




## Capacity Building Needs and Priorities

### Record information and status

Record ID	103732
Status	 Published
Date of creation	2012-08-06 13:08 UTC (E.Makeyeva@igc.by)
Date of publication	2012-08-06 13:08 UTC (E.Makeyeva@igc.by)

This document is also available in the following languages:

### General Information

#### Country

- Belarus

#### Contact person

##### Assoc. Prof. Elena Makeyeva

Head of the National Co-ordination Centre for Access to Genetic Resources and Benefit Sharing; BCH NFP, PA ABS-CH  
National Co-ordination Centre for Access to Genetic Resources and Benefit Sharing  
The Institute of Genetics and Cytology at the National Academy of Science of Belarus (IGC )  
27 Akademicheskaya street  
Minsk, Minsk City  
Belarus, 220072



Phone: +375 17 284-0297  
Fax: +375 17 284-1917  
Email: [E.Makeyeva@igc.by](mailto:E.Makeyeva@igc.by), [belarusnpabs@gmail.com](mailto:belarusnpabs@gmail.com)  
Url: [National Co-ordination Biosafety Centre](#)

##### Prof. Alexander Kilchevsky

Director  
Directorate  
Institute of Genetics and Cytology, National Academy of Sciences (IGC, NASB)  
Akademicheskaya st., 27  
Minsk  
Belarus, 220072



Phone: +375 17 284-1856  
Fax: +375 17 284-1917  
Email: [A.Kilchevsky@igc.bas-net.by](mailto:A.Kilchevsky@igc.bas-net.by)  
Url: [Institute of Genetics and Cytology](#)

#### Organization

##### Institute of Genetics and Cytology, National Academy of Sciences of Belarus (IGC NASB)

27 Akademicheskaya st.  
Minsk  
Belarus, 220072



Phone: +375 17 284-1856  
Fax: +375 17 284-1917  
Email: [office@igc.bas-net.by](mailto:office@igc.bas-net.by)  
Url: [SSI "Institute of Genetics and Cytology of NAS of Belarus"](#)

## Areas of capacity building

### Broad areas in which capacity is needed

- Institutional capacity
- Human resources capacity development and training
- Risk assessment and other scientific and technical expertise
- Risk management
- Public awareness, participation and education in biosafety
- Information exchange and data management including participation in the Biosafety Clearing-House
- Scientific, technical and institutional collaboration at subregional, regional and international levels
- Technology transfer
- Identification of LMOs, including their detection
- Socio-economic considerations
- Implementation of the documentation requirements under Article 18.2 of the Protocol
- Handling of confidential information
- Measures to address unintentional and/or illegal transboundary movements of LMOs
- Scientific biosafety research relating to LMOs
- Taking into account risks to human health

## Needs and priorities

### Specific needs and priorities

#### • Development of a national biosafety policy

##### *Extent of implementation*

- Fully addressed

##### *Preferred means*

- Conferences and other fora

##### *Major target groups*

- Decision / policy-makers (e.g. Ministers)
- IT, BCH and data / information managers
- Government regulators / administrators

#### • Development of national biosafety laws and regulations

##### *Extent of implementation*

- Adequately addressed

##### *Preferred means*

- Conferences and other fora

##### *Major target groups*

- Technical personnel / Scientists
- Customs officials
- Other professionals (e.g. lawyers, economists, etc.)

#### • Guidance on mainstreaming of biosafety into other sectors

##### *Extent of implementation*

- Partially addressed

##### *Preferred means*

- Conferences and other fora

##### *Major target groups*

- Government regulators / administrators
- Technical personnel / Scientists
- Other professionals (e.g. lawyers, economists, etc.)

#### • Development of a national liability and redress regime

##### *Extent of implementation*

- Adequately addressed

##### *Preferred means*

- Conferences and other fora

##### *Major target groups*

- Government regulators / administrators
- Enforcement officials (e.g. field inspectors)
- Other professionals (e.g. lawyers, economists, etc.)

#### • Support for implementation of the national biosafety framework

##### *Extent of implementation*

- Adequately addressed

##### *Preferred means*

- Education and training
- Guidance / training materials
- Conferences and other fora

##### *Major target groups*

- Government regulators / administrators
- Technical personnel / Scientists
- Customs officials

- **Streamlining of regulatory systems related to biosafety**

*Extent of implementation*

- Adequately addressed

*Preferred means*

- Conferences and other fora

*Major target groups*

- Government regulators / administrators
- Technicians (e.g. in the laboratories)
- Technical personnel / Scientists

- **Tools for enforcement of biosafety laws and regulations**

*Extent of implementation*

- Adequately addressed

*Preferred means*

- Exchange programmes, internships, study tours, etc.
- Guidance / training materials
- Technical assistance and advice

*Major target groups*

- Decision / policy-makers (e.g. Ministers)
- Government regulators / administrators
- Customs officials

- **Development of administrative systems for handling applications for import and/or release of LMOs**

*Extent of implementation*

- Adequately addressed

*Preferred means*

- Education and training
- Guidance / training materials
- Conferences and other fora

*Major target groups*

- Government regulators / administrators
- Technical personnel / Scientists
- Customs officials

- **Mechanisms for inter-institutional communication**

*Extent of implementation*

- Adequately addressed

*Preferred means*

- Conferences and other fora

*Major target groups*

- Government regulators / administrators
- Technical personnel / Scientists

- **Mechanism for coordination among national regulatory authorities and processes**

*Extent of implementation*

- Adequately addressed

*Preferred means*

- Conferences and other fora
- Technical assistance and advice

*Major target groups*

- Government regulators / administrators
- Technical personnel / Scientists
- Customs officials

- **System for management of records related to LMO import applications and decisions**

*Extent of implementation*

- Partially addressed

*Preferred means*

- Education and training
- Exchange programmes, internships, study tours, etc.
- Guidance / training materials

*Major target groups*

- IT, BCH and data / information managers
- Government regulators / administrators
- Customs officials

- **System for decision-making on LMOs (procedures and guidelines)**

*Extent of implementation*

- Adequately addressed

*Preferred means*

- Conferences and other fora
- Technical assistance and advice

*Major target groups*

- Technicians (e.g. in the laboratories)
- Technical personnel / Scientists
- Interest groups (consumer groups, farmers, NGOs, etc.)

- **Access to information communication technologies (ICTs)**

*Extent of implementation*

- Adequately addressed

*Preferred means*

- Conferences and other fora

*Major target groups*

- Technicians (e.g. in the laboratories)
- Technical personnel / Scientists
- General public

- **Biosafety research facilities (e.g. greenhouses)**

*Extent of implementation*

- Adequately addressed

*Preferred means*

- Exchange programmes, internships, study tours, etc.
- Guidance / training materials
- Technical assistance and advice

*Major target groups*

- Technicians (e.g. in the laboratories)
- Technical personnel / Scientists

- **Internet connectivity**

*Extent of implementation*

*Preferred means*

*Major target groups*

<ul style="list-style-type: none"> <li>Fully addressed</li> </ul>	<ul style="list-style-type: none"> <li>[Not specified]</li> </ul>	<ul style="list-style-type: none"> <li>[Not specified]</li> </ul>
<b>Office facilities, equipment and supplies for biosafety work</b>		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> <li>Fully addressed</li> </ul>	<ul style="list-style-type: none"> <li>[Not specified]</li> </ul>	<ul style="list-style-type: none"> <li>[Not specified]</li> </ul>
<b>Telecommunication facilities (e.g. telephone, fax, e-mail)</b>		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> <li>Partially addressed</li> </ul>	<ul style="list-style-type: none"> <li>Funding support</li> </ul>	<ul style="list-style-type: none"> <li>IT, BCH and data / information managers</li> </ul>
<b>Access to information on available funding sources</b>		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> <li>Adequately addressed</li> </ul>	<ul style="list-style-type: none"> <li>Technical assistance and advice</li> </ul>	<ul style="list-style-type: none"> <li>IT, BCH and data / information managers</li> <li>Government regulators / administrators</li> <li>Technical personnel / Scientists</li> </ul>
<b>Budgeting and financial management skills</b>		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> <li>Not addressed</li> </ul>	<ul style="list-style-type: none"> <li>Education and training</li> <li>Funding support</li> </ul>	<ul style="list-style-type: none"> <li>IT, BCH and data / information managers</li> <li>Technical personnel / Scientists</li> <li>Other professionals (e.g. lawyers, economists, etc.)</li> </ul>
<b>Resource mobilisation skills (including project proposal writing)</b>		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> <li>Not addressed</li> </ul>	<ul style="list-style-type: none"> <li>Education and training</li> <li>Funding support</li> </ul>	<ul style="list-style-type: none"> <li>IT, BCH and data / information managers</li> <li>Government regulators / administrators</li> <li>Technical personnel / Scientists</li> </ul>
<b>System for resource-recovery (e.g. system for collecting fees on applications)</b>		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> <li>Adequately addressed</li> </ul>	<ul style="list-style-type: none"> <li>Technical assistance and advice</li> </ul>	<ul style="list-style-type: none"> <li>Government regulators / administrators</li> <li>Technical personnel / Scientists</li> <li>Other professionals (e.g. lawyers, economists, etc.)</li> </ul>
<b>System for tracking and dealing with unintentional or illegal transboundary movements</b>		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> <li>Partially addressed</li> </ul>	<ul style="list-style-type: none"> <li>Funding support</li> <li>Guidance / training materials</li> <li>Conferences and other fora</li> </ul>	<ul style="list-style-type: none"> <li>Government regulators / administrators</li> <li>Enforcement officials (e.g. field inspectors)</li> <li>Customs officials</li> </ul>
<b>Mechanism for inspections and enforcement of biosafety laws</b>		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> <li>Minimally addressed</li> </ul>	<ul style="list-style-type: none"> <li>Education and training</li> <li>Funding support</li> <li>Guidance / training materials</li> </ul>	<ul style="list-style-type: none"> <li>IT, BCH and data / information managers</li> <li>Government regulators / administrators</li> <li>Enforcement officials (e.g. field inspectors)</li> </ul>
<b>System for post-release monitoring of LMOs</b>		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> <li>Partially addressed</li> </ul>	<ul style="list-style-type: none"> <li>Education and training</li> <li>Funding support</li> <li>Exchange programmes, internships,</li> </ul>	<ul style="list-style-type: none"> <li>Government regulators / administrators</li> <li>Technicians (e.g. in the laboratories)</li> </ul>

	study tours, etc.	<ul style="list-style-type: none"> <li>Technical personnel / Scientists</li> </ul>
<ul style="list-style-type: none"> <li><b>Access to information on existing academic training programmes in biosafety</b></li> </ul>		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> <li>Partially addressed</li> </ul>	<ul style="list-style-type: none"> <li>Conferences and other fora</li> <li>Technical assistance and advice</li> </ul>	<ul style="list-style-type: none"> <li>IT, BCH and data / information managers</li> <li>Graduate and undergraduate students</li> <li>General public</li> </ul>
<ul style="list-style-type: none"> <li><b>Access to biosafety training materials</b></li> </ul>		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> <li>Partially addressed</li> </ul>	<ul style="list-style-type: none"> <li>Funding support</li> <li>Guidance / training materials</li> <li>Technical assistance and advice</li> </ul>	<ul style="list-style-type: none"> <li>IT, BCH and data / information managers</li> <li>Technical personnel / Scientists</li> <li>Customs officials</li> </ul>
<ul style="list-style-type: none"> <li><b>Access to information on staff exchange/on-the-job-training opportunities</b></li> </ul>		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> <li>Not addressed</li> </ul>	<ul style="list-style-type: none"> <li>Exchange programmes, internships, study tours, etc.</li> <li>Scholarships / fellowships</li> <li>Conferences and other fora</li> </ul>	<ul style="list-style-type: none"> <li>IT, BCH and data / information managers</li> <li>Technical personnel / Scientists</li> <li>Customs officials</li> </ul>
<ul style="list-style-type: none"> <li><b>Training in biosafety legislation and policy development and practice</b></li> </ul>		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> <li>Minimally addressed</li> </ul>	<ul style="list-style-type: none"> <li>Exchange programmes, internships, study tours, etc.</li> <li>Guidance / training materials</li> <li>Conferences and other fora</li> </ul>	<ul style="list-style-type: none"> <li>Decision / policy-makers (e.g. Ministers)</li> <li>IT, BCH and data / information managers</li> <li>Government regulators / administrators</li> </ul>
<ul style="list-style-type: none"> <li><b>Training in scientific and technical fields relevant to biosafety</b></li> </ul>		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> <li>Partially addressed</li> </ul>	<ul style="list-style-type: none"> <li>Exchange programmes, internships, study tours, etc.</li> <li>Guidance / training materials</li> <li>Conferences and other fora</li> </ul>	<ul style="list-style-type: none"> <li>IT, BCH and data / information managers</li> <li>Technicians (e.g. in the laboratories)</li> <li>Technical personnel / Scientists</li> </ul>
<ul style="list-style-type: none"> <li><b>Training in legal, social and economic fields relevant to biosafety</b></li> </ul>		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> <li>Minimally addressed</li> </ul>	<ul style="list-style-type: none"> <li>Education and training</li> <li>Funding support</li> <li>Guidance / training materials</li> </ul>	<ul style="list-style-type: none"> <li>IT, BCH and data / information managers</li> <li>Technical personnel / Scientists</li> <li>Other professionals (e.g. lawyers, economists, etc.)</li> </ul>
<ul style="list-style-type: none"> <li><b>Training in basics of biosafety and modern biotechnology</b></li> </ul>		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> <li>Partially addressed</li> </ul>	<ul style="list-style-type: none"> <li>Education and training</li> <li>Funding support</li> <li>Exchange programmes, internships, study tours, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Technicians (e.g. in the laboratories)</li> <li>Technical personnel / Scientists</li> <li>Graduate and undergraduate students</li> </ul>
<ul style="list-style-type: none"> <li><b>Training in risk assessment</b></li> </ul>		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> <li>Partially addressed</li> </ul>	<ul style="list-style-type: none"> <li>Education and training</li> <li>Funding support</li> <li>Exchange programmes, internships, study tours, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Technicians (e.g. in the laboratories)</li> <li>Technical personnel / Scientists</li> <li>Graduate and undergraduate students</li> </ul>
<ul style="list-style-type: none"> <li><b>Training in risk management</b></li> </ul>		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>
<ul style="list-style-type: none"> <li>Minimally addressed</li> </ul>	<ul style="list-style-type: none"> <li>Funding support</li> </ul>	<ul style="list-style-type: none"> <li>Technicians (e.g. in the laboratories)</li> </ul>

<ul style="list-style-type: none"> <li>• <b>Training in biosafety regulatory issues</b></li> </ul>	<ul style="list-style-type: none"> <li>• Exchange programmes, internships, study tours, etc.</li> <li>• Conferences and other fora</li> </ul>	<ul style="list-style-type: none"> <li>• Technical personnel / Scientists</li> <li>• Graduate and undergraduate students</li> </ul>
<i>Extent of implementation</i> <ul style="list-style-type: none"> <li>• Minimally addressed</li> </ul>	<i>Preferred means</i> <ul style="list-style-type: none"> <li>• Funding support</li> <li>• Exchange programmes, internships, study tours, etc.</li> <li>• Conferences and other fora</li> </ul>	<i>Major target groups</i> <ul style="list-style-type: none"> <li>• Technicians (e.g. in the laboratories)</li> <li>• Technical personnel / Scientists</li> <li>• Graduate and undergraduate students</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Training in biosafety communication</b></li> </ul>		
<i>Extent of implementation</i> <ul style="list-style-type: none"> <li>• Partially addressed</li> </ul>	<i>Preferred means</i> <ul style="list-style-type: none"> <li>• Exchange programmes, internships, study tours, etc.</li> <li>• Guidance / training materials</li> <li>• Conferences and other fora</li> </ul>	<i>Major target groups</i> <ul style="list-style-type: none"> <li>• IT, BCH and data / information managers</li> <li>• Technicians (e.g. in the laboratories)</li> <li>• Technical personnel / Scientists</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Training in LMO sampling and detection</b></li> </ul>		
<i>Extent of implementation</i> <ul style="list-style-type: none"> <li>• Adequately addressed</li> </ul>	<i>Preferred means</i> <ul style="list-style-type: none"> <li>• Exchange programmes, internships, study tours, etc.</li> <li>• Conferences and other fora</li> <li>• Technical assistance and advice</li> </ul>	<i>Major target groups</i> <ul style="list-style-type: none"> <li>• Technicians (e.g. in the laboratories)</li> <li>• Technical personnel / Scientists</li> <li>• Graduate and undergraduate students</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Training in post-release monitoring of LMOs</b></li> </ul>		
<i>Extent of implementation</i> <ul style="list-style-type: none"> <li>• Minimally addressed</li> </ul>	<i>Preferred means</i> <ul style="list-style-type: none"> <li>• Education and training</li> <li>• Funding support</li> <li>• Exchange programmes, internships, study tours, etc.</li> </ul>	<i>Major target groups</i> <ul style="list-style-type: none"> <li>• Technicians (e.g. in the laboratories)</li> <li>• Technical personnel / Scientists</li> <li>• Graduate and undergraduate students</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Biosafety research</b></li> </ul>		
<i>Extent of implementation</i> <ul style="list-style-type: none"> <li>• Minimally addressed</li> </ul>	<i>Preferred means</i> <ul style="list-style-type: none"> <li>• Education and training</li> <li>• Funding support</li> <li>• Exchange programmes, internships, study tours, etc.</li> </ul>	<i>Major target groups</i> <ul style="list-style-type: none"> <li>• Technicians (e.g. in the laboratories)</li> <li>• Technical personnel / Scientists</li> <li>• Graduate and undergraduate students</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Training in administrative practices for handling LMO import and release applications</b></li> </ul>		
<i>Extent of implementation</i> <ul style="list-style-type: none"> <li>• Adequately addressed</li> </ul>	<i>Preferred means</i> <ul style="list-style-type: none"> <li>• Conferences and other fora</li> <li>• Technical assistance and advice</li> </ul>	<i>Major target groups</i> <ul style="list-style-type: none"> <li>• Government regulators / administrators</li> <li>• Technical personnel / Scientists</li> <li>• Graduate and undergraduate students</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Training in preparation and presentation of LMO export or release applications/dossiers</b></li> </ul>		
<i>Extent of implementation</i> <ul style="list-style-type: none"> <li>• Partially addressed</li> </ul>	<i>Preferred means</i> <ul style="list-style-type: none"> <li>• Education and training</li> <li>• Funding support</li> <li>• Conferences and other fora</li> </ul>	<i>Major target groups</i> <ul style="list-style-type: none"> <li>• Government regulators / administrators</li> <li>• Technical personnel / Scientists</li> <li>• Graduate and undergraduate students</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Training in socio-economic considerations relating to LMOs</b></li> </ul>		
<i>Extent of implementation</i> <ul style="list-style-type: none"> <li>• Not addressed</li> </ul>	<i>Preferred means</i> <ul style="list-style-type: none"> <li>• Funding support</li> <li>• Exchange programmes, internships, study tours, etc.</li> <li>• Technical assistance and advice</li> </ul>	<i>Major target groups</i> <ul style="list-style-type: none"> <li>• Technical personnel / Scientists</li> <li>• Graduate and undergraduate students</li> <li>• Interest groups (consumer groups, farmers, NGOs, etc.)</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Training in cost/benefit analysis as part of the risk management strategy</b></li> </ul>		
<i>Extent of implementation</i>	<i>Preferred means</i>	<i>Major target groups</i>

- Not addressed

- Education and training
- Funding support
- Technical assistance and advice

- Technical personnel / Scientists
- Graduate and undergraduate students
- Other professionals (e.g. lawyers, economists, etc.)

#### • Training in documentation and identification requirements for LMO shipments

##### *Extent of implementation*

- Minimally addressed

##### *Preferred means*

- Education and training
- Funding support
- Exchange programmes, internships, study tours, etc.

##### *Major target groups*

- Technical personnel / Scientists
- Graduate and undergraduate students
- Customs officials

#### • Training in compliance requirements under the Protocol

##### *Extent of implementation*

- Minimally addressed

##### *Preferred means*

- Education and training
- Funding support
- Exchange programmes, internships, study tours, etc.

##### *Major target groups*

- Technical personnel / Scientists
- Graduate and undergraduate students
- Other professionals (e.g. lawyers, economists, etc.)

#### • Training in liability and redress issues under the Protocol

##### *Extent of implementation*

- Partially addressed

##### *Preferred means*

- Education and training
- Funding support
- Exchange programmes, internships, study tours, etc.

##### *Major target groups*

- Technical personnel / Scientists
- Customs officials
- Other professionals (e.g. lawyers, economists, etc.)

#### • Guidance on other international agreements relevant to biosafety

##### *Extent of implementation*

- Minimally addressed

##### *Preferred means*

- Exchange programmes, internships, study tours, etc.
- Guidance / training materials
- Conferences and other fora

##### *Major target groups*

- IT, BCH and data / information managers
- Technical personnel / Scientists
- Graduate and undergraduate students

#### • Access to basic ecological data to support risk assessments

##### *Extent of implementation*

- Not addressed

##### *Preferred means*

- Exchange programmes, internships, study tours, etc.
- Conferences and other fora
- Technical assistance and advice

##### *Major target groups*

- IT, BCH and data / information managers
- Technical personnel / Scientists
- Graduate and undergraduate students

#### • Guidance documents on specific aspects of risk assessment

##### *Extent of implementation*

- Partially addressed

##### *Preferred means*

- Education and training
- Funding support
- Exchange programmes, internships, study tours, etc.

##### *Major target groups*

- Technicians (e.g. in the laboratories)
- Technical personnel / Scientists
- Graduate and undergraduate students

#### • Guidance on how to perform risk assessment

##### *Extent of implementation*

- Partially addressed

##### *Preferred means*

- Education and training
- Funding support
- Exchange programmes, internships, study tours, etc.

##### *Major target groups*

- IT, BCH and data / information managers
- Technicians (e.g. in the laboratories)
- Technical personnel / Scientists

#### • National risk management system/strategy

##### *Extent of implementation*

- Fully addressed

##### *Preferred means*

- Conferences and other fora

##### *Major target groups*

- IT, BCH and data / information managers
- Technical personnel / Scientists
- Graduate and undergraduate students

• **System to detect and appropriately respond to unintentional LMO releases**

*Extent of implementation*

- Not addressed

*Preferred means*

- Education and training
- Funding support
- Exchange programmes, internships, study tours, etc.

students

*Major target groups*

- IT, BCH and data / information managers
- Technicians (e.g. in the laboratories)
- Technical personnel / Scientists

• **Guidance on different risk management measures**

*Extent of implementation*

- Partially addressed

*Preferred means*

- Exchange programmes, internships, study tours, etc.
- Conferences and other fora
- Technical assistance and advice

*Major target groups*

- IT, BCH and data / information managers
- Technical personnel / Scientists
- Graduate and undergraduate students

• **Mechanisms for cooperation in risk management**

*Extent of implementation*

- Not addressed

*Preferred means*

- Exchange programmes, internships, study tours, etc.
- Guidance / training materials
- Conferences and other fora

*Major target groups*

- IT, BCH and data / information managers
- Technical personnel / Scientists
- Graduate and undergraduate students

• **National framework/system for post-release monitoring of LMOs**

*Extent of implementation*

- Minimally addressed

*Preferred means*

- Exchange programmes, internships, study tours, etc.
- Guidance / training materials
- Technical assistance and advice

*Major target groups*

- IT, BCH and data / information managers
- Technical personnel / Scientists
- Graduate and undergraduate students

• **Tools and methodologies for environmental monitoring of LMOs**

*Extent of implementation*

- Not addressed

*Preferred means*

- Education and training
- Funding support
- Exchange programmes, internships, study tours, etc.

*Major target groups*

- Technicians (e.g. in the laboratories)
- Technical personnel / Scientists
- Graduate and undergraduate students

• **Biosafety awareness materials**

*Extent of implementation*

- Adequately addressed

*Preferred means*

- Exchange programmes, internships, study tours, etc.
- Conferences and other fora

*Major target groups*

- IT, BCH and data / information managers
- Technical personnel / Scientists
- Interest groups (consumer groups, farmers, NGOs, etc.)

• **Biosafety awareness and education programmes**

*Extent of implementation*

- Partially addressed

*Preferred means*

- Education and training
- Funding support
- Exchange programmes, internships, study tours, etc.

*Major target groups*

- IT, BCH and data / information managers
- Technical personnel / Scientists
- Graduate and undergraduate students

• **Biosafety documentation units or reference libraries**

*Extent of implementation*

- Adequately addressed

*Preferred means*

- Exchange programmes, internships, study tours, etc.
- Guidance / training materials
- Conferences and other fora

*Major target groups*

- IT, BCH and data / information managers
- Government regulators / administrators
- Technical personnel / Scientists

• **Facilities for public access to biosafety information and means of access to the Biosafety Clearing-House**



*Extent of implementation*

- Partially addressed

*Preferred means*

- Guidance / training materials
- Conferences and other fora
- Technical assistance and advice

*Major target groups*

- Interest groups (consumer groups, farmers, NGOs, etc.)
- Mass media / extension workers
- General public

- **National biosafety website**

*Extent of implementation*

- Fully addressed

*Preferred means*

- Conferences and other fora

*Major target groups*

- IT, BCH and data / information managers
- Graduate and undergraduate students
- General public

- **Biosafety outreach strategy/ communication plan**

*Extent of implementation*

- Not addressed

*Preferred means*

- Funding support
- Exchange programmes, internships, study tours, etc.
- Conferences and other fora

*Major target groups*

- IT, BCH and data / information managers
- Government regulators / administrators
- Technical personnel / Scientists

- **Training in risk-communication**

*Extent of implementation*

- Adequately addressed

*Preferred means*

- Exchange programmes, internships, study tours, etc.
- Conferences and other fora
- Technical assistance and advice

*Major target groups*

- IT, BCH and data / information managers
- Technicians (e.g. in the laboratories)
- Technical personnel / Scientists

- **Systems for public participation in biosafety**

*Extent of implementation*

- Minimally addressed

*Preferred means*

- Funding support
- Guidance / training materials
- Conferences and other fora

*Major target groups*

- IT, BCH and data / information managers
- Technical personnel / Scientists
- General public

- **National system (policy, procedures and mechanisms) for biosafety information management**

*Extent of implementation*

- Adequately addressed

*Preferred means*

- Exchange programmes, internships, study tours, etc.
- Conferences and other fora

*Major target groups*

- IT, BCH and data / information managers
- Government regulators / administrators
- Technical personnel / Scientists

- **Equipment (hardware and software) to facilitate national participation in the BCH**

*Extent of implementation*

- Adequately addressed

*Preferred means*

- Exchange programmes, internships, study tours, etc.
- Guidance / training materials
- Conferences and other fora

*Major target groups*

- IT, BCH and data / information managers
- Government regulators / administrators
- Customs officials

- **Establishment of national biosafety databases**

*Extent of implementation*

- Adequately addressed

*Preferred means*

- Technical assistance and advice

*Major target groups*

- IT, BCH and data / information managers
- Technical personnel / Scientists

- **Interoperability with the BCH central portal**

*Extent of implementation*

- Partially addressed

*Preferred means*

- Funding support
- Guidance / training materials
- Technical assistance and advice

*Major target groups*

- IT, BCH and data / information managers
- Technicians (e.g. in the laboratories)
- Technical personnel / Scientists

- **Non-Internet access to the BCH**

*Extent of implementation*

- Minimally addressed

*Preferred means*

- Guidance / training materials
- Conferences and other fora
- Technical assistance and advice

*Major target groups*

- IT, BCH and data / information managers
- Technical personnel / Scientists
- Interest groups (consumer groups, farmers, NGOs, etc.)

- **Systems for data and information security and back-up**

*Extent of implementation*

- Adequately addressed

*Preferred means*

- Exchange programmes, internships, study tours, etc.
- Conferences and other fora
- Technical assistance and advice

*Major target groups*

- IT, BCH and data / information managers
- Government regulators / administrators
- Customs officials

- **Systems for data validation and quality control**

*Extent of implementation*

- Minimally addressed

*Preferred means*

- Exchange programmes, internships, study tours, etc.
- Conferences and other fora
- Technical assistance and advice

*Major target groups*

- IT, BCH and data / information managers
- Technical personnel / Scientists
- Other professionals (e.g. lawyers, economists, etc.)

- **Mechanism for biosafety information gathering and reporting**

*Extent of implementation*

- Partially addressed

*Preferred means*

- Education and training
- Funding support
- Technical assistance and advice

*Major target groups*

- IT, BCH and data / information managers
- Government regulators / administrators
- Technical personnel / Scientists

- **Training in the use and management of the BCH central portal**

*Extent of implementation*

- Partially addressed

*Preferred means*

- Exchange programmes, internships, study tours, etc.
- Conferences and other fora
- Technical assistance and advice

*Major target groups*

- IT, BCH and data / information managers
- Technical personnel / Scientists

- **Mechanisms for regional cooperation**

*Extent of implementation*

- Not addressed

*Preferred means*

- Funding support
- Exchange programmes, internships, study tours, etc.
- Conferences and other fora

*Major target groups*

- IT, BCH and data / information managers
- Government regulators / administrators
- Technical personnel / Scientists

- **Training in collaboration techniques and approaches**

*Extent of implementation*

- Not addressed

*Preferred means*

- Education and training
- Funding support
- Exchange programmes, internships, study tours, etc.

*Major target groups*

- IT, BCH and data / information managers
- Government regulators / administrators
- Technical personnel / Scientists

- **Training in negotiation skills**

*Extent of implementation*

- Not addressed

*Preferred means*

- Education and training
- Funding support
- Exchange programmes, internships, study tours, etc.

*Major target groups*

- IT, BCH and data / information managers
- Government regulators / administrators
- Technical personnel / Scientists

- **Access to information on available technologies relevant for biosafety**

*Extent of implementation*

- Not addressed

*Preferred means*

- Exchange programmes, internships, study tours, etc.
- Guidance / training materials
- Technical assistance and advice

*Major target groups*

- IT, BCH and data / information managers
- Technical personnel / Scientists
- Graduate and undergraduate students

- **Enabling policy/regulatory framework for technology transfer**

*Extent of implementation*

- Minimally addressed

*Preferred means*

- Exchange programmes, internships, study tours, etc.
- Guidance / training materials
- Conferences and other fora

*Major target groups*

- IT, BCH and data / information managers
- Government regulators / administrators
- Technical personnel / Scientists

- **Establishment of technology information platforms**

*Extent of implementation*

- Not addressed

*Preferred means*

- Funding support

*Major target groups*

- IT, BCH and data / information managers
- Technicians (e.g. in the laboratories)
- Technical personnel / Scientists

- **National framework and action plan for technology transfer**

*Extent of implementation*

- Minimally addressed

*Preferred means*

- Funding support

*Major target groups*

- IT, BCH and data / information managers
- Technicians (e.g. in the laboratories)
- Technical personnel / Scientists

- **Public-private partnerships for technology development**

*Extent of implementation*

- Not addressed

*Preferred means*

- Guidance / training materials
- Conferences and other fora

*Major target groups*

- IT, BCH and data / information managers
- Technical personnel / Scientists
- Other professionals (e.g. lawyers, economists, etc.)

- **Laboratory for LMO detection and analysis**

*Extent of implementation*

- Fully addressed

*Preferred means*

- Exchange programmes, internships, study tours, etc.
- Conferences and other fora
- Technical assistance and advice

*Major target groups*

- Technicians (e.g. in the laboratories)
- Technical personnel / Scientists
- Graduate and undergraduate students

- **Guidance on unique identification systems**

*Extent of implementation*

- Not addressed

*Preferred means*

- Exchange programmes, internships, study tours, etc.
- Conferences and other fora
- Technical assistance and advice

*Major target groups*

- Technicians (e.g. in the laboratories)
- Technical personnel / Scientists
- Graduate and undergraduate students

- **Simple/quick LMO test kits**

*Extent of implementation*

- Fully addressed

*Preferred means*

- Conferences and other fora

*Major target groups*

- Technicians (e.g. in the laboratories)
- Technical personnel / Scientists
- Graduate and undergraduate students

- **National system for taking into account socio-economic considerations in decision-making regarding LMOs**

*Extent of implementation*

- Minimally addressed

*Preferred means*

- Funding support

*Major target groups*

- Decision / policy-makers (e.g. Ministers)
- IT, BCH and data / information managers

<ul style="list-style-type: none"> <li> <b>Guidance on taking into account socio-economic considerations in decision-making concerning LMOs</b> </li> </ul>		
<i>Extent of implementation</i> <ul style="list-style-type: none"> <li>Not addressed</li> </ul>	<i>Preferred means</i> <ul style="list-style-type: none"> <li>Funding support</li> </ul>	<i>Major target groups</i> <ul style="list-style-type: none"> <li>General public</li> </ul>
<ul style="list-style-type: none"> <li> <b>Mechanisms for cooperation on research on socio-economic impacts of LMOs</b> </li> </ul>		
<i>Extent of implementation</i> <ul style="list-style-type: none"> <li>Not addressed</li> </ul>	<i>Preferred means</i> <ul style="list-style-type: none"> <li>Guidance / training materials</li> <li>Conferences and other fora</li> </ul>	<i>Major target groups</i> <ul style="list-style-type: none"> <li>Government regulators / administrators</li> <li>Other professionals (e.g. lawyers, economists, etc.)</li> <li>General public</li> </ul>
<ul style="list-style-type: none"> <li> <b>Development of LMO traceability systems</b> </li> </ul>		
<i>Extent of implementation</i> <ul style="list-style-type: none"> <li>Minimally addressed</li> </ul>	<i>Preferred means</i> <ul style="list-style-type: none"> <li>Education and training</li> <li>Funding support</li> </ul>	<i>Major target groups</i> <ul style="list-style-type: none"> <li>IT, BCH and data / information managers</li> <li>Technical personnel / Scientists</li> <li>Other professionals (e.g. lawyers, economists, etc.)</li> </ul>
<ul style="list-style-type: none"> <li> <b>Establishment of identity preservation systems</b> </li> </ul>		
<i>Extent of implementation</i> <ul style="list-style-type: none"> <li>Not addressed</li> </ul>	<i>Preferred means</i> <ul style="list-style-type: none"> <li>Funding support</li> <li>Exchange programmes, internships, study tours, etc.</li> <li>Technical assistance and advice</li> </ul>	<i>Major target groups</i> <ul style="list-style-type: none"> <li>IT, BCH and data / information managers</li> <li>Technicians (e.g. in the laboratories)</li> <li>Technical personnel / Scientists</li> </ul>
<ul style="list-style-type: none"> <li> <b>National system for inspection and verification of documentation accompanying LMO shipments</b> </li> </ul>		
<i>Extent of implementation</i> <ul style="list-style-type: none"> <li>Adequately addressed</li> </ul>	<i>Preferred means</i> <ul style="list-style-type: none"> <li>Exchange programmes, internships, study tours, etc.</li> <li>Conferences and other fora</li> </ul>	<i>Major target groups</i> <ul style="list-style-type: none"> <li>Government regulators / administrators</li> <li>Technical personnel / Scientists</li> <li>Customs officials</li> </ul>
<ul style="list-style-type: none"> <li> <b>National system for managing and protecting confidential information</b> </li> </ul>		
<i>Extent of implementation</i> <ul style="list-style-type: none"> <li>Fully addressed</li> </ul>	<i>Preferred means</i> <ul style="list-style-type: none"> <li>Conferences and other fora</li> </ul>	<i>Major target groups</i> <ul style="list-style-type: none"> <li>IT, BCH and data / information managers</li> <li>Government regulators / administrators</li> <li>Customs officials</li> </ul>
<ul style="list-style-type: none"> <li> <b>Training in biosafety record keeping and information security</b> </li> </ul>		
<i>Extent of implementation</i> <ul style="list-style-type: none"> <li>Partially addressed</li> </ul>	<i>Preferred means</i> <ul style="list-style-type: none"> <li>Exchange programmes, internships, study tours, etc.</li> <li>Guidance / training materials</li> <li>Technical assistance and advice</li> </ul>	<i>Major target groups</i> <ul style="list-style-type: none"> <li>IT, BCH and data / information managers</li> <li>Technical personnel / Scientists</li> <li>Customs officials</li> </ul>
<ul style="list-style-type: none"> <li> <b>Guidance on assessment risks of LMOs to human health</b> </li> </ul>		
<i>Extent of implementation</i> <ul style="list-style-type: none"> <li>Partially addressed</li> </ul>	<i>Preferred means</i> <ul style="list-style-type: none"> <li>Funding support</li> <li>Guidance / training materials</li> <li>Technical assistance and advice</li> </ul>	<i>Major target groups</i> <ul style="list-style-type: none"> <li>IT, BCH and data / information managers</li> <li>Technicians (e.g. in the laboratories)</li> <li>Technical personnel / Scientists</li> </ul>
<ul style="list-style-type: none"> <li> <b>Regulatory framework for addressing human health impacts of LMOs</b> </li> </ul>		
<i>Extent of implementation</i> <ul style="list-style-type: none"> <li>Adequately addressed</li> </ul>	<i>Preferred means</i> <ul style="list-style-type: none"> <li>Exchange programmes, internships, study tours, etc.</li> <li>Conferences and other fora</li> </ul>	<i>Major target groups</i> <ul style="list-style-type: none"> <li>IT, BCH and data / information managers</li> <li>Technical personnel / Scientists</li> <li>Other professionals (e.g. lawyers,</li> </ul>

economists, etc.)

• **Establishment of the national network of the laboratories for GMO detection**

*Extent of implementation*

- Minimally addressed

*Preferred means*

- Funding support

*Major target groups*

- IT, BCH and data / information managers
- Technicians (e.g. in the laboratories)
- Technical personnel / Scientists

• **Establishment of the national methodological information centre on GMO detection issues**

*Extent of implementation*

- Minimally addressed

*Preferred means*

- Funding support

*Major target groups*

- IT, BCH and data / information managers
- Technical personnel / Scientists

• **Creation of the national methodological information database on GMO detection and identification issues**

*Extent of implementation*

- Minimally addressed

*Preferred means*

- Funding support

*Major target groups*

- IT, BCH and data / information managers
- Technical personnel / Scientists