## NATIONAL BIOSAFETY SYSTEM FOR BELARUS AND VENEZUELA

S.E. Dromashko, A.P. Yermishin, E.N. Makeyeva, N.A. Balashenko

National Co-ordination Biosafety Centre at the Institute of Genetics and Cytology, National Academy of Sciences of Belarus, Akademicheskaya st.27, Minsk, 220072, Belarus, tel.: +375-17-284-2190, e-mail: S.Dromashko@igc.bas-net.by

One of the important documents controlling genetic engineering activity (GEA) and at the same time regulating interstate relations is the Convention on Biological Diversity (CBD, Rio de Janeiro, June 1992). Responsibility of the mankind for preservation, sustainable use and long-term development of biological diversity is enunciated there. The Convention also includes the problems of natural habitat preservation, the most efficient use of biological resources, renewal of degraded ecosystems and vanishing species, strict control over modern biotechnologies, elaboration of natural ecological networks and legislative basis. In accordance with the principle of taking safety measures (Principle 15 of CBD), the Cartagena Protocol on Biosafety (CPB) to CBD was worked out in 2000, became valid on 11<sup>th</sup> September 2003 and was ratified by August 2010 by 160 out of 192 states – members of UNO.

Prior to the CPB ratification, the National Co-ordination Biosafety Centre was established in the Republic of Belarus (Resolution of the Council of Ministers of June 19, 1998, No. 963). The Institute of Genetics and Cytology of the National Academy of Sciences of Belarus (NASB) was entrusted with these functions.

The main goal of NCBC was regulating and co-ordination of genetic engineering activity works during implementation of the strategy and the national plan of actions for preservation and sustainable use of biodiversity within the framework of CBD.

Having joined to the Cartagena Protocol on 6<sup>th</sup> May 2002, the Republic of Belarus worked out the National Biosafety System of gene engineering activity (GEA). First of all a number of competent national bodies was set up by the resolution of the Council of Ministers of the Republic of Belarus "On Measures for Implementation of the Cartagena Protocol Clauses on Biosafety to the Convention on Biological Diversity", of 5<sup>th</sup> June 2002, No.734. The following organizations were defined as such bodies: Ministry of Natural Resources and Environmental Protection (concerning functions related to release of LMO/GMO into the environment); Ministry of Public Health and Ministry of Agriculture and Food (dealing with questions on LMO use in economic activity). NCBC was entrusted with the function of liaison with the CPB Secretariat by the same resolution.

The stored world experience, Belarusian legislation and the well established governmental system, its commitments on international agreements were assumed as a basis of the conception on State control of GEA safety in Belarus. The aim of the biosafety system in the Republic of Belarus is as follows:

- 1. To protect human and nature under GEA implementation and application of its results;
- 2. To promote as much as possible application of modern biotechnologies for consolidation of an economic status in RB;
- 3. To inhibit the growth of financial expenses in the republican budget;
- 4. To provide public with maximum free access to biosafety information.

It meets completely the requirements of the Cartagena Protocol on Biosafety to the Convention on Biological Diversity.

Important propositions of the conception were represented in the Law of the Republic of Belarus "On Safety of Genetic Engineering Activity" approved on 9<sup>th</sup> January 2006. The Law prescribes rightful and organization principles for ensuring GEA safety. Its propositions do not carry over to relations associated with application of genetic engineering to human, his organs and tissues, handling with pharmaceutical preparations, food raw materials and foodstuffs, animal feeds produced from GMO or their components (Clause 2) because they are regulated by special public

health laws. In the Clause 5 of the Law, the following measures for ensuring GEA safety were established: adoption of standard lawful regulations, approval and implementation of technical standard regulations in the field of GMO safety; State expert examination of GMO safety; control in the field of GMO safety and some other measures for ensuring safety.

This Law together with the statements of the legislation in force and other lawful documents worked out for its development is the basis of lawful regulations for forming the National Biosafety System. Its task consists in implementation of citizens' rights in Belarus to life, health protection, information and to prevention of right violation.

Legislation of Belarus does not prohibit use and turnover of food raw materials and foodstuffs produced from GMO but in accordance with the laws of the Republic of Belarus "On the Quality and Safety of Food Raw Materials and Foodstuffs for Human Life and Health" and "On Protection of Consumers' Rights" a consumer has the right to getting information on foodstuffs including GMOs or their components. A threshold-free system of permissible GMO-component levels was established by the resolutions of the State Chief sanitary physician No.116 of 02.09.2003 and of the Council of Ministers No.434 of 28.04.2005. The total control of all the products containing soya and maize is legalized, and all goods where GMO admixture is detected are labelled. Besides, use of GMOs in child's meal is prohibited, a ban is put on realization of unlabelled produce with GMO.

Eighteen testing laboratories were set up in the Republic for GMO control: of them 8 in the system of the Ministry of Public Health, 6 – at the State Committee for Standardization, 2 – at the National Academy of Sciences of Belarus and 2 – at the Ministry of Agriculture and Food. Analysis of their activities over 2008-2010 has shown that percent of GMOs or their components detection varies from 0 (Brest Region) to 2.84% (Gomel Region). Minsk with 1.35% occupies an intermediate position which seems to show a real situation since above 10 thousand tests were carried out here that exceeds the figures in other regions taken together.

The experience stored in the field of gene engineering activity safety has allowed the Institute of Genetics and Cytology to conclude the agreement on scientific and technical collaboration with Venezuela in 2009. The project "Development and Improvement of the Biosafety System in the Field of Agricultural Biotechnology in Belarus and the National Institute of Agricultural Research in Venezuela" is expected to be accomplished within three years (from September 2009 to August 2012). Basic lawful regulation documents in biosafety as well as three books, earlier published in Belarus, including biotechnology manual were translated into Spanish and given to Venezuelan colleagues. Belarusian specialists delivered lectures in Biosafety courses held in Venezuela in February 2011, received Venezuelan partners in Minsk in September of this year. During the last visit an understanding was reached of prolongation and expansion of collaboration till 2015, in particular, in the field of establishing a laboratory for GMO detection at the National Institute of Agricultural Research in Venezuela.