Statement

Negotiations for the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction (BBNJ)

Statement of the Permanent Senate Commission on Fundamental Issues of Biological Diversity (SKBV) of the DFG

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Through the study of the ocean and its role in the Earth system, marine scientific research makes a key contribution to our understanding of global material cycles, the climate system and the diversity of life on Earth. Climate change and biodiversity change represent global economic, political and social challenges which can only be addressed on the basis of global scientific efforts. Marine researchers take on a key role in intergovernmental scientific expert committees such as the Intergovernmental Panel on Climate Change (IPCC) and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), because strategies for the conservation of marine ecosystems and strategies for their sustainable use must be developed on the basis of scientific knowledge. A particular challenge is the high seas and the deep sea floor, which can only be studied with a large effort in time and technical resources. Given the absence of national jurisdiction, these areas are only protected by international law, particularly international agreements such as the United Nations Convention on the Law of the Sea (UNCLOS), which is only a framework convention. SKBV therefore explicitly welcomes the efforts of the United Nations to promote and regulate the conservation and sustainable use of marine ecosystems in areas beyond national jurisdiction through an international, legally binding instrument.

However, care must be taken to ensure that such an agreement, probably multilateral in nature, does not impose regulations that make marine research in the open ocean and on the deep sea floor impossible, whether *de jure* or *de facto*. In the four topics of negotiation, which at present are most likely to be included in the agreement, we see great potential for a more sustainable human use of the ocean. This gives rise to both opportunities and risks for marine scientific research. The freedom of scientific research on the high seas is enshrined and guaranteed in the UN Convention on the Law of the Sea (subject to Parts VI and XIII). This freedom has substantially contributed to our current knowledge about the seas and should not be jeopardised or constrained by a new, additional BBNJ agreement. Only 5 percent of the oceans and a much smaller proportion (0.0001 percent) of the sea floor have been explored. At the same time, two thirds of the marine environment has already been significantly altered by human activity. This highlights the necessity and urgency of continued free, independent scientific research in order for this knowledge about the state and development of the oceans to be utilised for the conservation of marine ecosystems and the sustainable use of their resources.

We therefore request that the aspects formulated in this statement by SKBV from the perspective of the scientific community be taken into consideration in the BBNJ negotiations.

Negotiation Topic 1: Marine Genetic Resources

We support the negotiating position of the European Union and the Foreign Office of the Federal Republic of Germany. We particularly welcome the aim of avoiding the introduction of benefit-sharing for the use of genetic resources along the lines of the Nagoya Protocol for biodiversity in areas beyond national jurisdiction, and of not expanding the agreement to either derivatives (Art. 2 lit. e NP) or digital sequence information/data (DSI). The current versions of the Convention on Biological Diversity and the Nagoya Protocol do not apply to digital sequence information. Although the signatories are discussing an amendment to these agreements and associated conceptual clarifications, these should not be prejudged or "solved" by the envisaged agreement, which would circumvent the current discussion and negotiation processes. Furthermore, the inclusion of derivatives and digital sequence information in the agreement might be associated with barely surmountable implementation problems, thereby causing effectively limitations on research. The marine research community also sees no possibility of a monetary compensation for the use of genetic resources.

Instead, we propose to envisage a non-monetary form of benefit-sharing for the scientific use of genetic resources of the high seas and the sea floor starting already at a very early stage, for example in the form of active data sharing and the provision of access to digital sequence information and other data, so that these can be utilised globally also by scientists from developing countries. Germany already offers suitable infrastructures for such a nonmonetary sharing of benefits. This includes the German Federation for Biological Data (GFBIO), developed with funding from the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation), and the establishment of a national research data infrastructure initiated by funds from the federal and state governments. In this process an explicit link to primary data is also being considered, in addition to existing and envisaged open access models for primary data (DSI, observations, abundances). The existing formats are to be expanded and notably are to receive also financial support (DOSI document, particularly proposals ibid on p. 3). Similarly the accessibility of physical samples (e.g. voucher material from marine biology projects) can be enhanced to enable long-term use of the findings of biodiversity research. These initiatives and formats can serve as examples and basis for the development of specific capacity-building measures for the marine genetic resources negotiation package.

Negotiation Topic 2: Area-based Management, Including Marine Protected Areas (MPA)

At present, approximately 7.6 percent of the world's oceans are protected, but this only applies to 1.2 percent of marine areas beyond national jurisdiction. Although the process of designating marine conservation areas has shown a positive trend in recent years, the targets defined under the Convention on Biological Diversity and the United Nations Sustainable Development Goals will not be achieved by 2020. Marine research is essential to the designation and implementation of marine protected areas. It provides the basis for identifying marine areas with biodiversity that merits protection, for formulating the necessary conservation targets, and also contributes to scientifically monitor the achievement of these targets so that species find refuges in which to survive and adapt to a changing environment. For this, it is important that after designation targeted research and monitoring can continue to take place in the protected areas in accordance with the conservation measures. In this way, research can contribute to the active management of conservation areas and prevent them from being reduced to "paper parks".

Here, the SKBV suggests that discussion is needed as to how expertise and scientific findings can be integrated more quickly and effectively into the management of marine ecosystems and concrete measures for the protection of the ocean and its biodiversity. As demonstrated by the failure to meet the Aichi targets and the ongoing discussion on marine protected areas and their rationale amidst global change, there is often a delay of several years before scientific findings are translated into practical measures. There is therefore a need to facilitate the direct, rapid input of new scientific information into the work under the future agreement, e.g. through the establishment of a clearing house mechanism for implemented and planned monitoring work, and the establishment of an international multisectoral expert council for spatial management and MPA in marine areas beyond national jurisdiction. This should be taken into account in the current discussion on structure and organs under the BBNJ Convention.

Negotiation Topic 3: Environmental Impact Assessment (EIA)

Environmental impact assessments (EIA) represent an established instrument to survey, describe and evaluate significant human interventions in the natural environment. They increase transparency of the impacts of projects, plans and programmes on environmental assets and allow us to make informed decisions about the permissibility of such interventions. In marine areas beyond national jurisdiction (the High Seas and deep sea floor), an international agreement that requires an EIA to be carried out before implementing a project or designing a plan is appropriate. In general, the obligation to conduct an EIA only

applies when a project or plan is expected to have significant impacts on the environment. Typically, such projects and plans are listed and appended to the relevant legislation (the so-called "list principle").

In order to decide whether an activity, project or plan (including marine research) in marine areas beyond national jurisdiction is subject to a mandatory EIA, activities of this kind should be reported to a body to be established for this purpose. These notifications should be published to facilitate, for example, prior international coordination of research expeditions in terms of timing and location.

The introduction of general, mandatory obligations, beyond those already set out in the Convention on the Law of the Sea, to carry out an EIA is to be rejected, as are any possible general and obligatory licensing requirements. In most cases, the potential impact of marine research on the marine environment is very small and short-term (e.g. taking water samples with a rosette of water bottles, impacts of vessel operations). At most, there should be a duty of notification for these activities to enable a check whether an activity requiring a mandatory EIA is involved. Other sampling methods may have a temporary significant impact on the marine environment (e.g. trawls in contact with the sea floor), but their environmental impacts are to be classified as local and thus limited in terms of area and time. In the rarest of cases, marine research has longer-term or large-scale environmental impacts (e.g. ocean fertilisation experiments), where significant impacts are likely and an environmental impact assessment is therefore required. Only in these cases would a proposal and approval process be appropriate and justified.

It is important, however, that the assessments can be implemented at the operational level. If an EIA requires that the environmental status of the relevant international marine areas be surveyed, described and evaluated *before*, *during* and *after* the research project, this could only be achieved through the use of research vessels (or the development of autonomous observation and/or collection systems). However, this would mean that the few available vessels used until now for scientific expeditions would be almost entirely tied up with monitoring activities. This would entail the loss of a substantial proportion of knowledge-driven scientific expeditions, while multiplying the costs for any research projects in international waters, rendering most of them impossible.

SKBV therefore recommends introducing a classification of marine research activities (in keeping with the "list principle") which only requires an EIA for research projects in the last of these three categories (projects with significant impacts on the marine environment). A model for this negotiating position can be found in the "Act implementing the Protocol on

Environmental Protection to the Antarctic Treaty of 4 October 1991" (Environmental Protection Protocol Implementation Act; AntarktUmwSchProtAG). The approving national authority (the German Federal Environment Agency in this case) decides whether an activity has (1) less than minor or transitory impacts, (2) minor or transitory impacts, or (3) more than minor or transitory impacts. For the first category, no initial environmental evaluation or comprehensive environmental evaluation is required. Thus, for the majority of marine research a simple prior notification as described above would suffice and the Environmental Protection Protocol Implementation Act sets out that in these cases a permit be granted within a period of six weeks. For categories 2 and 3, we recommend that an assessment of the relevance of environmental impacts (initial environmental evaluation, category 2) or an environmental impact assessment (comprehensive environmental evaluation, category 3) only be requested when the project in question will modify the spatial or biological integrity of the marine environment within a spatially relevant context. This will remove the need to allocate substantial resources to the approval of small-scale, local sampling activities, while facilitating an accurate estimation of the consequences of regional or long-term interventions.

We also suggest that the approval process for category 3 projects should include an international component (e.g. through the participation of international experts). This would strengthen the work of national bodies (especially in developing countries with limited capacities) in the implementation of the EIA requirements under the new agreement and minimise the risk that national assessments and interpretations vary from country to country and thereby could lead to disparities in the research landscape.

Negotiation Topic 4: Capacity-building and Knowledge Transfer

SKBV is aware of the responsibility of science to grant the global research community, especially researchers in developing countries, full and unrestricted access to data and knowledge gained. To this end, the German marine research community is already playing a leading international role in strategy development for the open-access publication of scientific findings, data (metadata and/or detailed data) and the deposition of voucher material in appropriate collections and databases. This includes the internationalisation of cruise reports from expeditions in marine areas beyond national jurisdiction.

In addition, Germany is already enabling researchers from all nations to carry out scientific work on German research vessels, usually at no cost, as a member of a team led by German experts or as an independent working group. For example, international scientists can submit their own proposals for ship time on board the German research icebreaker "Polarstern". This vessel is also regularly used for South-North Atlantic Training Transects (SoNoAT) as

part of the Partnership for Observation of the Global Ocean (POGO). On these multiweek cruises, 25 postgraduate students, mostly from developing countries, get an introduction and learn about the methods and equipment used in modern high-sea research. The DFG is also actively involved in this exchange through international cooperation projects, graduate schools and specific programmes for bilateral and multilateral cooperation.

This leads to a further point in relation to capacity-building, namely the master's courses in marine science, which are often offered in English in Germany, and which international students can normally access without incurring tuition fees. After successfully completing these courses, graduates take their knowledge and contacts back to their home countries, where they continue to use and widen them.

We would ask that the perspectives described here be taken into consideration in the deliberations of the BBNJ Technical Expert Group (TEG) of the EU in July, and then in the next round of negotiations of the agreement in August.