# INGSA-EUROPE: INCLUSIVE project final report

26 June 2024

## **Executive Summary**

Since its formation in 2014, the International Network for Governmental Science Advice (INGSA) has functioned as a collaborative platform for exchange, capacity building, and research across diverse global science advisory organisations and national systems. The network, which consists of both individuals and institutional members, has three established Regional Chapters (Africa, Asia, and Latin America & Caribbean) and two Thematic Divisions (Foreign Ministries and Réseau International Francophone en Conseil Scientifique).

As part of the development of a regional chapter in Europe, INGSA launched the 'INfluence of Culture and LangUages on Science adVice in Europe' or 'INCLUSIVE' project. The project's aims were to explore how language, culture and context affect the provision and use of scientific evidence; and to see how INGSA can best complement the well-established range of European science advisory mechanisms both inside and outside the EU. Informed by work in its early stages, the project increasingly focussed on the relatively unexamined impacts of language on science advice.

Based on rapid evidence reviews, expert discussions and interviews, the project identified five key findings. The Advisory Board noted that, as is often the case when considering science advisory systems, the implications of these findings will be highly context specific. Nevertheless, the project's participants hope that they will prompt valuable reflection, discussion and action and will be of interest to other regional chapters and national systems outside Europe.

- Language choice can open up or limit the range of evidence taken to matter and the selection of experts, shaping where evidence is sought and how it is received. Unexamined assumptions may lead to sources of knowledge being ignored, or advice being less effective in informing decisions than it could be.
- 2. As for International Relations and diplomacy more generally, language choice can affect the conduct and outcomes of negotiation and debate. For example, where those present are able to operate in more than one language, the selection of language can be used for effect and to exclude or include subgroups within the room.
- 3. Concepts such as 'risk' or 'uncertainty', known to be crucial in providing and communicating science advice, may be difficult to translate precisely across languages and in the relevant scientific and policy contexts. Those differences may affect scientific and political judgements, and the public reception of advice. For some advisory systems, it might be helpful to provide scientifically trained translators or translation services (as is done in the EU for legal translations).
- 4. The English language has a particular role because of its historic and widespread use as a shared means of communication between scientists for whom it is not their first language,

and its dominance in scientific peer reviewed publications. Some practitioners said that creating science advice in a language that is not the native tongue of anyone in the room can have benefits as, for example, it makes everyone slow down and check their understanding of each other. However, adopting any single language as the basis for communications brings its own challenges. In some contexts, it may have associations of colonialism, or it may create unfairness if discussions include participants for whom it is the native tongue and, for English-speaking nations, it may mean sources in other languages are insufficiently examined.

5. Finally, while language is important and its uses often relatively unexamined, in many cases practitioners said that the challenges they experienced due to translation were still less than those created by wider aspects of culture including framing, dominant narratives and politics. These challenges exist across languages, academic disciplines and across contexts and are, of course, widely considered in the practice and literature associated with science advice and discussed within INGSA. Looking across Europe's very wide range of national science advisory ecosystems, a particular challenge is when a smaller nation has to rely on experts recruited internationally, or on pre-existing advice that is not sufficiently culturally specific.

## **Project structure**

## Scope

The INCLUSIVE project began with an acknowledgement of existing debates around and contextual understandings of "culture". We agreed that the initial work should leave definitions sufficiently open to allow participants to respond based on their own understanding of the term. We anticipated that the contents of subsequent responses would make understandings of culture apparent and provide interesting insights for further action and discussion.

Similarly, "scientific evidence" was broadly constructed within the context of the project to include natural, physical, and social science as well as the arts and humanities. This definition functioned to incorporate the multi and interdisciplinary research that is used to inform policy in practice.

## Methods

The project, which ran from January 2023 to June 2024, was organised by INGSA in association with the International Public Policy Observatory, University College London (IPPO) and funded by the Québec government and the Fonds de Recherche du Québec. The project and development of the INGSA Europe chapter have been steered by an expert pan-European advisory board, led by Dr Claire Craig (INGSA Vice-President, Evidence) and co-ordinated by Rokia Ballo (PhD candidate, UCL STS).

The INCLUSIVE project was completed in two phases. In its first exploratory phase the project focused on two policy topics, gene editing and energy transition through the lens of nuclear energy, in four national case studies: Belgium, Norway, Poland, and Switzerland. National case studies were selected to gather insights from countries with a range of national, regional, and linguistic contexts. Policy topics were selected to give the project an analytic focus and because they combine scientific and technical aspects of advice with cultural and political considerations.

Based on learnings from phase one, the second phase focussed on the impact of language on the provision of European science advice through the lens of food safety science advice. Drawing learnings from a wider range of case study countries it looked at both the operational uses of language, including the mechanics of language use, multilingualism, interpreting, translation and how these are explicitly or implicitly deployed as well as uses of language as a proxy for cultural issues, including where the dominance or underrepresentation of languages may trace the identities of some groups relevant to the policy context. The policy topic of food safety was chosen because it combined scientific and technical questions alongside a wide range of cultural and political concerns.

Throughout, the project's approach was shaped by INGSA's success as an evidence-informed, but practice-focused network. As such, additional methods used by the project included syntheses of peer reviewed and grey literature in multiple languages, structured expert interviews to gather learnings from practitioners, an in-person workshop and roundtable discussions led by experts from multiple European countries. For in-person events the project benefited from the support of MPA students from UCL's Science, Technology, Engineering and Public Policy department (STEaPP).

This report draws on and identifies these evidence sources in the following format. Learnings from practice shared by the Project Advisory Board [identified as 'AB']; 8 semi-structured interviews [SSI]; evidence from 3 expert led workshops and roundtables [WR] and from 3 commissioned evidence synthesis papers [SPn].

Readers should note that, while the evidence synthesis papers include data which has been subject to peer review, other findings are not peer reviewed but are based on first-hand accounts from practitioners.

# Themes and findings

The project's material can be organised into several themes. These are outlined below, showing how the themes link to the different types of evidence, and including illustrations. Several of the themes discuss matters that extend well beyond the specifics of science advice, such as the role of languages in politics and power. After outlining the themes, this part of the report summarises the project's findings for the future provision of science advice.

## Multilingualism in Europe - historical context

- Europe's historical trajectory has created a rich construct of languages, reflecting the continent's cultural, political, and social heterogeneity. [SP2]
- The Holy Roman Empire's linguistic diversity, the linguistic imperialism of colonial periods, and the subsequent rise of nation-states each contributed to the multilingual character recognised today, with the added challenge of immigration and concerns for heritage languages that stem from outside the Union. [SP2]
- The practice and promotion of linguistic diversity continues in contemporary Europe. For example, the European Union (EU) which itself advocates for multilingualism as a means of preserving cultural heritage and ensuring equal representation within its institutions. [SP2]

#### Language choice and plurilingualism in science and policy

- Language choice extends beyond communication. It can also reflect and shape political attitudes, identities, and even national policy. The choice of language can affect understanding and shape power dynamics. [SP2]
- Plurilingualism can support inclusive and representative dialogues, including the communication of a broader range of scientific knowledge. It may also create further opportunities for countries and institutions to learn from best practices across nations. [SP1] [SP2]
- The literature and practitioner accounts highlight the need for science advice to be clear, accurate, and accessible to effectively bridge the gap between scientific evidence and policy decisions for all stakeholders. As such, language choice becomes an important factor in topics such as:
  - Facilitating collaborations across nation-states, ensuring that scientific findings and discussions permeate political borders.
  - Enhancing communication among practitioners, aiding them in navigating complex scientific and technical jargon.
  - Improving practitioners' career opportunities by broadening their reach and understanding, especially concerning grey literature available primarily in local languages. [SP2]

• However, practitioners cautioned that while working in one language might improve access, and knowledge mobilisation, "it doesn't always guarantee clarity". [WR]

#### **Translation**

Translation, while essential for bridging linguistic divides between science and policy, presents its own set of challenges.

- Some practitioners noted that important context-specific knowledge will often be published in local languages, especially where that knowledge is close to practice. [WR]
- The use of AI translation tools was reported as being quite widespread and may play a significant role in increasing access to relevant information. For example, some academic journals have started to provide abstracts translated into other languages through automated tools. [SP2]
- However, the technologies available and the practical understanding of how to use them, are far from settled (and it should be noted that both were changing during the lifetime of the project so comments here are very much of their moment). For example, challenges may include the accuracy and trustworthiness of AI generated evidence. Advisors must also navigate known risks regarding novel technologies replicating existing biases within academic research and publishing, that can limit the range of evidence supplied to decision makers. This risk particularly applies to context-specific evidence which can more quickly develop nuanced understandings of complex problems.<sup>1</sup> [WR]
- Additionally, despite increased capacity for translation or Natural Language Processing, precise translation of scientific material remains a complex and challenging undertaking. Largely because, beyond literal translation, it requires the transposition of cultural meanings, scientific terminologies, and context-specific nuances. Inaccuracies in scientific translation can lead to significant misrepresentations, potentially influencing policy decisions adversely.
  - For example, in 2021, the Virginia Department of Health website (US), used a marketing firm that did not offer translation services to supply Covid-19 and vaccine information to Spanish speakers. They reportedly used Google Translate, and instead of "the vaccine is not required", it read as "the vaccine is not necessary". Examples like this suggest a need for high-quality, precise translation services and the incorporation of linguists experienced in scientific terminologies to mitigate these challenges. [SP2]
- The importance of translation was echoed by practitioners who noted that more than just a *"mundane activity"* translating a briefing into a national language changes the meaning which can have real world implications for policy *"people who do this are artists of sorts"*.
   [WR]

<sup>&</sup>lt;sup>1</sup> For additional work on the potential uses and pitfalls of AI tools within science for policy see the work of INGSA members Christ Tyler, Karen Akerlof et al.: <u>https://www.nature.com/articles/d41586-023-02999-3</u>

- "The issues are not really a matter of direct translation but more how language is used. For example, in Dutch the people are quite direct, you will print a warning quite explicitly but giving the same advice in English... a warning is received differently and will need to be communicated more subtly." [WR]
- "Most advisors speak English, so translation is less of an issue it is more about the cultural understanding of the context you are working in. For example, understanding the reality for different stakeholders (farmers, consumers etc.) but also normal practices around a policy topic, e.g., handling and preparing food." [WR]
- "In the Danish context the switch to English might even be a good thing [and] would allow grey literature to be published more widely." [WR]

### Scientific language

- In scientific discourse, in addition to language choice, how the chosen language is deployed can either facilitate or hinder the conveyance of information, influencing how discussions are conducted and understood. [SP2] For example the use of jargon or complicated terminology in science communication can lead to miscommunication or a misinterpretation of the intended message and can be a challenge for implementing advice. [SP1]
- As such, it was sometimes felt that the difference between languages was less than language differences between professional groups, such as, policymakers and scientists [WR]
  - "Language is very difficult not only between different languages, but also between organisations, policy levels [and] between countries. Even though it's the same language, it's not necessarily the same meaning. And that also limits sometimes or create[s] some pitfalls in using research from other cultures, to put it like that." [SSI]
- In addition to language choice, the language used in discourses [such as between scientists and decision makers to inform policy] mirrors cultural norms and identities, shaped by underlying language ideologies that can either be exclusive or inclusive. [SP3]
- Language affects the debate through the narrative that gets constructed. For example, the main argument for gene editing is whether it is the same as GMO or not. [RT2]
- Similarly, a combination of language choice and scientific language was said to impact the narrative in risk assessments
  - "For [risk assessment] experts, the equation is 'hazard X exposure', but in Polish, for example, we don't have a word for hazard. So, it is hard to explain the meaning of this assessment when we don't have simple words to translate or communicate the message. One way to overcome this would be to change the narrative and appeal to other values, for example" move away from "evaluating hazards of GMO/gene editing etc" and instead talk about "mitigating food safety risks". [WR]

• The language being used may also affect the formation of evidence, either due to technical requirements such as how words are formed in a language (e.g., where a particular term becomes very long it may be less convenient for it to be used) or through cultural habits of language use, such as the degree of directness.

## English as the "lingua franca" of science

- English has a well-established role as the (current) "language of science", helping to facilitate scientific knowledge exchange. [SP2]
- However, the appropriateness of using English as the language of first choice in the provision of science advice depends very much on the context. [SP3]
- On one hand, some argue that the English language can be an "easy and cost effective" medium of exchange, or as providing "equal footing" for negotiations. [SP3]
  - "If [it] is perceived as being important to make certain of these distinctions, then we probably switch to English. Right, which is then the lingua franca. And I think everybody is used to the vocabulary in English regarding uncertainty." [SSI]
- It is also suggested that when spoken in a non-native setting, the use of English allows for "emotional distance" and may lead to "cooler heads" especially when discussing topics that may provoke controversy. [SP3]
- However, it was also noted that "hidden barriers" can emerge from using the lingua franca "rendering proposals less palatable to the other side". In this context, debating issues that have an inherently "emotive" aspect, in the lingua franca, can trigger backlash and even be construed as insulting. [SP3]
- The central concern regarding the use of English is its perception as a "triumph of globalisation and a loss of identity" and furthermore that English is not "neutral" but rather imposed and benefits "natives" at the expense of others. [SP3]
  - "I introduced not only for myself, but for others, English as the language of operation. And, well... when I'm talking about English, it's not English... so I learned a little bit about the peculiarities and the difficulties of speaking real English... the hidden ironies and so on, which had subtle changes in the meaning and the context and the background of what you said. And of course, this is not possible if all people in the room are non-native speakers." [SSI]
- Because language functions as a reflection of societal values and norms, the prevalence of English in scientific discourse, often referred to as the "English Effect," has far-reaching implications, potentially overshadowing other languages and cultural perspectives. [SP2]

### Language as a proxy for culture

Language use both discursively and practically, is sometimes a proxy for culture and context. Discussions of language often reveal cultural differences and social attitudes towards those differences which both science advice and politics must account for.

- The literature also suggested that if scientific advice is devoid of cultural considerations, it risks alienation, reducing the impact of scientific evidence on policy. Recognising language as a proxy for cultural issues can guide more effective communication strategies, ensuring that the context surrounding scientific data is appropriate and relatable for diverse audiences [SP2]
- The relationship between language and culture is also visible through the different meanings created around specific words. Meanings are socially and culturally specific, they define how individuals use and respond to these words, as well as how they are learned [SP2]
  - "And then sometimes there are quite a lot of discussions about certain descriptions, or the use of some words that have quite different meaning[s] well, not as much a different meaning but different nuance. For example, even if you translate it, and then I'm going to use a very heavy example, is the difference between collaboration and cooperation. Because if you translated literally in Dutch "collaboration", that was the word used for people helping the Germans in the Second World War. So that has a very big meaning that we won't use" [SSI]
  - "In some languages there is one word to describe a concept, but in others you need a longer explanation to communicate the sense or "emotional load" of that word." Words such as <u>hazard</u>, <u>risk</u> or <u>warning</u> were good examples of this. Also, the use of caveats that express a measure of uncertainty e.g., "it may be", "could or might be", which were identified as difficult to translate with the same emotional or cultural meaning. [WR]
  - "There are differences in how we might communicate what "GMO free products" are. Similar to "alcohol free" when you look at ingredients it does not always mean 100% free. We are often dealing with marginally different, but culturally and politically significant, levels of tolerance we are working with." [WR]
- Language and culture were also thought to be observably linked by the way that experts express themselves. For example, French experts suggested they might express themselves in a less assertive manner (e.g., more 'uncertainty' embedded / or perceived to be) compared to English experts, or less bluntly than Dutch experts, for example. [WR]
  - "Polish communication is much more direct and so criticism can be delivered more honestly than British or American English. Polish language is also more descriptive. On average translations are 20 - 30 times longer. So, words are more direct and emotionally laden - in the scientific context. Otherwise, it will sound strange to the

Polish ear. Polish communication related to science or science advice does use humour but is quite different and often relates to self-depreciation, satire, or the absurd." [WR]

- Some European nations have developed policies around language to preserve linguistic diversity or protect more marginal languages. However, these policies are also shaped by historic and political contexts and have been criticised for potentially fostering a hegemony of widely used languages and undermining linguistic diversity instead.
- In regions like Catalonia, language choice reflects sociopolitical dynamics, often mobilised to
  assert political attitudes and identities. In Belgium, bilingual universities no longer exist, and
  education is coordinated by the regions instead, leading to the development of distinctive
  approaches to disciplines, including political science and policy. These examples underscores
  the cultural and political weight that language choice can carry, influencing not just
  communication but also identity expression and group dynamics. [SP2]
- Socio-political culture was also said to inform how advisory structures were organised. For example, in Belgium where the advisory structure reflects the country's consensus approach to policy development, by ensuring that a range of language and ideological interests are represented.
  - "A second major dimension that helps you understand the system is its conceptual nature. Belgium is a consensus style knowledge regime and advisory system. Which means also that experts are really sampled across linguistic partisan lines for instance. So also in Parliament, you see that expert hearings [are] always organised along these lines, and experts invited [are] assumed to represent different ideologies, different languages. The [science advice] delivery system, very much resembles this political system." [SSI]
- This was compared to the Polish case where it was noted that the current system is largely unstructured and could be said to be reliant on personal relationships between ministers and scientists. Ideas of science as an "individual creative activity" which dominate public thinking were suggested as possible explanations for the region's ad-hoc and individualistic approach to science advice compared to more deliberative and systematic systems. It was noted, however, that in selecting experts here an attempt is made to include a range of experts from different social and ideological communities. [SSI] [WR]
  - *"The perception of what science [constitutes] is very broad. And it includes, with quite significant weight [any] type of intellectual activity. [For example] anything that a scientist write is considered to be scientific work, which in my perception is definitely not how science is perceived in, for instance, Anglo Saxon countries. [SSI]*
  - "[When] making science advice to the government, they don't always invite the top experts to cover all the necessary disciplines, but rather, scientists representing different communities. So, to balance the interests and balance conflicting interest[s]. So, it's less [about] having complementary expertise, to fill the scientific picture, but

to take everybody on board, so that when people have different conflicting interests, they actually balance each other." [SSI]

- And additionally compared to the more decentralised approach reported in the Swiss case study, also shaped by the country's social and political culture.
  - "We specifically don't have a chief science advisor, such as you would have in many Anglophone speaking countries, specifically [due to] the political thinking and political structure in this country...which is very decentralised, it's very bottom up at the political level as well. On top of that, we have a very democratic system in the sense that we have referendums, and we have tools available. And so every Swiss person would think of herself or himself as being able to contribute something to the shaping of the local, regional or national condition." [SSI]
- Language also appeared to be a proxy for cultural differences across Swiss language communities when participants spoke about responses to the Covid-19 pandemic
  - "When it comes to regulations imposed by the government, for example mask wearing or the vaccine, there was a certain cultural element which came into whether people were accepting those measures or not. It doesn't specifically have to do with the language issue, but more with the nature of how the political system is understood in those areas. And in the French speaking part, they tend to be more closely associated with France. And since France is much more centralised as a government, every decision is basically taken in Paris and the provinces have got little say, there's a tendency to obey the government much more compared to the German speaking part. And all the things that I'm saying sound a bit black and white, but I have to accentuate it to polarise it in a way." [SSI]

#### Language and power dynamics

- Language can act as a form of soft power, influencing how scientific and political messages are conveyed and received as well as who has a voice or remains unheard [SP2] [SP3]
  - "[in meetings] you quickly scan the room, and you know that some of the people are fluent in Dutch. Is it from Brussels this sort of speak, whatever. But if they're really from the Walloon, Walloon, Luxembourg part, they might understand some German, but their Dutch is rusty. Right? And then, depending on what your aim is, you either accommodate that, or if it's more of an adversarial relationship or a conflict, then you speak Dutch, knowing that they will not understand. But that is a strategy that is really not usual in the scientific field. In the political field, that's of course more prevalent there." [SSI]
- The Belgian case study illustrated this point. As part of a "historical and protracted language struggle here, language remains a controversial topic and source of conflict in Belgian politics and society to this day" [SP3]

- Despite efforts to maintain equality of languages in Belgium, non-French speaking communities, particularly Dutch (Flemish) speakers, may feel the need to nurture or 'defend' their language across education, research, and politics. [SSI]
  - "Within Belgium, we have [the] Flemish speaking part, [the] French speaking part with the whole history behind us. And that history [has] made us in Flanders, in different degrees, [also] depending on political beliefs and whatever, that we really need to cultivate speaking Dutch, or Flemish. That Dutch has to be cultivated, has to be nurtured. That we need to take care of our language. Because we [have] been, and it's a big word, but in conflict as a language, we have to compete with French within our country." [SSI]
- Belgian interview participants also noted that language choice in this context was sometimes used to signal political reach or power and as a proxy for cultural differences. Individuals may have to select the language they choose to use in any specific group or meeting to achieve the outcomes they want.
- Also linked to discussions of language and power was the place of, so called, minority languages both in the literature and practice whereby some languages, and therefore the communities they represent, may be overlooked in the development and use of advice. [SP 1-3]
  - "We [Switzerland] have officially these three language regions, officially a fourth one, but it's not more than 100,000 people that [are] speaking Romansh so it is not present in science advice. And to be honest, also the Italian language is not present, in principle, in science advice." [SSI]
- In some contexts, the promotion and use of minority languages was also described as a form
  of political resistance. Language policies can also have implications for social justice and the
  recognition of linguistic rights. For instance, the use of Welsh as a language of resistance has
  been an important component in identity building of language learners past and present.
  [SP2]
- In a broader context, challenges can arise from a "monolingual view of modernization and internationalization" in which a certain language becomes the "technical" global language, as opposed to the "emotive" native language. Here language inclusion/exclusion can become a proxy for distinctions between local/indigenous knowledge and scientific/expert knowledge. [SP3]
- "Language imperialism" was a recurring theme in the literature. Here, the concept did not necessarily refer to English or the lingua franca but also related to how specific languages can be associated with legacies of imperialism or of oppression, whether that be by external powers or even internally by the ruling elite. [SP3]

#### **Findings**

As presented in the Executive Summary, five key findings for the provision of advice emerge from the material contained in the themes above.

1. Language choice can open up or limit the range of evidence taken to matter and the selection of experts, shaping where evidence is sought and how it is received. Unexamined assumptions may lead to sources of knowledge being ignored, or advice being less effective in informing decisions than it could be.

2. As for International Relations and diplomacy more generally, language choice can affect the conduct and outcomes of negotiation and debate. For example, where those present can operate in more than one language, the selection of language can be used for effect and to exclude or include subgroups within the room.

3. Concepts such as 'risk' or 'uncertainty', known to be crucial in providing and communicating science advice, may be difficult to translate precisely across languages and in the relevant scientific and policy contexts. Those differences may affect scientific and political judgements, and the public reception of advice. For some advisory systems, it might be helpful to provide scientifically trained translators or translation services (as is done in the EU for legal translations).

4. The English language has a particular role because of its historic and widespread use as a shared means of communication between scientists for whom it is not their first language, and its dominance in scientific peer reviewed publications. Some practitioners said that creating science advice in a language that is not the native tongue of anyone in the room can have benefits as, for example, it makes everyone slow down and check their understanding of each other. However, adopting any single language as the basis for communications brings its own challenges. In some contexts, it may have associations of colonialism, or it may create unfairness if discussions include participants for whom it is the native tongue and, for English-speaking nations, it may mean sources in other languages are insufficiently examined.

5. Finally, while language is important and its uses often relatively unexamined, in many cases practitioners said that the challenges they experienced due to translation were still less than those created by wider aspects of culture including framing, dominant narratives and politics. These challenges exist across languages, academic disciplines and across contexts and are, of course, widely considered in the practice and literature associated with science advice and discussed within INGSA. Looking across Europe's very wide range of national science advisory ecosystems, a particular challenge is when a smaller nation must rely on experts recruited internationally, or on pre-existing advice that is not sufficiently culturally specific.

## Conclusions and next steps

The project has identified several areas presented here for consideration by those engaged in, or reflecting on, science advice within a wide range of contexts within Europe. Many of the findings are also highly relevant to members of other INGSA chapters. The Project's participants hope that the report will prompt valuable reflection, critique, discussion and action.

During the project, participants also reflected on whether and how a European Chapter of INGSA might add value to the extensive range of networks and systems, both formal and informal, that exist within Europe already. Many took the view that INGSA can provide complementary support to such pre-existing arrangements and that its added value is linked primarily to its informality, its provision of opportunities for practitioners and academics to mix, and its focus on exchanges between those practising within or studying national systems. There was also encouragement for INGSA to go further to engage with early career academics and advisors.

INGSA Europe intends to continue its work, experimenting with different opportunities. Anyone wishing to find out more should look, in the first instance, at the INGSA website: <a href="https://ingsa.org/chapters/europe/">https://ingsa.org/chapters/europe/</a>.

# **Project participants**

Project Lead: Claire Craig, INGSA Vice President (Evidence) Project Coordinator: Rokia Ballo, Science and Technology Studies Researcher, INGSA and UCL

#### **Project Advisory Board**

Name	Role and Affiliations
Rémi Quirion	INGSA President and Chief Scientist of Québec
Kristiann Allen	Executive Secretary, INGSA
Virginie Auger	Senior advisor (Conseillère principale), INGSA and International Affairs
Joanna Chataway	Professor and Head of Department of Science Technology, Engineering & Public Policy, University College London
Aidan Gilligan	Media consultant, SciCom - Making Sense of Science
Anne-Greet Keizer	Senior Research Fellow and International Liaison, The Netherlands Scientific Council for Government Policy
Kristian Krieger	Head of Sector Feedback to Policy & External Communication, European Research Executive Agency (REA)
Ralph Maloumby Baka	Research and Innovation Attaché, Government of Québec
Jean-Christophe Mauduit	Lecturer - Science Diplomacy, University College London
Grant Mills	Programme Officer, INGSA
Jan Marco Mueller	Coordinator Science Diplomacy and Multilateral Relations, European Commission, DG Research and Innovation
David Budtz Pedersen	Professor of Science Communication and Impact Studies, Aalborg University
Roger Pielke Jr.	Professor, University of Colorado Environmental Studies Department
Flavia Schlegel	Independent Strategic Consulting, Science Governance Partnership
Ayden Wilson	Operations Manager, International Public Policy Observatory (UCL)

#### **Research Assistants**

- Itegbeyogene Patrick Ezekiel, PhD University College London, Department of Science Technology Engineering and Public Policy
- Géraldine Bengsch, PhD University of York, Department of Language and Linguistic Science
- Nathan Alan-Lee University College London, School of Slavonic and East European Studies

#### Interview participants

Name	Role and Affiliations
Prof Janusz Bujnicki	Professor of Biology, International Institute of Molecular and Cell Biology
Peter De Smedt	Head of Unit Strategic Insights & Analysis
Prof Gerd Folkers	Professor in Pharmaceutical Chemistry
Dr Valérie Pattyn	Assistant Professor at the Institute of Public Administration
Dr Roger Pfister	Head of International Cooperation
Prof Dr Ortwin Renn	Scientific Director - Institute for Advanced Sustainability Studies (IASS)
Prof Marc Van Ranst	Professor of Virology
Wim Winderickx	Policy advisor with the Department of Economy, Science, and Innovation

#### Workshop participants

Name	Role and Affiliations
Alessandro Allegra	Policy Assistant to the DDG, European Commission - Science, Research & Innovation
Kristiann Allen	Executive Secretary, INGSA
Virginie Auger	Senior advisor (Conseillère principale), INGSA
Rokia Ballo	Project Coordinator, INGSA
Marleen Brans	Professor, KU Leuven Public Governance Institute
David Budtz Pedersen	Professor, Aalborg University
Claire Craig	Vice-President (Evidence) and The Provost, INGSA and Queen's College Oxford
Peter De Smedt	Director, Flanders Chancellery and Foreign Office
Tracey Elliott	Executive Director (interim), European Academies of Science Advisory Council (EASAC)
Itegbeyogene Ezekiel	PhD Student / INCLUSIVE project research assistant, UCL
Gerd Folkers	Prof (Em), ETH Zürich
Aidan Gilligan	CEO, SciCom - Making Sense of Science & INGSA Planning Group Member
Anne-Greet Keizer	Senior research fellow and international liaison, Netherlands Scientific Council for Government Policy
Kristian Krieger	Policy Officer, European Commission
Jean-Christian Lemay	Research and innovation attaché, Québec Government Office in London
Jean-Christophe Mauduit	Lecturer, University College London
Natasha McCarthy	Associate Director, Engineering Policy, Royal Academy of Engineering

Name	Role and Affiliations
Jan Marco Mueller	Science & Technology Advisor, Strategic Policy Planning, European Commission
Aziz Naji	Programme Manager, Belgian Science Policy Office
Valérie Pattyn	Associate Professor, Leiden University
Roger Pfister	Head of International Cooperation, Swiss Academies of Arts and Sciences
Rémi Quirion	Chief Scientist of Quebec and INGSA president
Jørn Rattsø	Professor, Norwegian University of Science and Technology
Ortwin Renn	Academic expert, Research Institute for Sustainability - Helmholtz Center Potsdam
Flavia Shlegal	Consultant, Independent
Naomi Simon-Kuar	Project officer, INGSA
Ignė Stalmokaitė	Policy Officer, Council of the Baltic Sea States Secretariat
Chris Tyler	Associate Professor, UCL STEaPP
Marc Vanholsbeeck	Head (inter)federal & international coordination, BELSPO
Simon Whitfield	Deputy Director, Government Office for Science (UK)
Laura Wilton	Head of International Affairs - Europe and Asia, The Royal Society
Ugis Zanders	Advisor, Council of the Baltic Sea States Secretariat

## Roundtable participants (Food Safety)

Name	Role and Affiliations
Nathan Alan-Lee	PhD Researcher - School of Slavonic and East European Studies, University College London and INGSA EUR Research Assistant
Hermann Broll	Senior Scientist, Unit Effect-based Analysis and Toxicogenomics - German Federal Institute for Risk Assessment International Affairs (Food Safety Department)
Janusz M. Bujnicki	Professor of Biological Sciences - International Institute of Molecular and Cell Biology in Warsaw and former member of the EU GCSA
Niels Halberg	Director - Danish Centre for Food and Agriculture
Anja Hansen	Senior Consultant - Ghent group: science-based advice in Agriculture and Environment, Aarhus University
Lieve Herman	President - Scientific Committee of the Belgian Food Safety Agency and Vice Chair - EFSA BIOHAZ Panel
Jacek Kolanowski	Chairman - Young Academy at the Polish Academy of Sciences
Maarja Mathias	Food Safety Educator and Consultant at Foodinspect OÜ
Jean-Christophe Mauduit	Associate Professor (Science Diplomacy) - University College London (STEaPP) and INCLUSIVE project advisory board

Robin May	Chief Scientific Advisor - UK Food Standards Agency and Professor of Infectious Diseases, University of Birmingham
Erik Millstone	Emeritus Professor - Science Policy Research Unit (SPRU) Sussex, UK
Thomas Plesner	Advisor and Quality Coordinator - Ghent group: science-based advice in Agriculture and Environment, Aarhus University
Guy Poppy	Former Chief Scientific Advisor - UK Food Standards Agency
Ruta Śpiewak	Researcher - Polish Academy of Sciences, Institute of Rural and Agricultural Development
Anthony Smith	Communications professional - Department of Communication and Partnership at the European Food Safety Authority (EFSA)
Ignė Stalmokaitė	Policy Officer - Council of the Baltic Sea States and Guest Researcher at the University of Oslo
Steve Wearn	Chairperson - Codex Alimentarius Commission (CAC)
Ugis Zanders	Advisor - Council of the Baltic Sea States

#### Facilitators

- Nell Auchincloss MPA Student UCL STEaPP
- Fernando Fajardo MPA Student UCL STEaPP
- Alison Zihan Fang MPA Student UCL STEaPP
- Aya Abdin MPA Student UCL STEaPP
- Yihang Peng MPA Student UCL STEaPP