

UNGA78 - Science Summit Side Event

15 September 2023

Science Diplomacy in Times of Global Crises with the EU Science Diplomacy Alliance (151002)

Conclusions & Recommendations

Science diplomacy is about the confluence of scientific research and diplomatic endeavors, harnessed to address global challenges, foster international collaboration, and bridge the gap between scientific advancements and policy formulation. It emphasizes the central role of scientific knowledge, methodologies, and community-driven insights in shaping international policies, particularly in areas like Al governance and open science.

In light of rapidly evolving technological landscapes, particularly AI, it is crucial to advance a science diplomacy framework that integrates cutting-edge scientific methodologies with diplomatic strategies. This directive urges the prioritization of open science principles and community-centric approaches in the international discourse on and governance of AI. Through science diplomacy, we aim to address global challenges such as disinformation, promote transparent and resource-efficient technological applications, and foster international collaborations that draw on the collective strengths of diverse stakeholders.

As we harness AI to advance the Sustainable Development Goals (SDGs) it is imperative to follow grassroots initiatives, thus community-centric approaches emphasizing data collection and predictive analytics tailored to local challenges are paramount. However, this direction faces the looming challenges of disinformation, potentially undermining trust and efficacy, and the resource-intensive nature of large Al systems, which could exacerbate environmental and infrastructure strains. To address these, it is not only vital to bolster AI and digital literacy, ensuring communities can discern and counteract misleading information, but also imperative to champion the development and adoption of resource-mindful AI applications. Such sustainable AI practices will maximize impact while minimizing adverse footprints. Furthermore, the creation of AI applications must prioritize maximum transparency and adhere to open science principles, ensuring they are comprehensible, trusted, and optimally utilized by the communities they serve. The synergy of Al-driven SDG relevant data platforms, community-based resource exchange systems, and AIassisted monitoring mechanisms will be essential. Participation of and collaboration between local communities, tech developers, NGOs, and governments is critical for both the ethical deployment and the sustainability of these grassroots-driven AI strategies.

Solutions to complex global challenges require collaboration across diverse scientific disciplines. Transdisciplinary understanding and collaboration need to be improved,

scientific rewards systems need to be adapted to that requirement. Scientific cooperation respecting shared values and principles such as academic freedom has the power to sustain dialogue also in times of geopolitical crisis.

Recommendations

1. **Transparency**: Uphold the principle of transparency in AI governance by instituting robust transparency regulations. Advocate and support open-source endeavors and open science initiatives, encompassing the release and scrutiny of expansive language models and chatbots—this includes transparency in code, documentation, and evaluation processes. Prioritize the establishment of open data metrics and mandate clear labeling protocols for AI services to ensure user awareness and understanding.

2. **Inclusivity**: Ensure that the whole range of relevant stakeholders (industry, from start-ups to large corporations, different disciplines from academia, potential user groups etc.) is heard and actively involved in AI governance.

3. **Diversity**: Respect and integrate diverse cultures and science systems in the framing, design and implementation of research, as well as research policy and foster the voice especially of the global south.

4. **Awareness**: 4a) create awareness that although international cooperation in science is essential there is potential for foreign interference and malign interests in these endeavors and dedicated measures to ensure research security may be necessary for higher education and research institutions to safeguard their knowledge. 4b) Prioritize the strengthening of public education concerning AI while actively countering detrimental public narratives surrounding the technology. It is paramount to critically assess and challenge overly sensationalized or deterministic discourses regarding AI's potential impact and trajectory. Scrutinize and address inaccuracies that attribute human-like consciousness or competencies to AI systems. Vigilance is required to discern and highlight concealed motives behind certain public portrayals of AI. Moreover, ensure heightened awareness of external interventions and potential malicious intent in international scientific collaborations related to AI.

5. **Coordination**: Foster robust global connectivity within the AI community to synergize diverse efforts shaping AI's global evolution as responsible technology for the social good, with the United Nations poised as a potential arbiter of these endeavors. It is imperative to ensure that science maintains an equal and pivotal footing in these discussions, guaranteeing evidence-based decision-making. Integrate the establishment of a worldwide Open Science framework seamlessly with the overarching governance of AI at the international level. Additionally, we advocate for the examination and adoption of best practices from established global monitoring institutions, such as the IPCC or the IAEA, to inform and enrich the structure and operations of a potential institution dedicated to the global governance of AI.

6. **Transdisciplinarity**: Promote interdisciplinary research and foster personal and trusted partnerships between scientists, policymakers, diplomats, and industry. Encourage industry to integrate diversity and hybrid skills in their workforces.

7. **Participation**: As AI becomes a catalyst for the Sustainable Development Goals (SDGs), prioritizing community-driven methodologies is crucial. It is essential to prioritize transparency, inclusivity, and ethical considerations in AI deployment. This includes the use of mobile apps and platforms for reporting and monitoring local issues by citizen generated data, development of localized knowledge bases tailored to regional challenges, and AI-enhanced platforms rooted in local languages and cultures. Further emphasis is on facilitating rigorous participatory evaluation of AI projects and applications. The promotion of collaborative problem-solving through hackathons, AI-backed feedback mechanisms, crowdsourced research and monitoring, and tools that promote sustainable behaviors are equally imperative. Integral to these strategies is building AI capacity at the grassroots, empowering communities to co-create localized AI solutions for SDGs.

8. **Responsibility** - Research organizations must be aware of their social responsibility as sharers of knowledge for all levels of society and actively counter disinformation through respectful dialogue with society. This includes building trusted collaborations worldwide with like-minded organizations that respect values such as academic freedom and independent research and teaching.

9. **Trust**: Transparency, inclusivity and awareness are important elements not only in AI but also in general efforts to gain trust in science in a broader sense. Communication and dialogue are essential and dialogue formats need to be established to counter the rising science skepticism that also puts a danger to democratic systems.

