Diversity in science advice for strengthened trust, public confidence and legitimacy

SAPEA-YASAS-ALLEA workshop

Friday 29 May 2026, 09:00-12:00
Staszic Palace, Maria Skłodowska-Curie Hall, Warsaw, Poland

Workshop report

Background

On 29 May 2026, SAPEA organized a workshop on diversity in science advice, jointly led by YASAS and ALLEA. The event took place as part of a three-day programme of events that also included the ALLEA Public Conference and General Assembly, as well as meetings of ENYA (European National Young Academies) and the YASAS General Assembly. The workshop brough together 80 attendees, including academics and science–policy practitioners, who had the opportunity to exchange experiences, discuss challenges, and identify practical approaches for strengthening inclusive, resilient, and trustworthy science advice systems.

This SAPEA workshop examined how growing political, financial, and societal pressures affect the provision of science advice, including its legitimacy and credibility. These pressures influence not only the processes of advice, but also who participates, whose expertise is recognized, and the conditions under which experts contribute. Participants were invited to reflect on the tension between the increasing expectation that science advice draws on diverse expertise to address complex challenges, and the fact that the geopolitical reality and other pressures may be limiting the range of voices involved.

1. Welcome and workshop objectives

After the opening words of Paweł Rowiński, President of ALLEA and Vice-Chair of SAPEA, and Noel de Miranda, President of YASAS and member of the SAPEA Board, the event was moderated by Jovana Milic, Professor of Materials Chemistry at the University of Turku, Finland and member of the YASAS Executive Board.

Jovana Milic introduced the workshop by situating it within a broader programme of work to build capacity and engagement at the science-policy interface, including for early-career researchers and displaced scientists. The workshop objectives for the day were outlined: to

discuss concrete examples of how current political, funding and societal pressures affect the diversity of participation in science advice, and the resulting impact on trust and legitimacy; to exchange experiences and good practice in support of inclusive participation, contributing to more resilient systems; and to identify concrete actions and opportunities that reinforce a culture of free, independent and resilient science advice.

The moderator introduced the keynote speaker, Professor Peter Maassen, Professor in Higher Education Studies at the University of Oslo.

2. Keynote: Science advice under pressure: political polarization, geopolitical turbulence, and institutional conditions

Professor Maassen set the scene around three broader issues that are putting pressure on science advice:

Political polarisation: disagreement between political blocs is growing, alongside claims of bias in science advice in parts of the political landscape and a documented erosion of academic freedom across Europe, compounded by the current US administration's efforts to dismantle EDI policies. Eurobarometer data show consistently positive (80%+) public attitudes towards science overall, but a growing share of European citizens perceive scientists themselves as too narrowly focused, pointing to a widening gap between trust in science as an idea and trust in scientists as people.

Geopolitical turbulence: Since 2023 the EU has positioned itself as a "geopolitical union", increasingly viewing science through a security lens with visible shifts from "as open as possible" to "closed as necessary". Research security has become a stated policy priority, and critical technology areas (semiconductors, AI, quantum, biotech) are being treated as requiring the tightest control over knowledge transfer. Three geopolitical dimensions frame this shift: superpower rivalry between the US and China, with the EU as a potential third superpower; planetary threats that still require collaboration even with rivals; and growing assertiveness from the Global South demanding equal partnership rather than aid-based relationships, visible in the EU relations with Africa and Latin America.

Institutional conditions: To illustrate how science advice landscapes are fragmenting institutionally, Maassen traced the evolution of Norway's salmon policy. He showed how a once simple, transparent system (one ministry, two science institutes) has become fragmented across many ministries, agencies and institutes, illustrating the growing complexity that science advice systems generally must now navigate and increasing the difficulty of tracing which advice drives which outcome.

Professor Maassen concluded that the relatively stable, long-dominant international science and political order can no longer be assumed. New models for science advice are needed that fit this reality, and the push to fold science into the security domain, at the cost of its independent position, needs to be actively resisted.

3. Lightning talks framing the breakout group sessions

Theme 1: Academic freedom, inclusion and the credibility of science advice

Professor Mangala Srinivas, Full Professor of Cell Biology and Immunology at Wageningen University & Research and Deputy Chair of the Group of Chief Scientific Advisors, outlined the young academies' movement from its 2016 origins to the 2020 discussions with SAPEA on forming YASAS, noting that support was "not always unanimous", even recently.

The breakout questions were framed around whether science advice can be legitimate without academic freedom and inclusivity, drawing on recent report finding that the public often questions who is giving advice, whose interests it represents, and whether the process is transparent. Professor Srinivas closed with the remark that science advice "needs to be not only excellent but open, plural, and safe to participate in", and that "narrow rooms produce narrow answers, and narrow questions".

Theme 2: Funding, compliance and mobility: constraints on participation in science advice

Dr. Koen Jonkers, Head of Unit at the European Commission's JRC Centre for Advanced Studies and Chair of the JRC Scientific Committee, noted that top science advisors remain largely male, middle-to-upper-class and middle-aged, although Horizon Europe has improved gender balance: women now coordinate 32% of projects (up from 24%), and hold 53% of seats on boards and expert groups. He also cautioned that gender equality plans often add workload for women and overlook other underrepresented groups.

He also highlighted structural barriers to participation: mobility across disciplines, sectors and borders, essential for good advice, is shaped by socioeconomic background, with marginalised groups facing funding, visa and network barriers. Interdisciplinary researchers face career disadvantages in a system still organised around single disciplines, while indigenous and local knowledge holders are often excluded due to limited capacity to manage grants.

Theme 3: Incentives, risks and recognition for engaging in science advice

Dr. Anna M. Górska, Assistant Professor, Kozminski University and Head of the Research Center for Women and Diversity in Organizations, Poland, argued that science advice is treated as a "public good" while reward systems actually recognise publishing, grants and teaching, making advisory work invisible, unpaid, and burdensome, especially for early-career researchers.

She noted that access to advisory networks is often based on existing visibility and trust, reinforcing the same voices, while equally relevant expertise from smaller countries, non-dominant disciplines or interdisciplinary backgrounds stays invisible. Risks such as political pressure, public criticism and online harassment are unevenly distributed, falling most on those least protected by seniority, status, language or network position. She concluded that while science advice requires courage, it should not depend on it without institutional support.

Theme 4: Diversity of expertise, interdisciplinarity and legitimacy of science advice

Dr. Silvio Suckow, Research Associate, Weizenbaum Institute, framed interdisciplinarity as a "boundary game" built on three moves: opening up complex problems that resist any single clear framing; holding the resulting tensions rather than rushing to a comfortable consensus; and closing the process responsibly to produce trustworthy knowledge. He stressed that diversity extends beyond disciplines to include gender, social background, career stage and lived experience, which should be explicitly defined in any interdisciplinary process.

He distinguished "solution knowledge" from "orientation knowledge", which is contextualised knowledge suited to non-experts, applied wisely to a specific situation, rather than a single definitive answer. He concluded that diversity itself is a quality mechanism: visible tensions and disagreements enhance, rather than weaken, credibility.

4. Breakout discussions

Following the lightning talks, participants split into four parallel groups to explore each theme in depth. Each group was asked to focus on three takeaways and concrete recommendations.

Breakout 1 - Academic freedom, inclusion and the credibility of science advice

Key takeaways:

- Participation of underrepresented groups requires active incentives (recognition, appreciation, resources), it can't be assumed people will simply step up.
- Inclusion is undermined by a biased framing that links diversity to lower quality; in reality, exclusion (not inclusion) is the threat to scientific credibility.
- Genuine inclusion is more than an invitation; it requires safe spaces, transparency about who is missing, and protection from political or legal backlash.

Recommendations:

1. Build formal support/protection structures for advisors whose conclusions do not fully align with the position of the relevant institution or organisation or contradict prevailing political positions (including legal defence mechanisms). Protection is also required to avoid the risk of science being made a scapegoat if political decisions backfire or fail to gain broad public support.

2. Increase transparency and public engagement around how scientific advice is produced, communicating its processes and decisions transparently, and how its impact is monitored.
3. The scientific advisory community needs to engage in a debate about what genuine inclusion looks like, and the resources and methods required to ensure that underrepresented groups feel heard and can identify with the process. This raises the question of how 'underrepresented' should be defined and how under-represented groups can be identified.

Breakout 2 - Funding, compliance and mobility: constraints on participation in science advice

Key takeaways:

- Administrative and regulatory requirements can limit access to funding and participation opportunities (e.g. visa-related barriers), disproportionately burdening early- and mid-career and non-EU researchers.
- Factors such as institutional prestige, nationality, ethnicity and disciplinary background can affect perceptions of credibility and expertise, reinforcing existing inequalities rather than reducing them.
- Uniform evaluation frameworks often fail to account for differences in circumstances and constraints such as mobility restrictions, financial barriers, career pathways and personal circumstances, reinforcing barriers to participation.

Recommendations:

1. Advisory work should be formally recognised as a valuable professional contribution in recruitment, promotion, and evaluation processes, which would enable early- and mid-career researchers to contribute their expertise beyond academia without jeopardizing their career progression.
2. Academic networks and organisations should play a more active role in addressing barriers to participation, including advocating for fairer visa procedures and more flexible, inclusive funding schemes.
3. Academic networks should contribute to the development of shared frameworks for identifying and supporting "excellence" in science advice that explicitly account for interdisciplinarity, mobility, financial, and career-structure barriers.

Breakout 3 - Incentives, risks and recognition for engaging in science advice

Key takeaways:

- Science advice is largely invisible, unpaid, voluntary extra work rather than legitimate professional work, that falls hardest on early-career researchers, who also face the

greatest risk of harassment or being labeled "too political", and making their participation more difficult.

- Not everyone wants visibility/recognition for advisory work; several reasons were highlighted including: insecure career positions, lack of funding and institutional recognition, and opposition from supervisors and mentors.

  exposure can itself be a risk, so support should come from institutions rather than relying on individual courage.
- Existing reward systems (grants, publications) are blind to science advice activities and contributions, which affect the inclusion/presence of diverse groups and delegitimizes the work in the eyes of peers and supervisors.

Recommendations:

1. Shift responsibility from individual bravery to institutional protection; universities and academies should protect researchers engaging in advice work.
2. Academy networks involve in the provision of science advice should make sure it is inclusive.
3. Encourage organisations receiving science advice to actively demand diversity in who provides it, creating external pressure for inclusive practice.

Breakout 4 - Diversity of expertise, interdisciplinarity and legitimacy of science advice

Key takeaways:

- Tension between choosing only the most established, top-tier experts on a topic versus also including "bridge builders", younger voices with fresh, less institutionally established perspectives.
- Both interdisciplinarity and science advice require significant time to do well, with time availability being one of the key challenges for those engaging in these activities.
- When advice is interdisciplinary, it becomes difficult for a single reviewer to judge its quality, since one person is rarely equipped to assess such a broad range of underlying knowledge bases.

Recommendations:

1. Build interdisciplinarity into the process from the start, selecting issues and experts through a genuinely interdisciplinary process that also screens for the other forms of diversity discussed during the day.
2. Reward interdisciplinary engagement earlier and more concretely in academic careers, so researchers see a tangible benefits for time-consuming collaborations.
3. Introduce an interdisciplinary peer-review step after advice is delivered, feeding lessons back into the next round of expert selection — a continuous loop rather than a one-off exercise.

5. Plenary discussion and Q&A

The plenary discussion started with a report back from the breakout discussions, followed by an open discussion with the audience.

Linking back to the keynote, Peter Maassen raised two points: the growing challenge of translating and curating highly specialised research for policy use as boundaries between peer-reviewed knowledge and opinion are increasingly blurred, and the importance of who curates and how, and the idea that academic freedom carries responsibilities, including commitments to inclusion and diversity, alongside its protections.

On whether early- and mid-career researchers face disproportionate challenges, panellists agreed the picture is highly individual and context-dependent. Anna Górska and Mangala Srinivas both described institutional pushback from inside their own institutions, while Koen Jonkers noted a survivor-bias effect: those who reach senior advisory roles are often simply the ones who overcame early barriers, while many others leave the field.

Asked why diversity improves science advice, panellists pointed to fairness and better content quality, stronger public trust (people need to "see themselves" in those giving advice), and the risk that academics underestimate their own unconscious biases. It was argued that ignoring substantial organisational and forecasting research showing diversity improves decision quality is itself unscientific, and that the case for diversity should be made on evidence as well as on human and ethical grounds.

On interdisciplinarity, it was highlighted how rigid disciplinary structures discourage interdisciplinary careers, highlighting the need for hybrid academic roles (not necessarily full professorships, but stable, non-time-limited positions) to retain interdisciplinary-minded researchers who currently tend to leave academia after their PhD. The example of Tartu University's tailored professorship to one’s individual profile can raise efficiency rather than forcing people into existing categories. It was also cautioned that academic inclusion debates shouldn't obscure broader societal exclusion from higher education.

The session closed on a more hopeful note by pointing to real long-term progress (narrative CVs, institutional charter changes to explicitly value diverse academic contributions) and overcoming imposter syndrome and feeling proud of advisory work. The panel discussion ended with the challenge of communicating science as memorably as other stakeholders do with simple, vivid imagery.

6. Closing remarks

Dr. Flavia Schlegel, Visiting Fellow, University of Pretoria, and Former Assistant Director-General for Natural Sciences, UNESCO, described diversity as a complex, evolving concept ultimately

connects to the larger frame of human rights and argued that current academic career structures, incentive systems and recognition mechanisms weren't built for today's science-for-policy work, leaving real costs, such as invisibility, career and personal risks, uncompensated. She called on senior scientists and policymakers to actively create space for others rather than leaving inclusion work to junior researchers alone.

She also highlighted a tension between producing "solutions" versus "orientation", arguing that in fast-changing times, science should be understood as offering safe pathways forward rather than guaranteed fixes, often no longer realistic, especially as public trust in science remains comparatively strong. She closed by reminding participants not to underestimate the value of a “bubble” of like-minded people as a safe space for exchange, useful precisely because it allows people to share both difficult experiences and genuinely positive ones.

The workshop closed with a call to translate the day’s discussion into action, continuing to refer to the discussions and the learnings in continued interactions and efforts to shape the science-policy interface.