

Biosafety education and training

**Survey to establish baseline data on the current situation in
the Czech Republic**

- 2011 -

Obsah

1. Introduction	3
2. Public awareness, education and participation - legislative framework.....	3
a. International level.....	3
b. European level.....	4
c. National level	5
3. Source of biosafety-related information and biosafety education	6
a. Ministry of the Environment.....	7
b. Ministry of Agriculture	9
c. Research institutions, universities, NGOs and other relevant stakeholders.....	9
4. Literature:.....	11
5. Annex I. List of Biosafety-related seminars, workshops, conferences and other relevant events held in the Czech Republic 2006-2011	12
6. Annex II. List of publications issued in the Czech Republic 2006-2011.....	17
7. Annex III. Overview of web pages providing information on biotechnologies and biosafety in the Czech Republic.....	21

1. Introduction

This document was created on the basis of the Fifth Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol on Biosafety (COP-MOP/5) decision No. BS V/3, in which Parties and other Governments are invited to commission country surveys/studies to establish baseline data on the current situation regarding education and training related to biosafety and make the information available to the Biosafety Clearing-House.

In the Czech Republic, genetically modified organisms (GMOs) are being used for both research purposes and commercial cultivation. As regards research activities, more than 90 institutions are authorized to use GMOs under the contained use conditions and 12 consent holders perform field trials with 8 GM crops (maize, potato, plum tree, flax, pea, barley and tobacco) on totally 8,8 ha in 2011. Czech Republic has also experience with commercial cultivation of GM maize MON810 resistant to European corn borer and GM potatoes Amflora with altered starch composition. Therefore public awareness and participation together with related biosafety education and training play an important role in the current regulatory framework as well as general approach of the Czech Republic to modern biotechnologies.

2. Public awareness, education and participation - legislative framework

a. International level

- **Cartagena Protocol on Biosafety**
 - Article 23 requires Parties to promote and facilitate public awareness, education and participation concerning the safe transfer, handling and use of living modified organisms (LMOs). Furthermore, Parties are also obliged to consult the public in their decision-making processes regarding LMOs and make the result of such decisions available to the public.
 - Article 20 establishes the Biosafety Clearing-House to facilitate the exchange of biosafety-related information and requires Parties to use and update as necessary this online database.

- **Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters - the Aarhus Convention**

Aarhus Convention provides an appropriate international framework for further developing access to information, public participation and access to justice. The co-ordination body for implementation of the Aarhus Convention is the Ministry of the Environment, which closely co-operates with other sectors as well as environmental NGOs to evaluate the status of implementation of the Aarhus Convention.

In the sense of the Aarhus Convention, the public stands as a partner to the public administration, having the right to obtain intelligible environmental information, participate in decision-making and obtain legal protection.

An amendment to the Aarhus Convention was adopted in Almaty (Kazakhstan) in 2005. This amendment makes more specific obligations placed on Parties with regard to public participation in GMO decision-making processes. Relevant Community law governing

GMOs, as mentioned below, and in particular Directive 2001/18/EC and Regulation (EC) No 1829/2003, incorporates provisions for public participation in decision-making on GMOs, consistent with the amendment to the Aarhus Convention. The amendment will enter into force after its acceptance by ¾ of Parties to the Aarhus Convention. Czech Republic ratified the amendment in 2008.

Notice: Czech government officials are familiarised, within their initial training, with the aspects of access of the public to information on the environment (Act No. 123/1998 Coll., on free access to information on the environment, and Act No. 106/1999 Coll., on free access to information). The requirements of the Aarhus Convention are reflected in a number of regulations within the legislation of the Czech Republic; more specifically, a number of regulations contain provisions fulfilling the requirements of the Aarhus Convention.

b. European level

The main legal instrument to align EU Member States legislation with the provisions of the Aarhus Convention on access to information is **Directive 2003/4/EC** on public access to environmental information and repealing Council Directive 90/313/EEC. To further support citizens' rights of access to information, the EU has also adopted **Directive 2003/35/EC** on public participation, **Regulation 1049/2001** regarding public access to European Parliament, Council and Commission documents and **Regulation 1642/2003** amending **Regulation 178/2002** laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety.

EU legislation on GMOs promotes public awareness and participation as an integral part of its regulatory framework, formed by the following keystone instruments:

- **Directive 2001/18/EC** on the deliberate release into the environment of genetically modified organisms
 - In case of GMO notifications for deliberate release of GMOs into the environment for any other purpose than for placing on the market (i.e. field trials), Article 9 stipulates that Member States shall consult the public and, where appropriate, groups within the relevant authorization procedure. In doing so, Member States shall lay down arrangements for this consultation, including a reasonable time-period, in order to give the public or groups the opportunity to express an opinion. Member States are to make available to the public information on all intentional releases of GMOs into the environment in their territory, and the European Commission (EC) shall make available to the public the information contained in the system of exchange of information established within the EC.
 - In cases of GMO notifications for placing on the market of GMOs as or in products, Article 24 stipulates that the EC makes available to the public the summary dossier that is to accompany notifications for placing on the market of GMOs or a combination of GMOs as or in products. It also provides for the EC to make available the assessment report issued by the national authority of the Member State which received the notification.
- **Regulation (EC) No 1829/2003** on genetically modified food and feed establishes a register of genetically modified food and feed authorised under this Regulation, including product specific information. It makes non-confidential data available to the public. Article 5 of the Regulation stipulates that the European Food Safety Authority receiving

from national authorities an application for authorisation for placing on the market of GM food shall make a summary of the application available to the public. The public can make comments to the EC on the authority's opinion. Monitoring plans are to be made available to the public after deletion of any information identified as confidential. Similar provisions exist with regard to the authorisation of GM feed (Article 17). Access to information held by the European Food Safety Authority in relation to procedure under Regulation 1829/2003 should be provided according to Regulation 1049/2001.

- **Directive 90/219/EEC** on the contained use of GM micro-organisms in conjunction with Directive 98/81/EC amending Directive 90/219/EEC states that EU Member States may provide, where appropriate, that the public shall be consulted on any aspect of proposed contained use. It includes a requirement that information on emergency plans and safety measures to be taken in the event of an accident is made publicly available.
- **Regulation (EC) No 1946/2003** transposes the Cartagena Protocol on Biosafety. With regard to transboundary movements of GMOs, Article 6 of the Regulation requires the EC to make available to the public all non-confidential documents related to notifications of exports of GMOs to third countries. In cases of unintentional transboundary movements of GMOs, Article 14 requires Member States to take the appropriate measures to inform, among others, the public about the movement
Information on EU legislation on GMOs was borrowed from the EU 2nd National Report on implementation of the Cartagena Protocol on Biosafety.

All above mentioned legislation is relevant also for the Czech Republic as a EU member state.

c. National level

With reference to Aarhus convention (Czech Republic ratified in 2004), access to information is regulated by two acts in the Czech legal order:

- **Act No. 123/1998 Coll.**, on Right to Environmental Information - the Act regulates right to information on the environment and natural resources, being at disposal at governmental authorities or local administration. The Act defines conditions and procedures how and in which terms to obtain required information.
- **Act No. 106/1999 Coll.**, on Free Access to Information – the Act defines conditions for access to information and in providing information by governmental authorities and local administration, as well as by other public institutions (Káš and Roudná, 2004).

Act No. 106/1999 Coll. applies as supportive act for cases Act No. 123/1998 Coll. does not regulate.

Czech legislation on GMOs promotes public awareness and participation as an integral part of its regulatory framework:

- **Act 78/2004 Coll.**, on the Use of GMOs and Genetically Products, as amended, which is in line with the Cartagena Protocol and relevant Community law governing GMOs, incorporates following provisions for public participation in decision-making on GMOs:
As regards GMOs under the contained use, the Ministry of the Environment of the Czech Republic (Ministry) publishes all relevant information in its online Register of authorized GMOs and the Register of GMO Users. Both registers are available in Czech language at

the web page of the Ministry
http://www.mzp.cz/cz/geneticky_modifikovane_organismy.

Education and training is obligatory for all staff that is getting into contact with GMOs under the contained use. The personnel shall be trained every year about rules for the use of GMOs by the professional consultant. For that purpose the guidelines for professional consultants and GMO users as well as guidelines on training of personnel working with GMOs have been elaborated in the Czech language and published by the Ministry on its website http://www.mzp.cz/cz/legislativa_a_formulare.

In case of GMO notifications for deliberate release of GMOs into the environment for any other purpose than for placing on the market (i.e. field trials), the Ministry makes available a summary of the notification to the public on the internet, on its official board and ensures its publication by the relevant municipality and regional authorities. Anybody may send to the Ministry his/her opinion or make comments within 30 days of publication of the summary of the notification. In case that negative opinion/comments from the public is raised, in which environmental risk assessment results are doubted or an objection to insufficient protection of the health and the environment is made, the Ministry is obliged to arrange public hearing prior to making a decision.

Once a field trial is approved, all staff that is getting into contact with genetically modified material shall be trained every year about rules for the use of GMOs by the professional consultant (similarly as in case of the contained use).

Information on GMOs approved to be placed on the market under the Directive 2001/18/EC is also made available to the public at the Ministry web page. As regards GMOs authorized for commercial use under the Regulation (EC) No 1829/2003, the Ministry provides a link to relevant European databases that is directly applicable in the Czech Republic.

3. Source of biosafety-related information and biosafety education

From the European point of view, the EU maintains online information systems that provide the public with up-to-date information on the legislative framework for GMOs, applications for GMO authorisations and imports, decisions taken by relevant authorities, the results of environmental risk assessment and measures provided as part of risk management (2nd European National Report on the implementation of the Cartagena Protocol on Biosafety, 2011). The EU's main information portals for these purposes are:

- http://ec.europa.eu/food/food/biotechnology/index_en.htm
- <http://gmoinfo.jrc.it/default.asp>.

Further information sites include:

- Biotechnology and GMOs Unit website: <http://biotech.jrc.it/>;
- Community Reference Laboratory for GM Food and Feed: <http://gmo-crl.jrc.it/>
- European Food Safety Authority: http://www.efsa.eu.int/index_en.html
- European Community Biodiversity Clearing-House Mechanism: <http://biodiversity-chm.eea.eu.int/>

In the Czech Republic, education in a broad sense has centuries long tradition, reaching in certain periods a high standard. Environmental education as to its content has been developed in the last decades, already before this term was officially used. Nowadays, the State Programme on Environmental Education and Public Awareness (2000) represents the official

document for environmental education in general, with its Action Plan – regularly updated for a 2-year period (since 2001). The Ministry of the Environment as the main actor cooperates with the Ministry of Education, Youth and Sports in this field. Thanks to national network of centres for environmental education different activities can be developed at local level, in cooperation and even with support of local governments and various stakeholders (Roudná, 2009). UNEP/GEF projects strengthened biosafety education as a part of the broader environmental context.

Further strategic documents also mention GMOs and biosafety topic in the context of environmental policy, which is linked with following biosafety education. These are in particular:

- State Environmental Policy of the Czech Republic
- Sustainable Development Strategy
- State Programme for Protection of Nature and Landscape
- Biodiversity Protection Strategy
- Food Safety Strategy
- National Environment and Health Plan
- Health for Everyone Programme
- State programme on Environmental Education and Public Awareness and its Action plan
- Reports on the Environment of the Czech Republic

Raising the awareness in the field of biosafety constitutes an essential part of activities performed by all the participating ministries and partners from among non-governmental organisations.

The objective of such education is to increase the awareness of all interest groups of both the professional and general public, and to deepen their knowledge in the field of biosafety and in particular risk assessment and management (Ministry of Agriculture, 2010).

a. Ministry of the Environment

Education and public awareness have been developed within the UNEP/GEF projects (Development of the National Biosafety Framework for Czech Republic 2002 – 2004; Implementation of the Draft National Biosafety Framework for the Czech Republic 2006 – 2010; Building Capacity for Effective Participation in the Biosafety Clearing House 2006 – 2008) in cooperation with universities, Scientific-technical Society, civil societies, NGOs, schools and centres for environmental education, museums and Nature Protected Areas administrations.

Workshops for public and schools, Academy of Sciences conferences on topical issues, dissemination of information through media (newspapers, magazines), promotion of education on biosafety at secondary schools and universities, production and dissemination of information on biosafety through the Internet, posters, publications and CD-ROMs for decision-makers, experts, public and schools, as well as regional workshops organized in cooperation with FAO and UNEP (Roudná, 2009).

One meeting per year of the Czech Commission for the Use of Genetically Modified Organisms and Genetic Products is open for public and offers possibility to meet with representatives of responsible authorities and experts (Roudná, 2009). At these meetings, regular trainings and consultations with professional advisors also takes place.

Besides above-mentioned activities, Internet has become the main source of information to be used for further public awareness, education and participation provided by the Ministry of the Environment. Two key websites have been established and regularly updated for this purpose: **www.mzp.cz/cz/rizika_zivotni_prostredi** – a basic website of the Ministry of the Environment performed in the Czech language. Following information on handling GMOs according to the Act 78/2004 Coll. is provided:

- List of the authorised users (“Register of authorized users”)
- List of the authorized GMOs (“Register of authorized GMOs”)
- Issued approvals – any final decision on authorisation always contains general information on the applicant, GMO characteristics, risk assessment results, conditions for use, purpose of the release, labelling requirements, site of release, monitoring requirements and a detailed settlement of all received opinions and comments and also the results of the public hearing.
- Legislation on GMOs – national as well as European relevant legislation is made available
- Guidelines for professional consultants
- Guidelines for training of staff handling with GMOs
- Informative documents, forms etc.

www.mzp.cz/biosafety – the Czech node of the Biosafety Clearing-House Central Portal has been established in line with the Article 20 of the Cartagena Protocol on Biosafety, in order to facilitate the exchange of scientific, technical, environmental and legal information on living modified organisms (LMOs) and to assist Parties to implement the Protocol. This website was initiated and supported by the UNEP/GEF within the Project “Building Capacity for Effective Participation in the Biosafety Clearing-House”. It has been set up and it is managed by the the Ministry of the Environment. The website serves as a source of information in English, therefore in particular for foreign countries and for contact with the Secretariat of the Convention of Biological Diversity serving also as the Secretariat of the Cartagena Protocol on Biosafety (Roudná, 2009). Besides obligatory information according to Article 20 much useful non-obligatory information on the use of GMOs and relevant activities in the Czech Republic is provided. The present menu consists of eight basic headings, and following information can be found:

- Contacts on the national competent authorities
- Czech biosafety legislation
- Information for notifiers about field trials and clinical trials
- Decisions on field trial authorisations and other relevant information on field trials conducted in the Czech Republic
- Principles of co-existence and obligation for GM crops growers in the Czech Republic
- Reporting – the first national report on implementation of the Cartagena Protocol on Biosafety
- Information on the UNEP/GEF Projects related to biosafety gained in the Czech Republic
- Publications on biosafety to be downloaded
- Several reports

The Ministry of the Environment also publishes information on applications for field trials on its official board and ensures its publication by the relevant municipality and regional authorities according to the intended release location

b. Ministry of Agriculture

As regard communication with consumers, the Food Safety Information Centre (FSIC) operated by the Food Authority of the Ministry of Agriculture provides relevant services since 2002. Its main task is to provide access to verified topical information and news, but also scientifically verified and science-based information and news on activities of all relevant organisations, state administration authorities and scientific committees for both professional and general public. The FSIC closely collaborates with the Ministry of Health (Ministry of Agriculture, 2010).

The FSIC is primarily tasked to transmit information from the RASFF system to the public. The FSIC plays the role of a “communication centre” which in its weekly overviews updates the consumer public on issues addressed at the EU level. The FSIC has proven its worth as a quality source of information for both the general and professional public (Ministry of Agriculture, 2010).

FSIC website provides comprehensive information in the form of its own articles and articles from other sources as well as information obtained from foreign sources:

- **www.eagri.cz** – central portal of the Ministry of Agriculture and its competent authorities
- **www.bezpecnostpotravin.cz** – it consists of various applications and the so called “e-mail list“ service which, following the registration, generates advices on new information on the web.
- **www.foodsafety.cz** – it is designed for the English speaking foreigners. It provides basic information on the food safety system in the Czech Republic.
- **www.bezpecna-krmiva.cz** – it aims to provide free of charge the necessary supporting documents and information on valid legislation to all the feed business operators, i.e. primary producers, feed producers and those placing the feed on the market, including importers.
- **www.viscojis.cz** – it is run by the Ministry of Health in cooperation with the Ministry of Agriculture. This website shall improve the awareness of consumers with respect to healthy nutrition, diet and food safety.

Publicity and education events represent a tool for direct communication with the consumer. The FSIC, in cooperation with the Ministry of Health, the Ministry of Education, Youth and Sports and local authorities in the regions, organises publicity events, lectures and educational programmes for the general public of various age groups. The aim of such events is to keep improving the awareness of consumers.

c. Research institutions, universities, NGOs and other relevant stakeholders

Besides national competent authorities, a number of research institutions and / or non-government organisations in the Czech Republic are also focused on public awareness, education and training in biosafety area. Scientists, experts and members of these organisations regularly organize and / or actively participate in different workshops, training courses, conferences, public discussions (also in TV and radio stations), etc. Furthermore, several seed companies also organize seminars and workshops in order to inform the public on different aspects of GM crops cultivation.

Examples of involved universities, research institutes and organizations, NGOs and other relevant stakeholders involved in biosafety public awareness and education:

- Charles University in Prague
- Czech University of Agriculture in Prague
- Mendel University in Brno
- Masaryk University in Brno
- Palacky University in Olomouc
- University in South Bohemia in České Budějovice
- Academy of Sciences of the Czech Republic
- Biology Centre of the Academy of Sciences of the Czech Republic
- Central Institute for Supervising and Testing Agriculture
- Crop Research Institute Prague
- Institute of Chemical Technology and Biotechnological Society
- Institute of Experimental Botany
- National Institute of Public Health
- Biotrin
- Association for Sustainable Development

Annex I and II list seminars and biosafety-related publications issued in the Czech Republic since 2006.

4. Literature:

EU 2nd National Report on implementation of the Cartagena Protocol on Biosafety, 2011.

Káš J., Roudná M. (Ed.) (2004): National Biosafety Framework for the Czech Republic. Ministry of the Environment, Prague, ISBN 80-7212-281-9, 36 pp.

Roudná M. (Ed.) (2009): Genetic Modifications, their Use and Management – Czech Republic. Ministry of the Environment, Prague, ISBN 978-80-7212-511-1, 36 pp.

Food Safety and Nutrition Strategy for 2010 – 2013. Ministry of Agriculture of the Czech Republic, Prague, 2010, ISBN: 978-80-7084-883-8, 12 p.

5. Annex I. List of Biosafety-related seminars, workshops, conferences and other relevant events held in the Czech Republic 2006-2011

ORGANIZATION	TITLE		YEAR	VENUE
Ministry of the Environment	Joint UNEP/GEF Biosafety Inception Workshops – Czech and Slovak Republics	Seminar *	2006	Prague
Ministry of Agriculture	Genetically Modified Organisms	Seminar	2006	Prague
Association for Sustainable Development	Environmental Risks of Biotechnologies	Seminar	2006	Prague
Ministry of the Environment and Scientific-Technical Society	Genetic Modifications and Biosafety Framework	Seminar *	2007	Prague
Ministry of Agriculture in cooperation with Czech University of Agriculture	Genetically Modified Organisms in Agroecosystem and its Vicinity	Seminar	2007	Prague
Czech Association for Plant Protection	X th Plant Protection Days, “Healthy and Quality Crops” – current consumer requirement (lecture on GMOs incl.)	Seminar	2007	Pardubice, Eastern Bohemia
Academy of Sciences of the Czech Republic	Genetically Modified Organisms	Seminar	2007	Prague
Association for Sustainable Development	Organic Agriculture and Genetically Modified Crops: Benefits and Risks for Sustainable Development from the Socio-Economical Perspective	Seminar	2007	Prague
Association for Sustainable Development	Biotechnologies and Sustainable Development from the NGOs Point of View	Seminar	2007	Prague
Committee on Regional Development, Public Administration and the Environment of the Senate of the Parliament of the Czech Republic in cooperation with the Association for Sustainable Development	Benefits and Risks of Biotechnologies from the Perspective of Sustainable Development”	Conference	2007	Prague
Centre for Environmental Education and Ethics	Biosafety Workshop for Teachers	Training *	2008	Rýchory, Eastern Bohemia
Institute of Organic Chemistry and Biochemistry, Institute of Chemical Technology and the NCC	News from Genetic Modifications Field	Seminar *	2008	Prague

Ministry of the Environment and the National Coordination Committee of the UNEP/GEF Project	Building Capacity for Effective Participation in the Biosafety Clearing-House - Final Workshop of the BCH Project	Seminar *	2008	Prague
Crop Research Institute in cooperation with the Ministry of the Environment	Possibilities of GMOs Usage for Food and Industrial Purposes	Seminar	2008	Prague
Institute of Organic Chemistry and Biochemistry, Institute of Chemical Technology and the National Coordination Committee of the UNEP/GEF Project	News from Genetic Modifications Field	Seminar *	2009	Prague
Ministry of the Environment	Biotechnology in Forestry and Examples of its Use	Seminar *	2009	Prague
Centre for Environmental Education and Ethics	Workshop for Educators	Workshop *	2009	Rýchory, Eastern Bohemia
Ministry of Agriculture	Biotechnology and its role in ensuring Food and Feed Sources	Seminar	2009	Prague
Ministry of Agriculture	Agriculture in the Czech Republic and USA – state Georgia	Seminar	2009	Prague
Fairground České Budějovice	New Agricultural Technologies and Their Use in Food Industry - lecture on GMOs incl.	Seminar	2009	České Budějovice, South Budějovice
Ministry of the Environment and Scientific-Technical Society	Use of Genetically Modified Organisms in the Czech Republic and Public Awareness	Seminar *	2010	Prague
Centre for Environmental Education and Ethics	Workshop on activities of the Centre of Environmental Education and Ethics - cooperation with the UNEP/GEF Project and NCC Meeting	Workshop *	2010	Rýchory, Eastern Bohemia
Institute of Chemical Technology and Biotechnological Society	News from Genetic Modifications Field	Seminar *	2010	Prague
Ministry of the Environment	New Technology and Biodiversity Conservation	Series of seminars on the occasion of YoB 2010 *	2010	Prague
Ministry of the Environment	International Year of Biodiversity – UNEP, its Activities and Projects on Biodiversity and Biosafety	Seminar *	2010	Jičín, Eastern Bohemia
Ministry of the Environment	Biotechnology in Forestry II.	Seminar *	2010	Prague

Ministry of the Environment and Scientific-Technical Society	Genetic Resources – Biosafety Principals and Risks of Genetic Erosion	Seminar *	2010	Prague
Ministry of the Environment and Scientific-Technical Society	International Year of Biodiversity – Related Projects and Programmes	Seminar *	2010	Prague
Ministry of the Environment in cooperation with University and Centre for Agricultural Research Olomouc	Genetically Modified Organisms and Biosafety Measures	Seminar *	2010	Olomouc, Northern Moravia
Ministry of the Environment in cooperation with local organizations	Nature Diversity Conservation and Role of International Organizations	Seminar *	2010	Eastern Bohemia
Ministry of the Environment in cooperation with local organizations	Nature Diversity Conservation and 2010 International year of Biodiversity	Seminar *	2010	Northern Bohemia
MoE in cooperation with the Scientific-Technical Society	UNEP/GEF Project – Final Workshop	Seminar *	2010	Prague
Ministry of the Environment in cooperation with Institute of Chemical Technology	Czech Commission on the Use of Genetically Modified Organisms and Genetic Products – Open Meeting + Instruction Meeting for Applicants on authorization for GMO usage	Seminar *	2010	Prague
Centre for Environmental Education and Ethics	Workshop on Food Safety	Workshop *	2010	Trutnov, Eastern Bohemia
Centre of Environmental Education and Ethics	Questions about Genetic Modifications	Workshop *	2010	Trutnov, Eastern Bohemia
Centre of Environmental Education and Ethics	Questions about Genetic Modifications	Workshop *	2010	Hradec Králové, Eastern Bohemia
Biomania (civil association)	Student Scientific Conference for Students Dealing with Genetically Modified Organisms.	Student conference	2010	Brno, Southern Moravia
Reprogen and Monsanto	Seminar on GM Crops Cultivation	Seminar	2010	Planá nad Lužnicí, Southern Bohemia
Crop Research Institute in cooperation with the Scientific Committee for GM Food and Feed	Risk Assessment Procedure, potential toxicity and allergenicity of GMO's (invited speaker Dr. Jean-Michel Wal, EFSA)	Seminar	2010	Prague
Academy of Sciences of the Czech Republic	Introduction of the “White Book on Genetically Modified Crops”	Press conference	2010	Prague

Czech-Moravian Association for Supply and Sale in Agriculture	Scientific Workshop on Plant Production – (lecture on GMOs incl.)	Workshop	2010	Strakonice, Southern Bohemia
Ministry of the Environment in cooperation with the Scientific-Technical Society	Possibilities of Genetic Modifications Use and Biosafety Measures	Seminar *	2011	Prague
Ministry of the Environment in cooperation with the Nature Conservation Union, local organization Eastern Bohemia	Outcomes and Experience of the UNEP/GEF Project on Biosafety Implementation	Workshop *	2011	Czech Paradise Landscape Protected Area, eastern Bohemia
MoE in cooperation with the Scientific-Technical Society	International Biosafety Negotiations and New Treaty on Liability and Redress	Seminar *	2011	Prague
Ministry of the Environment in cooperation with the Scientific-Technical Society	Use of New Biotechnology in Trees Conservation	Seminar	2011	Prague
Ministry of the Environment in cooperation with the ZOO Prague	Experience with public information and education	Seminar *	2011	Prague
Ministry of the Environment	National Consultative Meetings to Share with Public on the Process of Implementing the Cartagena Protocol on Biosafety	Seminar *	2011	Prague
Ministry of Agriculture	Actual Questions about GM Plants and GM Feed Production	Seminar	2011	Prague
Centre of Environmental Education Divizna - Liberec	Genetically Modified Organisms	Seminar for high school teachers and their students	2011	Liberec, Northern Bohemia
Czech-Moravian Association for Supply and Sale in Agriculture	XVI th Feed Conference (lecture on GMOs incl.)	Conference	2011	Brno, Southern Moravia
Institute of Chemical Technology and Biotechnological Society	News from Genetic Modifications Field	Seminar	2011	Prague
Czech Association for Plant Protection and its partners	GMOs as a New Biotechnology in Plant Protection – Biosafety or Risks for Human Health and Environment?	Conference	2011	Dolní Dunajovice, Southern Moravia
Charles University, Faculty of Science	“GMOs: European Legislation and Genetic Manipulations in Plants”	Seminar	2011	Prague

Crop Research Institute	International Meeting on GM Plum Tree with Resistance to Plum Pox	Workshop	2011	Prague
Palacký University – Biological Center in Olomouc – Holice and Science and Technology Park	Plant Biotechnology: Green for Good	Seminar	2011	Olomouc, Northern Moravia
Institute of Entomology, Biology Centre AS CR	5th International Conference on Ecological Impact of GMOs	Conference	2011	České Budějovice, Southern Budějovice
Palacky University in cooperation with the Contipro Group Ltd	School of molecular biotechnologies - Profession	Training course for university students	2011	Olomouc, Northern Moravia

*Notice: events marked with * were organized with support of the UNEP/GEF Projects*

6. Annex II. List of publications issued in the Czech Republic 2006-2011

PUBLICATION	LANGUAGE	Availability
Bioinstitut (2008): Organic Agriculture and Genetically Modified Organisms – Questions about Co-existence. Bioinstitut, Olomouc, ISBN: 978-80-904174-6-5.	Czech	Printed version only
Drobník J. (2010): Modern breeding and food (What Do We Need to Know About Food From Genetically Modified Crops). Czech Consumers Association, Prague, ISBN 978-80-903930-8-0.	Czech	http://www.konzument.cz/publikace/soubory/pruvodce_spotrebitele/brozura-GMO.pdf
Jiráková H.; Večeřa M. (2009): Czech node of the Biosafety Clearing-House to the Cartagena Protocol on Biosafety. Bioprospect (1): 4.	Czech	Printed version only
Jiráková H.; Roudná M. (2010): International negotiations on biosafety were successful. Bioprospect (3-4): 45-46.	Czech	Printed version only
Káš J. (Ed.), Kotrba P., Angelis K., Macek T. (2008): Proceedings of the Workshop “News from Genetic Modifications Field”. Institute of Chemical Technology, Prague, 28.5.2008. Institute of Chemical Technology, 18 pp. *	Czech	Printed version only
Káš J. (Ed.) (2009): Proceedings of the Workshop “News from Genetic Modifications Field”. Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic, Prague, 28.4.2009. Institute of Chemical Technology and Ministry of the Environment, Prague, 17 pp. *	Czech	Printed version only
Káš J. (Ed.) (2010): News from Genetic Modifications Field. Proceedings of the Workshop held on May 28, 2010, Institute of Chemical Technology, Prague, 20 pp. *	Czech	Printed version only
Křístková M. (2009): Dosavadní zkušenosti s pěstováním geneticky modifikované Bt kukuřice v ČR 2005-2009. Ministry of Agriculture, Prague, ISBN 978-80-7084-871-5.	Czech	http://eagri.cz/public/web/mze/zemedelstvi/publikace-a-dokumenty/gmo/
Křístková M. (2009): Genetically Modified Crops in Agriculture of the Czech Republic – Bt Maize. Bioprospect (1): 5-6.	Czech	http://eagri.cz/public/web/mze/zemedelstvi/publikace-a-dokumenty/gmo/

Křístková M. (2010): Změna pravidel pro pěstování Bt kukuřice. Agromanuál (3): 16-18.	Czech	http://eagri.cz/public/web/mze/zemedelstvi/publikace-a-dokumenty/gmo/
Křístková M. (2010): Experience with Bt Maize Cultivation in the Czech Republic 2005-2009. Ministry of Agriculture, Prague, ISBN 978-80-7084-893-7.	Czech	http://eagri.cz/public/web/mze/zemedelstvi/publikace-a-dokumenty/gmo/
Ministry of Agriculture; Czech University of Life Sciences (2006): Genetically Modified Organisms. Proceedings of the seminar arranged by the Ministry of Agriculture and the Czech University of Life Sciences on May 18, 2006. Ministry of Agriculture, Prague, 48 pp.	Czech	http://eagri.cz/public/web/mze/zemedelstvi/publikace-a-dokumenty/gmo/
Ministry of Agriculture et the Czech University of Life Sciences (2007): Genetically Modified Organisms in Agroecosystem and its vicinity. Proceedings of the seminar arranged by the Ministry of Agriculture on May 17, 2007 Ministry of Agriculture, Prague, 56 pp.	Czech	http://eagri.cz/public/web/mze/zemedelstvi/publikace-a-dokumenty/gmo/
Roudná M. (Ed.) (2006): Proceedings of the Joint UNEP/GEF Biosafety Inception Workshops – Czech and Slovak Republics, Prague, November 8-9, 2006. Ministry of the Environment, Prague, 20 pp. *	English	www.mzp.cz/biosafety
Roudná M. (Ed.) (2007): Genetic Modifications and Biosafety Framework. Proceeding of the Workshop, Czech Scientific-Technical Society, Prague, 8.10.2007. Ministry of the Environment, Prague, 18 pp. *	Czech + English Summary	Printed version only
Roudná M., Dotlačil L. et al. (2007): Genetic Resources – Importance, Use and Conservation. Ministry of the Environment, Prague, ISBN 978-80-7212-469-5, 28 pp. + Annex 98 pp. *	Czech + English summary	www.mzp.cz/biosafety
Roudná M. (Ed.) (2008): Proceedings of the Final Workshop – Project UNEP/GEF Building Capacity for Effective Participation in the Biosafety Clearing-House. Prague, December 9, 2008. Ministry of the Environment, Prague, ISBN 978-80-7212-494-7, 14 pp. *	English	www.mzp.cz/biosafety
Roudná M. (Ed.) (2008): Genetic Modifications – Possibilities of their Use and Risks. Ministry of the Environment, Prague, ISBN 978-80-7212-493-0, 48 pp *	Czech + English summary	www.mzp.cz/biosafety
Roudná M. (Ed.) (2009): Genetic Modifications, their Use and Management – Czech Republic. Ministry of the Environment, Prague, ISBN 978-80-7212-511-1, 36 pp. *	English	www.mzp.cz/biosafety

Roudná M. (Ed.), Malá J., Dobrý J. (2009): Biotechnology in Forestry and Examples of its Use. Proceeding from the Seminar held on May 7, 2009. Ministry of the Environment, Prague, ISBN 978-80-7212-529-6, 32 pp. *	Czech + English Summary	Printed version only
Roudná M. (Ed.) (2010): Use of Genetically Modified Organisms in the Czech Republic and Public Awareness. Proceedings of the Workshop held on January 28, 2010, Ministry of the Environment, Prague, ISBN 978-80-7212-533-3, 30 pp. *	Czech + English Summary	Printed version only
Roudná M. (Ed.) (2010): Genetic resources – Biosafety Principals and Risks of Genetic Erosion. Proceedings of the Workshop held on June 10, 2010, Ministry of the Environment, Prague, 36 pp. *	Czech + English Summary	Printed version only
Roudná M.(Ed.), Malá J., Dobrý J. (2010): Biotechnology in Forestry and Examples of its Use – 2. Proceedings of the Workshop held on June 2, 2010, Ministry of the Environment, Prague, 12 pp. *	Czech + English Summary	Printed version only
Roudná M. (Ed.) (2011): International Year of Biodiversity – Related Projects and Programmes. Proceedings of the Workshop held on November 2, 2010, Ministry of the Environment, Prague, 16 pp. *	Czech	Printed version only
Roudná M. (Ed.) (2011): International Biosafety Negotiations and New Treaty on Liability and Redress. Proceedings of the Workshop held on May 3, 2011, Ministry of the Environment, Prague, 16 pp. *	Czech + English Summary	Printed version only
Roudná M. (Ed.) (2011): Use of Biotechnology in Woody Species Conservation. Proceedings of the Workshop held on May 10, 2011, Ministry of the Environment, Prague, 16 pp. *	Czech + English Summary	Printed version only
Říha K. (2006): Genetically Modified Organisms – production of food and feed. Krmivářství (3): 12-13.	Czech	http://eagri.cz/public/web/mze/zemedelstvi/publikace-a-dokumenty/gmo/
Říha K. (2008): Genetically Modified Food and Feed – Europe at a crossroad? Krmivářství (1): 15-17.	Czech	http://eagri.cz/public/web/mze/zemedelstvi/publikace-a-dokumenty/gmo/

Sehnal F.; Drobník J. (Ed.) (2010): White Book on Genetically Modified Crops, EU Regulations and Research Experience from the Czech Republic. Biology Centre of the Academy of Sciences of the Czech Republic, České Budějovice, ISBN 978-80-86668-05-3.	English	http://www.bc.cas.cz/doc/mobitag/White-Book-on-GMO.pdf
Šuta M. (2007): Biotechnology, the Environment and Sustainable Development. Association for Sustainable Development, Prague, ISBN 978-80-902635-1-2.	Czech	Printed version only
Team of Authors (2008): Terms on Genetic Resources and Biosafety. Ministry of the Environment, Prague. Part I. Genetic Resources, 53 pp. Part II. Biosafety, 48 pp. *	Czech – English terminology	www.mzp.cz/biosafety
Tošovská E. (2006): Conservation of Biological Diversity, Patent Protection and Liability. Ministry of the Environment, Prague, 66 pp. *	Czech + English Summary	Printed version only
Tošovská E., Roudná M. (2006): Legislation Related to Access and Rights to Genetic Resources – Czech Republic. Ministry of the Environment, Prague, ISBN 80-7212-442-0, 16 pp. *	English	www.mzp.cz/biosafety

*Notice: events marked with * were edited within the UNEP/GEF Projects*

7. Annex III. Overview of web pages providing information on biotechnologies and biosafety in the Czech Republic to be used for further public awareness, participation and education

ORGANIZATION	LINK
Ministry of the Environment	http://www.mzp.cz/cz/geneticky_modifikovane_organismy
	http://www.mzp.cz/biosafety
Ministry of the Environment in cooperation with the Green Circle	http://www.ucastverejnosti.cz/cz/
Ministry of Agriculture	www.eagri.cz
	www.bezpecnostpotravin.cz
	www.foodsafety.cz
	www.bezpecna-krmiva.cz
	www.viscojis.cz
Czech Environmental Inspectorate	http://www.cizp.cz
Czech Agriculture and Food Inspection Authority	http://www.szpi.gov.cz/
Central Institute for Supervising and Testing in Agriculture	http://www.ukzuz.cz
State Phytosanitary Administration	http://www.srs.cz
National Institute of Public Health	http://www.szu.cz
Crop Research Institute	http://www.vurv.cz
Institute of Chemical Technology	http://www.vscht.cz
Institute of Experimental Botany	http://www.ueb.cz
	http://www.enviweb.cz/gmo
	http://www.gate2biotech.cz/