
Date: 29th January 2016

Re: Response to the AHTEG Report

To whom it may concern,

We are writing to provide feedback on the October 7, 2015 report from the Ad Hoc Technical Expert Group on the implications of synthetic biology technologies on global biodiversity. SynBioBeta is an activity hub for the synthetic biology industry, entrepreneurs and thought leaders. The SynBioBeta community is largely made up of small, young companies, many of whom do not have the time and resources to submit feedback individually. As such, we submit this peer review based on feedback we have received from companies in our network.

SynBioBeta strongly supports the technical and community sourced evaluation of synthetic biology undertaken by the Convention on Biological Diversity. We condone the attention given to the moderated online forum and the assembly of an Ad Hoc Technical Expert Group to process the online community input. The report issued October 7, 2015, sought to address the mandates laid out in October 2014 by the Convention on Biological Diversity and published a series of conclusions on the implications of synthetic biology for global biodiversity.

One of the primary mandates addressed was to establish an operational definition of synthetic biology. Of the many definitions that were initially offered, we were generally satisfied with the final definition chosen: "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." Our only concern was with the phrase 'further development and new dimension.' The phrase emphasizes novelty, rather than expressing 'the continuity and novelty' (referenced in paragraph 22 of the report) of technological advance. While synthetic biology is a 'further development', it is important to remember that is also just another chapter in the biotechnology story that stretches back to the molecular biology revolution of the 1970s. In a few years, in future chapters of this story, it may not be appropriate to label synthetic biology as a "new dimension."

We also strongly support "the conclusion of the AHTEG that living organisms developed through current and near future applications of synthetic biology are similar to LMOs as defined in the Cartagena Protocol." We see no reason why the organisms produced by synthetic biology techniques should be viewed any differently, either from a scientific or a regulatory perspective, than the living modified organisms produced by previous biotechnologies. Synthetic biology and old genetic manipulation techniques are part of the same continuum of technology development.

The SynBioBeta community strongly approves of the conclusion "that those non-living

components and products of synthetic biology do not fall under the scope of the Cartagena Protocol on Biosafety.” We affirm that nonliving materials or industrial products of synthetic biology are no different from materials/products of other industrial processes, from a regulatory if not chemical perspective. Synthetic biology promises to produce many of the the same products that chemical industries already manufacture, but in a more sustainable and efficient process.

Furthermore, we appreciate the AHTEG’s conclusions to establish regular reassessment, especially in the manner this assessment was conducted, as the synthetic biology field evolves. The group resolved to establish a “process to monitor and assess the state of knowledge within the field of synthetic biology on a regular basis, review new information regarding the positive and negative impacts.” This aligns well with the philosophy of the members of our community, who appreciate the incredible societal benefits synthetic biology could offer, but recognize that any groundbreaking technology must be advanced with prudence. On a similar note, we have received feedback from our community emphasizing interest in working with social scientists, ethicists, responsible research innovators and risk assessment experts.

We are invested in these technologies because we believe synthetic biology has the potential to benefit countries and communities across the socioeconomic spectrum. There are real promises to treat widespread diseases and bring sustainable manufacturing tools to resource-poor regions. In order to realize the benefits of synthetic biology, we will maintain communication with the Convention on Biological Diversity and other regulatory agencies to help them develop best practices for this new branch of biotechnology.

Yours sincerely,

A handwritten signature in black ink that reads 'John Cumbers'.

John Cumbers,
Founder of SynBioBeta