**Mandate of the Special Rapporteur** **in the field of cultural rights**

**Call for submissions on**

**THE RIGHT TO ACCESS AND TAKE PART IN SCIENTIFIC PROGRESS**

For her upcoming report to the Human Rights Council to be presented in March 2024, the United Nations Special Rapporteur in the field of cultural rights, Ms. Alexandra Xanthaki, will consider the right to access and take part in scientific progress.

The forthcoming report builds on the previous work of the mandate (Report on the right to enjoy the benefits of scientific progress and its applications, [A/HRC/20/26](https://daccess-ods.un.org/tmp/7347178.45916748.html), 2012), and of the Committee on Economic, Social and Cultural Rights ([General Comment 25](https://www.ohchr.org/en/documents/general-comments-and-recommendations/general-comment-no-25-2020-article-15-science-and) on Science and Economic, Social and Cultural rights, 2020).

Today, many ongoing conversations focus on the important contribution of science to the realization of human rights and the sustainable development goals. The Special Rapporteur believes that this discussion must be placed in a human rights framework. It is important to reiterate the human rights dimension of science, and to understand access to and participation in science as crucial human rights issues.

The Special Rapporteur intends to take stock of setbacks and progress both under international human rights law and in practice regarding access to scientific knowledge and its applications. She plans to focus more on the rather unexplored issue of participation in scientific life, as part of cultural life. Central questions include what participation means, what are possible limits to it, and how to ensure it in ways that complements scientific expertise, in the context of societies that are challenged by misinformation and disinformation. She would also like to reflect more broadly on the definition of science, scientific expertise and exclusionary processes such definitions may entail; on the notion of scientific diversity; on challenges and obstacles to participation; on conditions and best ways to ensure it; as well as on the intrinsic relationship between access and participation.

Cultural rights protect the rights for each person, individually and in community with others as well as groups of people, to develop and express their humanity, their world view and the meanings they give to their existence and their development through, inter alia, values, beliefs, convictions, languages, knowledge and the arts, institutions and ways of life. They are also considered as protecting access to cultural heritage and resources that allow such identification and development processes to take place.

**Questions**

General definitions

* + 1. How is science defined in your country, taking into consideration the definition of science adopted at UNESCO?[[1]](#footnote-2) In this context, how is the notion of scientific diversity understood?

**The German Constitutional Court as the highest court in Germany gave the following definition in its “ruling on universities” of 1973: “Science is any activity which, in terms of content and form, can be regarded as a serious, planned attempt to determine the truth.”**

**This is well in line with the 2017 definition of UNESCO.**

**The notion of “scientific diversity” is not officially established in Germany, at least to my knowledge. “Scientific/Academic freedom” in turn is very well defined and well protected, by Article 5.3 of the German Constitution: “Art and science, research and teaching are free. The freedom of teaching does not release from loyalty to the constitution.” This freedom applies to the full spectrum and diversity of disciplines and research topics. This freedom is corroborated by strong public funding for R&D, about 1 percent of GDP. While a large part of this funding is mission-oriented, there are very strong funds available for fundamental research. Citizen Science, Science Communication and Transdisciplinary Science are very well established in Germany.**

* + 1. Is science considered as a public and/or as a common good, and what does this imply or should imply, particularly in terms of setting priorities for scientific research, access to scientific benefits, and protection of the scientific enterprise from harm and encroachments from political, religious and private interests?

**The Open Access movement was effectively launched in Germany in 2003 with the “Berlin Declaration”. The argument that taxpayer-funded research results should be openly available to all, is well established, even though not a binding principle.**

**To my knowledge, there is no official consensus in Germany on the notions of science as “public and/or as a common good”. It can be understood as scientific/academic freedom and/or public funding for science and/or non-mission oriented funding (for all this compare question 1: well established and secured in Germany).**

**As regards access to scientific benefits, while Germany has a well-functioning system of IPR and patents, there is – for example – also well-functioning regulation as regards to market access and pricing of new medical treatments.**

* + 1. Does the right to benefit from scientific progress include the right to be protected against anticipated harm? How is harm anticipated and what kind of reparation is offered in case of harm?

**The German legal system builds on the Precautionary Principle, in particular in the case of new technologies such as genetic engineering. Germany also has a very strong academic community and tradition of *Technology Assessment* (Technikfolgenabschätzung). The Committee in National Parliament actually has the title of “Education, Research and Technology Assessment”. The Parliament has its very own Office of Technology Assessment – for more than 20 years already.**

**Courts can be called upon in case of harm. In same specified areas of law, NGOs are entitled to submit cases on behalf of some/all harmed persons.**

**However, this system does not seem to be legally tied to the human right to benefit from scientific progress**

Main obstacles to access and participation in scientific knowledge and its applications

* + 1. What are the main obstacles to ensuring the right of all persons to access scientific knowledge and its applications, within and between countries? Please provide an example.

**The German Commission for UNESCO currently finalizes a document with guidelines on “Equitable International Research Cooperation with LMICs”. All official German strategies demand that research cooperation with LMICs should be “at eye level”/”on equal footing”. In reality, this promise is not heeded, inter alia due to bureaucracy. The German Commission for UNESCO would like to contribute to a new understanding that would enable research cooperation that leads to real knowledge progress in LMICs. A position paper will be published in early 2024.**

Adoption of specific measures

* + 1. Please describe how scientific freedom is respected, protected and promoted in your country. In particular, what kind of protection from interferences and threats from political, religious or commercial entities is offered? What are the main challenges? Please provide examples.

**Scientific freedom is so important that it will be the topic of the German National Science Year 2024. It is respected, protected and promoted effectively through provision of non-mission oriented public funding, government regulation for research institutes and universities, internal regulation in these institutions and a high level of awareness for possible interferences. Such interferences are, for example, overly strict restrictions due to fear of dual use of research results, in particular in cooperation with authoritarian states. Other interferences might come from overly high sensitivity for the opinions of others (e.g. fear of being accused of blasphemy). Interference due to commercial entities is mostly self-inflicted, since public funding is well available.**

* + 1. Please provide information on measures adopted to:
* Ensure and develop scientific education for all, including adult education;
* Develop and disseminate accurate scientific information in formats available to all;
* Protect and promote science journalists in sufficient number to ensure democratic and genuine debates on scientific issues.

**STEM education is universally obligatory in primary and secondary education. The Foundation “Children do research” has effectively reached out to more than half of the German pre-school entities and primary schools (combining STEM education with ESD). There are some 400 out-of-school “student labs” all across Germany for primary and secondary students, at universities, research institutes, science centres, museums, and in the corporate sector. The “Girls Day” for more than 20 years offers more than 10,000 STEM opportunities for more than a 100,000 students, mostly in companies. There is also a “Boys’ Day”. STEM is also firmly entrenched in adult education of the 900 adult education centers (Volkshochschule).**

**There are many efforts to improve the quantity and quality of Science Communication in Germany, e.g. through “Wissenschaft im Dialog” (“Science Dialogues”) or #FactoryWissKomm.**

**The press is free in Germany. Any state funding for journalism is therefore critically discussed and assessed (even if it is in line with the Constitution, according to studies). However there are offers such as the WPK Innovationsfonds or the “Science Media Center”.**

Connecting science and policy-making

* + 1. As recommended by the Committee on Economic, Social and Cultural Rights, “States should endeavour to align their policies with the best scientific evidence available”, (General Comment 25, para. 54). How is this principle implemented, following which kind of procedure? How is this implemented in case of scientific dissensus?

**The German government has established an ample array of institutions (unclear total number, at least several dozens, probably more than 100) that should ensure its independent policy advice. Examples: German Council of Economic Experts, National Academy of Science, German Sustainability Council, German Advisory Council on Global Change, German Ethics Council, to name the 5-best known.**

**In addition, the German government has several dozens of agencies that support it with scientific expertise such as National Agency of Hydrology, Robert Koch Institute, etc.   
  
Also the German national parliament has its own institutions of policy advice. Beyond its Office of Technology Assessment (cop. Question 3), it has its own “Scientific Service”.**

* + 1. In particular, what kind of science policy interface platforms, understood as channels connecting science with policymaking, have been put in place, to ensure input of scientific information in decision-making processes? What are the challenges and the elements necessary for the efficiency of such interfaces? How is the agenda set and who participates in these institutions?  
         
       **Compare question 7. In addition, the German Parliament’s Committees have the well-established tradition to invite scientific experts in processes of legislative reform.   
         
       The other questions you raise would need to be answered institution by institution, this is impossible to respond to in a generalizing way.**

Participation in science

* + 1. How is the right of every person to participate in scientific progress and in decisions concerning its direction understood and implemented? What are the challenges? How are lack of representativeness of marginalized groups and inequalities in participation addressed?

**What I observe, there is not the “one” understanding of the right of every person to participate in scientific progress in Germany. As regards the benefits from progress (new medical treatments, new technologies), this is a mixture of market forces mainly and government regulation.**

**After about a year of specialist discussions that the science system has with a few national NGOs about “participation in decisions concerning its direction” (e.g. the NGO BUND), there has been put in place the “Bürgerrat Forschung” (“Citizens Council for Research”) that after 7 sessions presented its results (study with 25 recommendations) to the minister in May 2022. The “Bürgerrat Forschung” worked on the basis of the Greenbook Participation (published in 2021; it was also evaluated. The Council’s 55 members were selected stochastically from the entire population. Based on these results, the national “Participation Strategy for Research” was published in summer 2023.**

**Other relevant terms used in the German discourse beyond terms used above (“Open Science, Public Engagement in Science, Citizen Science, Transdisciplinary Science”): “Quadruple Helix, Social Innovation, Open Innovation, Community Science, Participatory Technology Assessment, , Responsible Research and Innovation / RRI, Participatory Science Communication”.**

* + 1. How is ‘citizen science’ (ordinary people doing science) understood in your country? Is it considered important, and what measures have been put in place to support it, particularly in terms of access to information and data, and participation in decision-making? What are the challenges? Please provide an example.

**Citizen Science is well-established in Germany, not just in classical cases such detecting species in nature or supporting the work of professional astronomy. There is considerable public funding, there is a national digital platform (Bürger schaffen Wissen), there is a national strategy. The field is so large that it is not possible to answer the follow-up question in a generalized way.**

* + 1. To what extent are indigenous sciences and alternative sciences acknowledged, supported and included in policy decision-making? How is the conversation ensured between science and other kinds of knowledge?

**This is not a discussion that is well established here. There are no classical “indigenous groups” in Germany; at the other hand, there are large parts of the population that believe in esotericism, para- and pseudoscience – or cannot differentiate well between these beliefs and science. Thus, there is no strong discourse in Germany to foster the first while not falling into the trap of the second.**

* + 1. What are the limits to the right of every person to take part in scientific progress and in decisions concerning its direction and for which purposes? Please provide examples if any.

**This question is too general to be answered sensibly.**

**What I have missed in this questionnaire is how science could be organized in such a way that it optimally contributes to the right of every person to a good life in a healthy environment, irrespective of whether such science is participatory or not.**

1. [Recommendation on Science and Scientific Researchers](https://en.unesco.org/themes/ethics-science-and-technology/recommendation_science), article I.1. [↑](#footnote-ref-2)