Tuesday, Nov 5 – Training Day (08:30 – 17:30)

Prior to the two-day meeting, there will be a Training Day on 5 November 2019, designed to provide grounding in DMDU concepts and core methods. It is intended for those who wish to conduct DMDU analyses as well as decision makers who may receive the output of such analyses. The contents of the Training Day will be published in the following weeks.

Wednesday, Nov 6th

8:30-9:00	Coffee & Registration		
9:00-10:30	Opening Plenary 1		
10:30-11:00	Coffee		
11:00-12:30	Parallel session - #15	Parallel session - #4	Parallel session - #17
12:30-14:00	Lunch + Posters		
14:00-15:30	Parallel session - #3	Parallel session - #2	Parallel session - #16
15:30-16:00	Coffee		
16:00-17:30	Parallel session - #3	Parallel session - #11	Parallel session - #12
18:00-21:00	Dinner		

Thursday, Nov 7th

8:30-9:00	Coffee		
9:00-10:30	Parallel session - #9	Parallel session - #11	Parallel session - #7
10:30-11:00	Coffee		
11:00-12:30	Parallel session - #14	Parallel session - #10	Parallel session - #1
12:30-13:30	Lunch + Posters		
13:30-15:00	Parallel session - #14	-	Parallel session - #8
15:00-15:30	Coffee		
15:30-16:30	Parallel session - #5	Parallel session - #6	Parallel session - #18
16:30-17:30	Closing plenary		
17:30-18:30	Closing reception		

Friday, Nov 8th

A Post Conference Workshop titled "The governmental challenge of anticipating the future with decisions about end-of-lifetime water infrastructure" will be held on Nov 8th, 8:30 – 13:00. You can find more details about the workshop here.

#	Title
1	A Decision Capability Framework: Matching Decision Capabilities To Decision Support Approaches To Make More Effective Decisions In Deep Uncertainty
2	Combining Network Science And Deep Uncertainty Methods To Inform Transport Resilience Planning
3	Decision Making Under Uncertain Sea Level Rise: A Special DMDU Case?
4	Developing Robust Defence And Security Strategies And Plans
5	Embracing Uncertainty In Regional Energy Planning And Management
6	Ex-Post Evaluation Of Deep Uncertainty In Infrastructure Design
7	Finding The Tipping Point - Deep Uncertainty For Resilience Engineering In Coupled & Complex Systems
8	Fostering Connections Between Resilience Thinking And DMDU Approaches For Achieving Long-Term Sustainability
9	Improving Water Information To Support Humanitarian Responses
10	Incorporating Values In Modelling And Decision Analyses
11	Innovations For Scenario Discovery When Seeking Dynamic, Robust, And Resilient Action Pathways
12	Institutions And Governance Arrangements Enabling Forward-Looking Decisions Under Uncertainty By Governments
14	Practical Challenges In The Application Of DMDU Methodologies To Climate Risk Assessment And Management
15	Supporting Decision Making Under Deep Uncertainty With Participatory Approaches
16	Moving Towards Adaptive Governance for Sustainability under Conditions of Complexity and Deep Uncertainty
17	Techniques To Support Long-Term Strategic Decision Making Under Deep Uncertainty For Energy And Other Infrastructures
18	The Deep Uncertainties Of Legislative Processes

Session # 1

A Decision Capability Framework: Matching Decision Capabilities to Decision Support Approaches to Make More Effective Decisions in Deep Uncertainty

Description: Decision making to accommodate risk and uncertainty requires distinctive capability sets, modelling and decision support approaches to address short-term issues (e.g. expert judgement), medium to long-term issues (e.g. futures) and complex problems (e.g. structured decision making). However, the pathology of different types of decisions and the individual and organisational capabilities required to address them are frequently under-estimated or ignored. Modelling and decision support approaches are often advocated with little understanding of the type of risk and uncertainty being attended to, the decision type and structuring, or the capabilities of the organisation using the approach. This can constrain the uptake or effectiveness of these approaches, which we aim to address directly in this session.

Session format: This will be an interactive session seeking input into ongoing work to better define the circumstances under which modelling and decision support approaches might be deployed to maximise impact. The session will start by outlining the conveners' work on defining decision typologies and on developing a decision capability framework to identify organisational 'readiness levels' for decision making under deep uncertainty. Participants will then be engaged in mapping known modelling and decision support approaches onto the decision typologies and readiness levels to identify effective deployment opportunities.

Format: Presentation + interactive session/discussion

Accepting Abstracts: Yes

Conveners:

Katy Roelich - University of Leeds

Geoff Darch - Anglian Water and AU4DM Network

Mark Workman - Energy System Catapult and AU4DM Network

Session # 2

Combining Network Science and Deep Uncertainty Methods to Inform Transport Resilience Planning

Description: The international community is increasingly concerned about the resilience of transport networks, given the unprecedented level of interconnectivity between systems. The scientific community has answered with network science, which represents infrastructure systems with an abstract network of nodes and connecting links. Recent advances in geospatial and trade data have enabled large-scale transport network risks analysis at global and national scales. Such analyses identify systemic criticalities and risks for transport failures due to extreme weather impacts, towards quantifying the costs and benefits of climate resilience options, and identifying locations for prioritizing investments into climate adaptation. But such large-scale analyses can become computationally very expensive, when several failure scenarios are tested to account for underlying deep uncertainties in data and modelling assumptions.

This session brings together academics and practitioners who have been involved in advancing transport network risk analysis using DMDU methods. It seeks to answer questions such as – how accessibility and connectivity metrics inform decision makers about the disruptions that would lead to extreme functionality loss? How can criticality analyses be designed to capture multiple points of failure? Can DMDU techniques be used to stress-test networks to a collection of representative disruptive events? The session will discuss the latest applications of network theory to the planning of infrastructure systems – from simple connectivity and accessibility metrics to more complex criticality analyses and simulation models – and will ask how to best work with deep uncertainty in these contexts. To showcase usefulness of such analysis for policy-making, different tools created in these different contexts will be presented.

Format: Presentation + interactive session/discussion

Accepting Abstracts: Yes

Conveners:

Julie Rozenberg - World Bank

Dr. Raghav Pant - ECI, University of Oxford

Session # 3

Decision making under uncertain sea level rise: a special DMDU case?

Description: Uncertainties in the rate and magnitude of sea level rise (SLR) hampers decision making on coastal adaptation. Large uncertainty arises from potential mass-loss from Antarctica that could rapidly increase sea level rise after 2050. While the IPCC focuses on the likely range of potential future SLR, others have suggested considering high-end scenarios as this is more relevant for risk management. Recent high-end scenarios are under intensive debate within the science community and have already been adjusted by more recent work. In parallel, there is less uncertainty on the low-end scenarios and it is clear SLR will continue to rise beyond 2100 with a commitment to SLR depending on worldwide emissions.

In this environment, greater clarity is needed on the following challenges: 1) Are there criteria that may be applied to high end SLR projections (and potentially worst case scenarios for other climate phenomena) to better govern when peer review science becomes "actionable science" appropriate for the decision environment? 2) How can DMDU methods help inure the decision environment from the "whiplash" effect (Revkin 2008) from ever-changing best available science? 3) How can DMDU methods support decision makers in using available information from likely ranges, low to high-end scenarios and commitments to SLR? How to use high end scenarios in exploring adaptation pathways? What do high-end scenarios mean for current adaptation options? and 4) How can monitoring support decision making under deeply uncertain SLR?

Presentations are sought that address one or more of these challenges.

Format: Interactive Session

Accepting Abstracts: Yes

Conveners:

Marjolijn Haasnoot - Deltares, Utrecht University, The Netherlands

David Behar - San Francisco Public Utilities Commission and Bay Area Climate Adaptation Network, USA

Judy Lawrence - Climate Change Research Institute New Zealand

Natascha Barlow - Leeds University, UK

Goneri Le Cozannet - BGRM, France

Tim Reeder - Trioss, UK

Detlef Stammer - Hamburg University, Germany

Session # 4

Developing Robust Defence and Security Strategies and Plans

Description: Defence organisations make important decisions that impact, and affect their ability to act, in the future every day. This ranges from making long term expensive investment decisions whose consequences can be felt decades into the future, such as the procurement of aircraft carriers and satellites, to developing plans to respond to short term national and global crisis, such as state instability and the spread of global terrorism. However, we cannot know how events will develop, what threats we shall face and where we will face them. Consequently, how can we decide on whether to invest in more ships or tanks and whether we should shift to novel solutions such as autonomous systems over manned systems. Similarly, how do we develop plans that effectively respond to emerging crisis.

This session will explore how Robust Decision Making, and related approaches such as Assumption Based Planning, can help Defence organisations develop strategies and plans that work in a wide range of potential futures.

Format: Presentation

Accepting Abstracts: Yes

Conveners:

Darren Rockett - Dstl MOD

Jim Maltby - Dstl MOD

Stephanie Martin (TBC) - Aerospace Corporation, USA

Session # 5

Embracing Uncertainty in Regional Energy Planning and Management

Description: Last year, at the 2018 DMDU society conference in Culver City, The Kleinman Center for Energy Policy presented research on using RDM to assess stakeholder-advocated energy pathways specific to the City of Philadelphia. Beyond this research project and it's local application, other researchers, utility regulators and civil servants have expressed interest in applying the DMDU approach to making broader decisions in energy policy. The inherent uncertainty that these decision-makers face, given the current dynamic policy environment and the future of large-scale economic and technological innovation, results in the DMDU approach being both applicable and sensical to local decision-makers: it is a method of research that operates under the same decision-making paradigm that they use every day.

This session will explore the application of DMDU in designing energy transitions, and in rethinking the role of multiple kinds of decision-makers in the face of disruptive technologies and policies. This session will offer researchers an opportunity to present new ways of applying DMDU methods to technology and policy uncertainty, and will provide decision-makers with a set of options for better energy planning across multiple scales.

Format: Presentation + interactive session/discussion

Accepting Abstracts: Yes

Conveners:

Cornelia Colijn - The Kleinman Center for Energy Policy

Mark Alan Hughes - The Kleinman Center for Energy Policy

Oscar Serpell - The Kleinman Center for Energy Policy

Session # 6

Ex-post Evaluation of Deep Uncertainty in Infrastructure Design

Description: In this session we will identify sources of deep uncertainty that are revealed in ex-post analysis of past designs. How did infrastructures fare with respect to the planning assumptions under which they were conceived? Which unforeseen trend reversals, shock events, unintended consequences or changing boundary conditions led to a significant reduction of their performance? A review of the timescales and dynamics of such processes can shed light on the stability of assumptions in engineering design and planning. Such an analysis may be useful when proposing monitoring schemes for long-term performance assessment or for assessing the adaptive capacity of infrastructures. Assessments conducted in hindsight could also be used to debate the potential of planning approaches currently proposed to address deep uncertainty. Case studies that reveal how sources of deep uncertainty impacted the historical performance of systems across their lifetimes are sought from a wide range of sectors including transport, energy and water.

Format: Presentation + interactive session/discussion

Accepting Abstracts: Yes

Conveners:

Marc Neumann - Basque Centre for Climate Change - BC3 & Ikerbasque, Leioa, Spain

Session # 7

Finding the Tipping Point - Deep Uncertainty for Resilience Engineering in Coupled & Complex Systems

Description: The accelerating frequency and severity of environmental, technological or socio-political threats in our hyper-connected world has the potential to create cascading effects that lead to unexpected collapse of coupled social-technical-environmental (STE) systems. Resilience engineering is dedicated to understanding the conditions under which a system collapses or fundamentally changes its behaviour (regime shifts). The complex adaptive nature of such systems as well as the dynamic interactions between STE elements and cross-scale feedbacks call for integrating models from different domains. Inevitably, this approach increases the uncertainty space. Yet, the robustness of coupled models' performance is rarely studied, let alone a comprehensive exploration of tipping points and circumstances, in which the resilience of STE systems erodes. Moreover, in time- and resource-constrained environments, such as during the response to crises, it becomes impossible to thoroughly explore the entire uncertainty space.

This session is dedicated to discussing to what extent deep uncertainty methods are applicable to for computationally-heavy STE systems in time-bound situations. We will explore the boundaries of existing deep uncertainty methods and requirements for new methods for searching through the uncertainty space and identifying regime shifts. To this end, we aim to bring together the resilience (engineering) and DMDU communities.

Format: Interactive Session

Accepting Abstracts: Yes

Conveners:

Tina Comes - TU Delft

Tatiana Filatova - University of Twente

Session # 8

Fostering Connections Between Resilience Thinking and DMDU Approaches for Achieving Long-term Sustainability

Description: "Resilience thinking" has been gaining prominence in sustainability planning and economic development realms, e.g., the 100 Resilient Cities Initiative, The Global Resilience Partnership, and adoption of resilience approaches by development agencies. Resilience thinking shares many features in common with DMDU approaches, yet the two communities have remained largely separate.

This session seeks to provide the audience, and eventually the broader DMDU and resilience communities, with different perspectives on how DMDU approaches and resilience approaches do and do not mesh well, and where each could learn from each other. We seek presenters who work at the boundary of DMDU and the resilience world, to present on papers that connect the two topics in rigorous theory and/or in real case studies. Potential sub-topics include:

-- Systems thinking and scenario thinking as bridging concepts between the two realms

-- Resilience in engineering versus socio-ecological resilience

-- Strengths and weaknesses of the (typically) more quantitative emphasis of DMDU

-- The extent to which different approaches promote equity and inclusion

-- Applications that demonstrate the above.

Following 3-5 presentations, we will break out into small groups with the goal of situating resilience approaches within common "schools" of DMDU approaches and, conversely, assessing the extent to which DMDU approaches manifest resilience principles, and where each could gain, reconvening at the end of the session. Participants may self-select into a follow-on work group to develop "primer" documents for each community.

Format: Presentation + interactive session/discussion

Accepting Abstracts: Yes

Conveners:

Benjamin Bryant - Woods Institute for the Environment, Stanford University

Jan Kuiper - Stockholm Resilience Center, Stockholm University

Session # 9

Improving Water Information to Support Humanitarian Responses

Description: Growing water demands combined with climate change may lead to increasing pressures on particularly agriculture and related livelihoods, which can result in (forced) migration, conflicts, and humanitarian crises. Possibilities rapidly increase to obtain information on imminent crises or disaster risk from global data sets, including Earth Observation Systems. And while it is widely recognized that understanding the most prominent risks in time to plan and implement adequate response can save lives – information needs to address the situation on the ground and respect decision cycles, hierarchical levels, workflows and processes. The humanitarian sector has dedicated principles and requirements with regard to, amongst others, content, timing, format, protection/privacy and accessibility.

In this session, we therefore explore the use of water information to inform humanitarian responses in order to develop a joint research agenda. Through two case studies, the recent flood in Mozambique and water-related human displacement in Iraq, we investigate:

•   Water information use and information needs in the humanitarian domain

•   Tensions between short-term responsive decision-making and long-term disaster risk reduction, resilience and planning

•   Uncertainties, tipping points and intervention windows

We will invite practitioners from the humanitarian sector to present and participate in this session for a good connection with humanitarian practice.

Format: Interactive Session

Accepting Abstracts: No

Conveners:

Karen Meijer - Deltares

Tina Comes - TU Delft - TBM

Maike Bennema - Deltares

Session # 10

Incorporating Values in Modelling and Decision Analyses

Description: Decision support of all flavors must weave together two fundamentally different kinds of inputs. On the one hand are beliefs about how the world works (what outcomes may result from an action, and how likely might these be). On the other hand are a variety of value judgements regarding which problems are most pressing, how desirable the different possible outcome are, and perhaps how much risk or uncertainty to tolerate. The first kind of input derives from observations, expertise, theory, and models. The second kind depends on what people care about—and telling people what to care about is not part of the analyst's job. Understanding of where value judgements can enter an analysis, and effective approaches for eliciting, describing, and incorporating value judgements are therefore crucial for practicing epistemically and ethically responsible decision making under uncertainty.

This session is open to presentations on any aspect of incorporating values into DMDU approaches. Possible topics include: (i) Stakeholder engagement practices, (ii) Selecting objectives and metrics, (iii) Identifying ethically-loaded assumptions, (iv) Choosing a model and decision framework, (v) Interactions between values and the treatment of uncertainties, (vi) Values in the selection of scenarios, and (vii) Acknowledging ethical uncertainty and/or ethical disagreement.

Format: Presentation + interactive session/discussion

Accepting Abstracts: Yes

Conveners:

Casey Helgeson - Pennsylvania State University

Nancy Tuana - Pennsylvania State University

Session # 11

Innovations for Scenario Discovery when Seeking Dynamic, Robust, and Resilient Action Pathways

Description: There are a growing number of DMDU innovations that seek complex time dynamic and adaptive action pathways. Emerging application areas such as climate change abatement, ecological resilience, and the sequencing of major capital infrastructure investments (water, transport, energy, etc.) all pose significant challenges to traditional scenario discovery techniques. Some of these challenges include defining robustness across multiple actors with diverse objectives, understanding robustness with major thresholds in states (e.g., ecological tipping points or capacity changes with investments), and quantifying robustness of systems that are undergoing temporal transformations (e.g., energy systems). This session will clarify these challenges and explore emerging tools that hold promise for advancing our ability to discover consequential scenarios that shape our understanding of the resilience and robustness of action pathways. Presentations highlighting use inspired methodological advances in scenario discovery are welcome.

Format: Presentation + interactive session/discussion

Accepting Abstracts: Yes

Conveners:

Patrick Reed - Cornell University

Jan Kwakkel - Delft University of Technology

Jon Lamontagne - Tufts University

Institutions and Governance Arrangements Enabling Forward-looking Decisions Under Uncertainty by Governments

Description: Climate change, digital transformation, and the loss of biodiversity are among the grand challenges that increase the need for governments to take into account, anticipate, and shape the long term with their current-day decisions and policies. Forward-looking decisions can be understood as decisions that anticipate future challenges, by the way such decisions formulate the problem, propose response options, and build on plausible, probable, and possible futures. In preparing or taking forward-looking decisions, practitioners and political decision makers face several dilemmas that emerge from their everyday practices. For example, how can they be both responsive to current generation's needs, while also taking responsible action for future generations. Practitioners and decision makers may also be puzzled with how to deal with (a lack of) information, or information overload, and how to use institutions, frameworks and tools to support forward-looking decision making. In this session we will explore: (1) what dilemmas organizations and practitioners are faced with when dealing with the deep uncertainties of the long term; and (2) what this requires of existing and new governance arrangements, institutions, and organizational processes. We invite people to present dilemmas or ideas, that can be further explored and fine-tuned in interactive discussions.

Format: Presentation + interactive session/discussion

Accepting Abstracts: Yes

Conveners:

Wieke Pot - Wageningen University - Public Administration and Policy Group

Art Dewulf - Wageningen University - Public Administration and Policy Group

Judy Lawrence - Victoria University of Wellington - Climate Change Research Institute

Session # 14

Practical Challenges in the Application of DMDU Methodologies to Climate Risk Assessment and Management

Description: There is an increasing interest in the use of DMDU methods to quantify and manage risks from climate change in long-term infrastructure planning. This interest is providing an opportunity to make the DMDU approaches more mainstream and accessible to a greater community of practitioners outside of the academic world, from applied research institutes, consulting companies, national organizations, and water managers or operators. Recently, the Decision Tree initiative (Ray and Brown, 2015), CRIDA (Mendoza et al. 2018), Resilient Hydropower Guidelines (IHA, in development) or similar frameworks integrate key DMDU concepts such as robustness, flexibility, and resilience into the climate adaptation practice. However, challenges arise in practice due to the complexity and multiplicity of analytical tools and approaches available to the practitioners, such as sampling and evaluation of future conditions (e.g., stochastic weather generators, system models) or incorporation of scientific information and innovations to the DMDU assessments (e.g., climate projections, growing number of climate services portals). In addition, there remain challenges in communicating the benefit of these approaches to management organizations, other planners and those interested in climate adaptation would conceivably benefit from their application.

This session aims to bring in the expertise from both universities and applied research community to discuss these practical problems of adoption and facilitate a discussion on best-practices, especially with a focus on recent applied work. Some examples to the issues we want to address are:

• How do we communicate the benefit of using DMDU approaches for climate adaptation and other applications?

• How should prediction information, including climate projections, be incorporated into the DMDU framework? Is there a role for probabilistic frameworks within DMDU?

• What are suitable approaches for rapid scoping of climate and nonclimate sensitivities for the practitioners under time/budget contraints?

• What are suitable ways to incorporate expert-based information to DMDU analyses?

• What are the biggest challenges for adoption by the broader planning community?

• What are the opportunities for expanding the application of DMDU approaches?

Participants are invited to present their own cases, examples, methodology. The discussion will focus on context-specific recommendations for further operationalization of DMDU tools in a wider practitioner community.

Format: Presentation + interactive session/discussion

Accepting Abstracts: Yes

Conveners:

Ad Jeuken - Deltares

Umit Taner - Deltares

Casey Brown - University of Massachusetts Amherst

Patrick Ray - University of Cincinnati

Session # 15

Supporting Decision Making under Deep Uncertainty with Participatory Approaches

Description: The DMDU field is rapidly expanding. Most DMDU research makes use of quantitative computer models, in particular simulation models. We are aware that in some of this research participatory approaches are used to engage stakeholders during the model development and results interpretation. Stakeholders are included amongst others because of their expertise, their decision power, or because decisions will affect them. However, there is currently very little emphasis on stakeholder involvement in the DMDU literature. We expect that much can be gained from exploring the link between participatory approaches like Group Model Building and DMDU research more explicitly. Therefore, we would like to invite academics and practitioners to share their experiences and ideas on this topic. Potential questions that your submission could address include (but are not limited to):

- How should stakeholders (not) be involved in DMDU?

- What are the effects (positive and negative) of involving stakeholders in DMDU?

Format: Presentation + interactive session/discussion

Accepting Abstracts: Yes

Conveners:

Vincent de Gooyert - Radboud University Nijmegen

Willem L. Auping - Delft University of Technology

Etiënne A.J.A. Rouwette - Radboud University Nijmegen

Session # 16

Moving Towards Adaptive Governance for Sustainability under Conditions of Complexity and Deep Uncertainty

Description: This session is inspired in Antonio Gramsci's reflections: "The crisis consists precisely in the fact that the old is dying and the new cannot be born; in this interregnum a great variety of morbid symptoms appear." The European Union, together with other regions of the world, is currently experiencing a series of economic, ecological, scientific and political crises. Drawing on decades of research in complexity theory and post-normal science, including the ongoing EU Horizon 2020 project "Moving towards Adaptive Governance in Complexity:

Informing Nexus Security" (MAGIC), we argue that the crises are strongly intertwined. Furthermore, we argue that the crises are deeply connected to a model of governance that fails to appreciate the complexity of socio-ecological systems and the deep uncertainty that results from this complexity.

There are many useful typologies of uncertainty and complexity. In this session, we shall emphasize the importance of pre-analytical choices on the framing of policy or governance issues – so-called policy narratives – on the definition of the system to be modelled. While such pre-analytical choices are clearly normative, they have profound implications for the science to inform policy and governance. We shall outline our considerations on how to move towards more adaptive forms of governance that deal with such normative choices in a politically and scientifically robust way. A possibly controversial aspect of such considerations is that they appear to have implications not only for scientific methodology but also societal choices such as the choice of policy for economic development. Indeed, it seems that a careful consideration of conditions of complexity and deep uncertainty points towards fundamental tensions between the goal of sustainability and the goal of perpetual economic growth

Format: Panel Discussion

Accepting Abstracts: No

Conveners:

Zora Kovacic – University of Bergen (Norway)

Silvio Funtowicz - University of Bergen (Norway)

Roger Strand - University of Bergen (Norway)

Dominique Chu – University of Kent (UK)

Session # 17

Techniques to Support Long-term Strategic Decision Making under Deep Uncertainty for Energy and other Infrastructures

Description: Models and modelling have played an important role in the strategic national planning of infrastructure systems, particularly for energy. However, the consideration of deep uncertainty is often neglected, implicitly relegated to the traditional matrix of four scenarios. The multiple sources of uncertainty might include technological change, the evolution of markets and behavioural considerations, all of which are poorly considered in the use of scenarios. Often existing models offer little opportunity for incorporating a more detailed representation of uncertainty due to various reasons, but available uncertainty methods can add value in this instance.

In this session, we investigate, demonstrate and discuss the role of key tools and methodologies that modellers can use to cut through the swathe of uncertainty and hone in on the key drivers of model results. For example, global sensitivity analysis techniques, such as those implemented in the open-source Python library SALib, exist that are computationally efficient and informative. These techniques can be used to screen out unimportant input variables, identify interesting multi-dimensional input spaces and identify key drivers of results. These approaches are compatible and complementary with traditional scenario approaches and can add depth and robustness to an analysis for little upfront investment.

We invite contributions from those who have used uncertainty analysis and global sensitivity analysis methods to propagate uncertainty through a new or existing model, or to quantify uncertainty respectively.

Format: Presentation

Accepting Abstracts: Yes

Conveners:

Will Usher - University of Oxford/KTH Royal Institute of Technology, Stockholm, Sweden

Elko Koks - ECI, University of Oxford

Raghav Pant - ECI, University of Oxford

The Deep Uncertainties of Legislative Processes

Description: DMDU methods hold great promise for democratic societies striving for environmental, economic, social and political sustainability. At the same time, the processes of legislatures do not appear to be conducive environments within which DMDU concepts may flourish or even find meaningful footholds. Adaptive change is not their hallmark. What avenues would allow DMDU analyses and decision methods access to – and influence in -- legislative deliberations? What experience can we draw upon to guide us toward best practice? How can the gap between DMDU analysis and legislative practice be bridged so that the former can be brought fully to bear on the gaps that the latter is seeking to close?

This panel will introduce and provide substance to these themes. It will offer presentations on specific challenges confronting the DMDU-legislative nexus, real-world examples of structured engagements designed on DMDU principles that brought together disparate stakeholder groups, government agencies and community organizations, and examine the ability to endow policies with persistence across changes in government leadership. This combination of brief observational insights on legislative systems, testimony on actual practice and suggestions for DMDU practice to enhance the latter's survivability in contentious circumstances will lead into a panel to engage with the audience to draw out more fully lessons for the DMDU community to consider.

Format: Presentation + interactive session/discussion

Accepting Abstracts: Yes

Conveners:

Nidhi Kalra - U.S. Senate

Steven W. Popper - RAND Corporation

Robert J. Lempert - RAND Corporation