytical radiochemist within the radioanalytical laboratories at Sellafield, United Kingdom, (formerly British Nuclear Fuels Ltd., or BNFL).



Tristan Barr is the section head of the Planning, Outreach, Exercises and Training section within the Radiation Protection Bureau of Health Canada. He has a Master's degree in biology and has worked in the field of radiation protection in private industry and government since 2002. Tristan Barr has extensive expertise in radiation detection, characterisation, dosimetry, radioactive waste management, emergency response and has recently focused on nuclear emergency exercises and the management of Canada's Federal Nuclear Emergency Plan. In authoring Canada's "Guidance on Planning for Recovery from a Nuclear or Radiological Emergency", Barr identified the need to develop tools for balancing psychosocial and radiological impacts in emergency response decision-making for the application of protective actions. Mr Barr's presentation will focus on research and the development of a proposed decision-making tool for nuclear emergency managers in the context of a protection strategy.



Alessandro Bellantoni joined the OECD in 2009, where he is the Head of the Open Government, Public Communication, and Civic Space Unit in the Public Governance Directorate. Previously, he worked in the Ministry of Public Administration and Innovation of the Government of Italy, for the United Nations (WFP and ILO), and in civil society. He graduated in international affairs from the John Cabot University of Rome and holds a Master of Science in social anthropology and development studies from the London School of Economics and Political Science of the University of London.



Christian Gollier's research spans the fields of economics of uncertainty, environmental economics, finance, insurance, and cost-benefit analysis, with a particular interest in long-term sustainable effects. He founded the Toulouse School of Economics with Jean Tirole in 2007 and has been its director since 2009 (with a hiatus in 2015-2016). He has published more than a hundred articles in international scientific journals. He has also published 10 books on risk including "The Economics of Risk and Time" (MIT Press), which won the Paul A. Samuelson Award (2001), In 2012, he published a book entitled "Pricing the Planet's Future" at Princeton University Press, which he presented at the 6th Arrow Lecture at Columbia University. Christian Gollier is one of the authors of the 4th and 5th reports of the Intergovernmental Panel on Climate Change (IPCC, 2007 and 2013). In addition, he regularly advises several governments on their public investment evaluation policies. He is a former President of EAERE, the European Association of Environmental Economists. His recent book for the general public, "Le Climat après la fin du mois" (PUF 2019), deals with the importance of taking action in the face of climate change and has been a success in France.



Véronique Leroyer is project officer in the openness to society division of the French Institute for Radiation Protection and Nuclear Safety (IRSN). She is in charge of developing dialogue with civil society on safety, especially in the field of periodic safety reviews of reactors, and on post-accident awareness. She ensures the technical secretariat of IRSN's committee ODISCE, for the "openness and impulsion of dialogue with civil society on expertise."

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