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**Report on the Central and Eastern European training course on risk assessment of living modified organisms**

**Minsk, 24-28 September 2018**

# Introduction

1. At its eighth meeting, in decision [CP-VIII/12](https://www.cbd.int/doc/decisions/mop-08/mop-08-dec-12-en.pdf), the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol on Biosafety requested the Executive Secretary to support, subject to the availability of resources, regional and subregional capacity-building activities on risk assessment of living modified organisms (LMOs).
2. Similarly, in their decision [CP-VIII/3](https://www.cbd.int/doc/decisions/mop-08/mop-08-dec-03-en.pdf) on capacity-building, the Parties also requested the Executive Secretary to facilitate priority capacity-building activities for supporting the implementation of the Cartagena Protocol.
3. With support from the Government of the Republic of Korea, through the Korea Biosafety Capacity Building Initiative, and in collaboration with the Institute of Genetics and Cytology of the [National Academy of Sciences of Belarus](http://nasb.gov.by/eng/),the Secretariat of the Convention on Biological Diversity organized a training course on risk assessment of living modified organisms for the Central and Eastern European region, which was held in Minsk from 24 to 28 September 2018.
4. The objectives of the course were to provide theoretical and practical training for participants on:

(a) The risk assessment process (concepts, steps, methodology, key issues to consider);

(b) The evaluation of case studies of living modified organisms for environmental release, identifying protection goals and applying the risk assessment methodology to develop risk scenarios to assess.

1. The training course consisted of plenary sessions and break-out groups. Documents for the course are posted at <https://www.cbd.int/meetings/CP-RARM-CB-2018-02>.

# Item 1. Opening of the course

1. The course was opened by Mrs. Tatsiana Zhialiaznova from the Ministry of Natural Resources of Belarus, at 9 a.m. on Monday, 24 September 2018. In her remarks, Mrs. Zhialiaznova welcomed the participants to Minsk and thanked the Secretariat for facilitating the training in the field of risk assessment of LMOs.
2. Mrs. Lyubov Khotyleva, honourable director of the Institute of Genetics and Cytology, National Academy of Sciences of Belarus, also welcomed the participants and the Secretariat to Belarus. She stressed the importance of the [Cartagena Protocol](http://bch.cbd.int/protocol) and the actions taken to ensure safe use of biotechnology developments, making reference to the challenges posed by rapid scientific development. She also invited the participants to take advantage of the knowledge being shared during the course to reinforce existing capacities in their countries, and to trigger regional cooperation on biosafety.
3. Ms. Marianela Araya of the Secretariat welcomed the participants to the course. She also highlighted the cross-cutting nature of biosafety, and the importance of risk assessment for the effective implementation of the Cartagena Protocol. She expressed gratitude to the Government of the Republic of Korea for its generous financial support and the Government of Belarus for hosting the meeting.
4. Following the opening remarks, Ms. Araya of the Secretariat introduced the course objectives and the provisional programme of work.

# Item 2. Overview of biosafety and the Cartagena Protocol on Biosafety

1. Under this agenda item, the representative of the Secretariat gave a presentation to provide an overarching framework for the work on risk assessment that was to be undertaken during the training course, including concepts, history and main provisions of the Cartagena Protocol. The presentation provided information on the history of the Protocol, its importance, and its links to the [Convention on Biological Diversity](https://www.cbd.int/convention/), the [Aichi Biodiversity Targets](https://www.cbd.int/sp/targets/) and the [Sustainable Development Goals](https://sustainabledevelopment.un.org/). The presentation also included a description of some of the articles of the Protocol, in particular Article 15 on risk assessment, Article 16 on risk management, and Annex III.

# Item 3. Risk assessment experiences in the region

**3.1. Experience of Belarus with risk assessment and the regulatory system for living modified organisms**

1. The head of the National Coordination Biosafety Centre of the Institute of Genetics and Cytology presented the country’s national biosafety system, including a description of the main components and operations associated with the implementation of the Cartagena Protocol, and in particular with risk assessment.

**3.2. Presentations from participants: national experiences on risk assessment and the application of the Cartagena Protocol**

1. Participants from the countries represented at the training course offered short presentations about how risk assessment was carried out on their countries, highlighting main challenges and strengths. This session was particularly useful for sharing experiences between the countries, as well as identifying lessons learned from the various approaches followed by countries in relation to the implementation of their national biosafety frameworks.

# Item 4. National biosafety frameworks[[1]](#footnote-1)

**4.1. Competent national authorities, practices and principles**

1. An overview of the structure and role of national biosafety frameworks, including definition of national competent authorities, and examples of biosafety frameworks from various countries, were covered under this session. The rationale behind the session was to provide participants with a better understanding of the main role of national competent authorities using examples of the various approaches that have been followed by different countries.

**4.2. Expert advice and the role of the risk assessors**

1. The role of the regulators and scientific advisory bodies was presented, including such issues as the responsibilities of the risk assessors, the roster of biosafety experts and public participation. The presentation supported the better understanding of the risk assessor’s function and the difference between “expert advice” and “decision-making”.

# Item 5. Overview of the risk assessment

**5.1. Methodology**

1. This session covered an overview of the risk assessment methodology, including such issues as national protection goals, assessment endpoints, practices and principles, and definition of such terms as adverse effects, exposure and risk characterization. Participants benefited from a detailed description of the various steps that are considered when undertaking risk assessment.

**5.2. Overarching issues (quality and relevance of information, uncertainty)**

1. A presentation on quality and relevance of information, and identification and consideration of uncertainty, gave the participants the opportunity to better understand how to deal with these overarching issues of the risk assessment process. Topics such as the quality and sources of information, as well as where to look for additional information and how to indicate uncertainty on a risk assessment report, were discussed.

**5.3. The planning phase (context and scope, assessment endpoints, choice of comparators)**

1. This topic included establishing the context and scope of the risk assessment, selecting relevant assessment endpoints or representative species, establishing the baseline for risk assessment, how to choose suitable comparators and how to develop risks hypotheses. Participants were guided through the various steps that will lead them to the formulation of risk hypotheses that will eventually be tested during the next steps of the risk assessment.

**5.4. Conducting the risk assessment (identification of novel characteristics, evaluation of likelihood and consequences, estimation of the overall risk, acceptability of risk)**

1. Information key for conducting the risk assessment was offered during this session. Among the issues included were identification of the novel characteristics of the LMOs, how to evaluate the likelihood of occurrence of adverse effects and the possible consequences, and the overall estimation of the risk. Concepts such as gene flow, allergenicity, and receiving environment, among others, were part of this topic.

**5.5. Preparing a risk assessment report and recommendation**

1. This topic provided participants with important information on aspects to consider when drafting risk assessment reports. It was highlighted that a report presented in a well-structured form facilitated the deliberations of decision makers. The presentation included information on the background and scope of the risk assessment, characterization and estimation of risk, and descriptions of risk management and monitoring strategies.

# Item 6. Case studies

**6.1. Presentation of case study 1**

1. A case study on herbicide-resistant oilseed rape was presented during the plenary session, and the group was guided by one of the resource persons on how that particular case study could be assessed on the basis of the concepts and methodologies presented during the previous days. The intention of this exercise was to give the participants an opportunity to see how the concepts are applied.

**6.2. Presentation of case studies 2**

1. An additional case study on rhizomania-resistant sugar beet was presented in plenary, and the participants were then divided into groups to undertake an assessment of the information presented in the case studies. Participants were requested to identify protection goals, formulate hypotheses, identify assessment end-points, and to apply the risk assessment methodology. Each group was guided by one of the resource team members. At the end of the session, each group reported back to the plenary, presenting their assessment, which led to a group discussion.

# Item 7. Resource mobilization and Biosafety Clearing-House

**7.1. Biosafety resource mobilization**

1. A presentation was provided on how to access funding from the Global Environment Facility (GEF) for projects on biosafety. The presentation included a brief explanation of what the GEF is, how it works and how countries could use their resources under the System for Transparent Allocation of Resources (STAR) towards, among other things, the development of biosafety projects.

**7.2. Biosafety Clearing-House**

1. During this session, information was presented on how to use the [Biosafety Clearing-House](http://bch.cbd.int/about/) portal. The presentation covered such issues as the roster of experts, where to find information and what can be found in the Biosafety Clearing-House, and national and reference records, among others.

# Item 8. Conclusions and recommendations

**8.1. Evaluation of the course**

1. An evaluation form was given to participants to collect their opinions on the course. The results of this evaluation are presented in annex II below.

**8.2. Closure of the course**

1. The course had a closing ceremony at which representatives of the Institute of Genetics and Cytology and the Secretariat of the Convention on Biological Diversity thanked the participants, other donors and partners for the opportunity to host this activity. The course closed at 1 p.m. on Friday, 28 September 2018.

*Annex I*

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*Annex II*

# Evaluation questionnaire and results

Participants were invited to evaluate the course by completing the questionnaire below. Participants were instructed to select the answer that best reflected their assessment of the course.

A total of 15 participants completed the questionnaire. The number of respondents for each option is shown below.

|  |  |  |  |
| --- | --- | --- | --- |
| **A. Overall assessment** | | | |
|  | **# Yes** | **# No** | **% Yes** |
| (1) During the workshop, were you able to acquire knowledge related to: | | | |
| The Cartagena Protocol and its approach towards risk assessment | 15 | 0 | 100% |
| The steps to undertake risk assessment of LMOs | 15 | 0 | 100% |
| Practical experience in assessing case studies | 15 | 0 | 100% |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **The workshop exceeded my expectations** | **The workshop met my expectations** | **The workshop partly met my expectations** | **The workshop did not meet my expectations** | **% Exceeded** | **% Met** |
| (2) To what extent were your expectations regarding the workshop met? | 11 | 4 | 0 | 0 | 73 | 27 |
|  | **Very relevant** | **Somewhat relevant** | **Not relevant** | **% relevant** | **% somewhat relevant** |  |
| (3) How relevant was the subject matter of the course to your job activities? | 10 | 5 | 0 | 67 | 33 |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **B. Content and conduct of the workshop** | | | | | | | |
|  | **Average rating** | **Excellent** | **Good** | **Adequate** | **Poor** | **Very poor** | **Not applicable** |
| Quality of training material | 4.6 | 12 | 1 | 2 |  |  |  |
| Quality of presentations | 4.8 | 13 | 1 | 1 |  |  |  |
| Sufficient time for discussion and participation | 4.6 | 11 | 3 | 1 |  |  |  |
| Balance and relevance of topics | 4.7 | 12 | 2 | 1 |  |  |  |

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1. Presentations for items 4, 5, 6 and 7.2 were provided by a team of three resource persons: Mrs. Marja Ruohonen-Lehto, Mrs. Angela Lozan, and Mr. Helmut Gaugitsch. [↑](#footnote-ref-1)