

Submission to the Department of the Environment re. the SBSTTA twentieth meeting

Many thanks for the opportunity to make a submission to the Department of the Environment in response to the SBSTTA's discussions on synthetic biology (synbio). We are concerned by the lack of public consultation on this important issue and would urge the Government to consult more widely with other NGOs working in this area and the public.

Synthetic biology is a new and emerging issue

We believe that synthetic biology clearly falls under the CBD and is a new and emerging issue. We concerned at attempts by the Australian Government and the biotechnology industry to argue that synbio does not qualify as a new and emerging issue.

A precautionary approach to synthetic biology is needed

We support the COP 11 and Ad Hoc Technical Expert Group (AHTEG)'s calls for a precautionary approach.

The Convention on Biological Diversity (CBD) has 3 main objectives:

- 1. The conservation of biological diversity
- 2. The sustainable use of the components of biological diversity
- 3. The fair and equitable sharing of the benefits arising out of the utilization of genetic resources

We are concerned at attempts by the Australian Government and the biotechnology industry to restrict a precautionary approach to environmental impacts. We believe that a precautionary approach should also be taken when considering the socio-economic and cultural impacts of synbio.

Defining synthetic biology

We agree with the Australian Government that discussions on synbio will be hampered without a coherent and agreed definition of synthetic biology. We support the AHTEG's definition of synbio as:

"Synthetic biology is a further development and new dimension of modern biotechnology that combines science, technology and engineering to facilitate and accelerate the understanding, design, redesign, manufacture and/or modification of genetic materials, living organisms and biological systems."

We strongly disagree with the biotechnology industry's claim that there is no need for a definition as the technology is constantly changing. This is a thinly veiled attempt to avoid regulation.

In order to define more clearly define what synbio is, we suggest that an indicative list of techniques that would be considered synbio can be developed and continuously updated.

The gaps in the Cartagena Protocol need to be addressed

We strongly urge the Australian Government to ratify the Cartagena Protocol as a matter of priority. By remaining outside the treaty our credibility is diminished with the 170 other parties, particularly those in our region. Any claim that the Protocol may be used to create non-tariff barriers trade is refuted by the 15 years of experience since it came into force. The Protocol has served to ensure that the environmental and public health risks associated with the international transfer, handling and use of genetically modified organisms are minimised. This should be a key goal for the Australian government.

We agree with the Australian Government that the Cartagena Protocol covers some of the direct biodiversity risks posed by synthetic organisms. However, there are important gaps in the Cartagena Protocol that need to be addressed. These include addressing the following Convention on Biological Diversity objectives:

- The sustainable use of the components of biological diversity
- The fair and equitable sharing of the benefits arising out of the utilization of genetic resources

There is currently no forum on indirect and socioeconomic impacts. So for example, if Madagascar feels synbio vanilla is going to undermine its forest conservation strategy it currently has no forum in which to advance its case or recourse from decisions made outside its jurisdiction.

A process is needed to monitor synbio

We believe that a process needs to be established where synbio can be monitored. Ideally this would entail establishing a protocol, body or mechanism. Any such process needs to be accessible and needs to include indigenous representation, unlike the current ad hoc expert group.

Gene drives

Gene drives should get special attention because of the potentially catastrophic risks associated with their use. We urge Australia to support an International moratorium on their use.

Digital transfer

We are concerned that synbio may result in digital biopiracy. We believe the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) should instruct the Nagoya Protocol to include digital transfer.

For more information contact:

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