



МІНІСТЭРСТВА  
ПРЫРОДНЫХ РЭСУРСАЎ І АХОВЫ  
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THE MINISTRY  
OF NATURAL RESOURCES AND  
ENVIRONMENTAL PROTECTION OF THE  
REPUBLIC OF BELARUS

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12.04.2019 № 10-2-35/140-инк

На № \_\_\_\_\_ ад. \_\_\_\_\_

Г-жа Кристина Паска Палмер

Исполнительный  
Конвенции о  
разнообразии

Секретарь  
биологическом

О предоставлении информации

Уважаемая г-жа Кристина Паска Палмер!

Министерство природных ресурсов и охраны окружающей среды Республики Беларусь имеет честь представить Секретариату Конвенции о биологическом разнообразии информацию, запрашиваемую в соответствии с Решением 9/7 Конференции Сторон, выступающей в качестве Совещания Сторон Картахенского протокола по биобезопасности (КС/СС).

Пожалуйста, примите г-жа Кристина Паска Палмер заверения в моем высоком уважении.

Приложение:

С уважением,

Заместитель Министра

А.Н.Корбут



Let me present an opinion formed through a consultative process that included organizations responsible for implementing the biosafety system in the Republic of Belarus on the issues listed below:

- (1) the structure and content of the Implementation Plan for the Cartagena Protocol on Biosafety post 2020;
- (2) possible elements of a specific action plan for capacity-building on biosafety, covering the Cartagena Protocol and its Supplementary Protocol; and
- (3) relevant elements of the biosafety component of the post-2020 global biodiversity framework.

**(1) The structure and content of the Implementation Plan for the Cartagena Protocol on Biosafety post 2020.**

**(2)**

Taking into account Decision 9/7, which states that the Strategic Plan should be developed as an implementation tool, reflect relevant elements of the 2011-2020 Strategic Plan for the Cartagena Protocol implementation and include new elements reflecting the lessons learned and new biosafety-related developments and also contain indicators that are simple and easily measurable to facilitate the progress review in implementing the Protocol, we believe that the 2011-2020 Strategic Plan structure fully reflects all of the above issues and can be effectively used as the post-2020 Strategic Plan structure. With regard to the Plan content, a number of Operational Objectives specified in the 2011-2020 Plan will be relevant. Among them:

- 1.3 Risk assessment and risk management;
- 1.4 LMOs or traits that may have adverse effects;
- 1.6 Handling, transport, packaging and identification;
- 1.7 Socio-economic considerations;
- 1.8 Transit, contained use, unintentional transboundary movements and emergency measures.

The relevance of Operational Objectives data is determined by the fact that currently there is an increased number of species that undergo genetic modification; also determined by the occurring complexity of structures, an extension of the term "living modified organism", which includes a number of organisms developed by using various methods of synthetic biology. Among them: CRISPR/Cas, gene drive, construction of protocells and metabolic pathways, xenobiology. In this regard, constant screening of the developments in the field of synthetic biology and the development of Methodological Guidances for new species organisms that cannot be assessed using previously developed Risk Assessment Guidance, Guidance on the LMO Detection and Identification and by socio-economic considerations are needed.

Considering the 2011-2020 Strategic Plan indicators, we can say that many of them are also relevant as an indicators of the post-2020 Strategy implementation.

At the same time, the phrase “LMOs developed by synthetic biology methods” should be added to the implemented Outputs of the Operational Objectives 1.3, 1.4, 1.6, 1.7, 1.8 of the Strategic Plan.

We consider the Paragraph 1.4. “LMOs or traits that may have adverse effects” to be very important. It is advisable to the indicators of Para. 1.4. to add “the number of Parties that have elaborated and validated detection techniques for the developed LMOs to be released into the environment, placed at the market and the ones, which may become subject to transboundary movement, including the LMOs developed by synthetic biology methods for monitoring purposes.

## **(2) Possible elements of a specific action plan for capacity-building on biosafety, covering the Cartagena Protocol and its Supplementary Protocol.**

Among the elements of a specific action plan for capacity-building on biosafety, all of the above Operational Objectives will be relevant for the Post 2020 Action Plan: risk assessment and risk management, LMOs or traits that may have adverse effects, handling, transport, packaging and identification, socio-economic considerations, transit, contained use, unintentional transboundary movements and emergency measures.

At the same time, we would recommend to supplement Operational Objectives and the Outcomes to be achieved in the Plan for them to be in line with COP-MOP 9 Decisions and organize a discussion at the regional and subregional levels on this issue. For example, one of the results in p.

1.3 “To further develop and support implementation of scientific tools on common approaches to risk assessment and risk management for Parties” may be supplemented with the phrase “risk assessment on new developments in modern biotechnology including LMOs developed by methods of synthetic biology. In Outcomes, we would add “to develop an effective mechanism for horizontal screening of developments in synthetic biology and create a database of literary sources and research projects in this area and develop an effective mechanism to update a database on an ongoing basis”.

In Paragraph 1.4. LMOs or traits that may have adverse effects, which is also very close to Paragraph 1.6. Handling, transport, packaging and identification, it is very important to stress the need for the development of simple, accurate and low-cost methods for the detection and identification of new species organisms developed by modern biotechnology methods, including synthetic biology, as well as the need to develop simple, accurate and low-cost screening schemes for the detection of unauthorized LMOs; the need to support capacity-building at the regional level in this area should be emphasized, including the collaboration of those unions in which authorized and unauthorized LMO lines released into the environment or the country’s market are identical.

## **(3) Relevant elements of the biosafety component of the post-2020 global biodiversity framework.**

The importance of developments in the field of genetic engineering, including LMOs developed by synthetic biology methods that fall under the scope of the Cartagena Protocol on Biosafety, can hardly be overestimated for healthcare, agriculture and industry. However, in the last decade there has been a rapid development of research and the development of LMOs that may differ significantly from the LMOs developed before this time (LMOs with modified metabolic pathways, new structure of nucleic acids and proteins, new cell structure, etc.) Modern and expected in the immediate future methods of the synthetic biology techniques' use are mainly destined for limited use in research laboratories and industrial environments. In the contained conditions that exclude their contact with the environment, they are not considered, for the most part, as a source of new risks than those for all LMOs.

Potential future uses of synthetic biology objects that can contribute to the conservation and sustainable use of biodiversity (microorganisms destined for bioremediation, the increased efficiency of agriculture, to stop desertification, to combat diseases of wild flora and fauna, etc.), LMOs destined to fight against insects – carriers of dangerous human diseases, rodents, and etc. stipulate their deliberate distribution in the environment. Undoubtedly, the release of such organisms can contribute to the solution of a number of very important problems of health care, agriculture and industry. However, as a result of such release, risks that are different from the risks inherent to the organisms developed for restricted (contained) use may arise.

If the use of synthetic biology becomes widespread, it can cause a large-scale environmental impact, both planned and unforeseen. However, new organisms may differ significantly from those LMOs that have been studied to date. As the number of research activities has seen an increase recently, a key element of the New Strategic Biodiversity Plan to recommend is the conservation of biological diversity through the further implementation of the Cartagena Protocol on Biosafety in relation to LMOs obtained using synthetic biology techniques, as well as capacity-building for the implementation of this key component. At the same time, the important issues that will need to be addressed to implement POST 2020 are as follows:

1. Final elaboration of the “synthetic biology” definition and its inclusion in the terminology of the Cartagena Protocol on Biosafety;
2. Development of effective mechanisms for horizontal scanning of new developments in the LMOs obtained using synthetic biology methods;
3. Development of environmental risk assessment methodologies, taking into account risks to human health of certain LMOs developed by methods of synthetic biology;
4. Further methodology development for socio-economic considerations, taking into account both the potential benefits and risks of those LMOs, including the impact on all three objectives of the Convention on Biological Diversity;
5. Further development of Guidance on the detection and identification of LMOs for new species organisms that cannot be assessed using previously developed detection methods;

6. The need for scientific and technical collaboration on the above issues.