

Republic of Moldova:

National Biosafety Framework

Angela Lozan

*Biosafety Office, Ministry of Ecology and Natural
Resources*

**South Eastern European Meeting
on GMO Analysis
18-19 November 2008**



Country Biosafety framework

- **Ratification of the Convention on Biological Diversity by the Resolution of the Moldovan Parliament no. 112-XV of 27 April 2001**
- **Ratification of the Cartagena Protocol on Biosafety by the Resolution of the Moldovan Parliament no. 1381-XV of 11 October 2002**
- **National Strategy and Action Plan on Biological Diversity, 2000**
- **Ministry of Ecology –National Biosafety Authority & FP, 2002**
- **National Law on Biosafety, 2001**



International Sectorial regulations

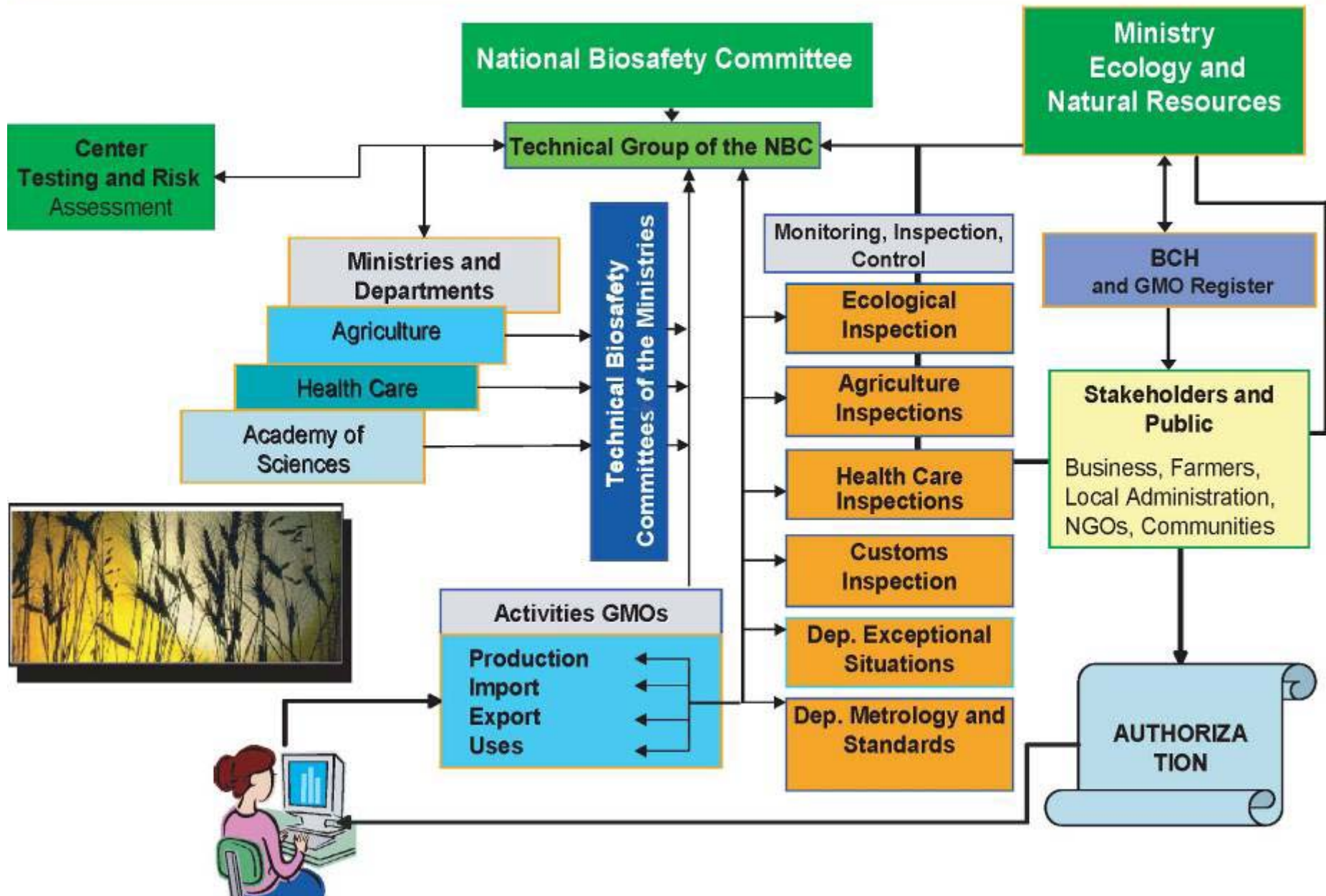
- **Moldova is part of:**
- International Union for Protection of New Plant Varieties (UPOV), (no.1355-XIII of 22.10.1997)
- World Trade Organization (WTO)
(no. 1035 of 16.10.2000)
- Codex Alimentarius Commission
(no. 1342–XIII of 8.10.1997)
- Convention on plant protection
(no. 926-XIV of 22 13.04.2000)



National Regulations on Biosafety

- *Law ratifying the Cartagena Protocol on Biosafety to the Convention of Biological Diversity (N° 1381-XV dated October 11 2002).*
- *Law on biological safety (No 755 dated February 21, 2003).*
- *Law concerning the entry, modification and addition into the Law on licensing different types of activity No 451- XV dated July 30, 2001 (No 214-XV dated June 24, 2004).*
- *Law on ecological agro-food production, nr.115-XVI of 09.06.2005*
- *Government Resolution concerning the National Commission on biological safety (No 603 dated May 20, 2003).*
- *Government Resolution No 1153, dated September 25, 2003, on Regulations concerning the issuance of permissions for various types of activities related to the testing, manufacture, utilization and creation of genetically modified organisms.*
- *Government Resolution on appointment of the national authority responsible for liaison with the Secretariat of the Cartagena Protocol on Biosafety to the Convention on Biological Diversity no. 197 of 25.02.2003*
- *Governmental Resolution on labeling of food products and the standards on labeling of housekeeping chemical products, nr. 996 of 20.08.2003*
- *Order on Regulations on Information and Public Consultations on Genetically Modified Organisms, No 19 of 10.02.2004*
- *Joint Order of the Minister of Ecology and Natural Resources and Minister of Education on establishing of the National Biosafety Center, No 28/61 of February 18, 2004*

NATIONAL BIOSAFETY FRAMEWORK





BIOSAFETY PRIORITIES IDENTIFIED for MOLDOVA

- Enforce comprehensive National Biosafety Policy as the basis for the development of the adequate national regulations and institutional framework
- Establish responsive and fully functional national regulation framework in line with CP and national needs
- Enabling national system for handling request and decision-making as well as performing risk assessment and management associated to LMOs
- Encourage national system for “follow-up” activities, namely monitoring of environmental effects and legislation enforcement
- Enhance public awareness, education and participation to ensure access to information



UNEP-GEF Implementation NBF Project

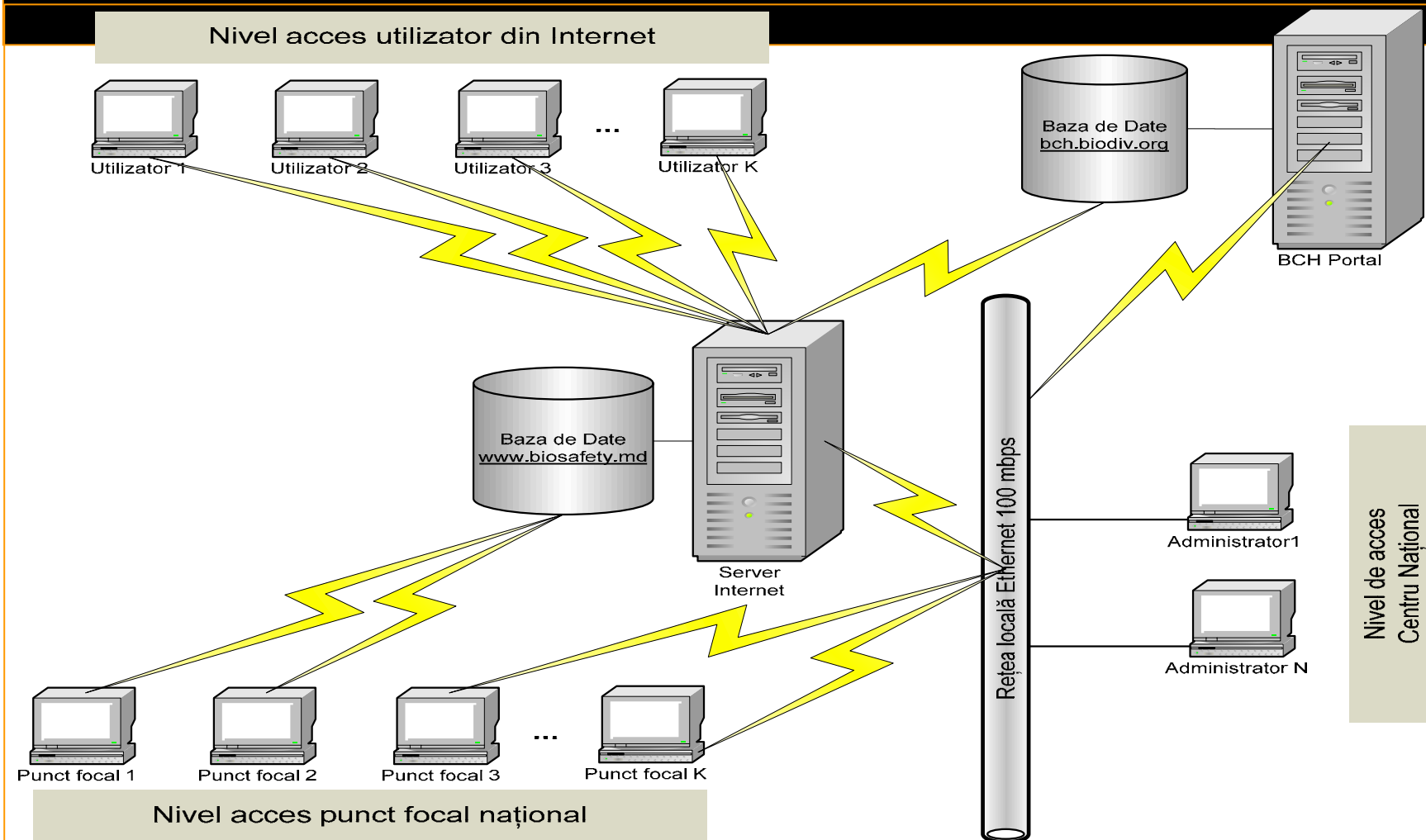
Functional risk assessment system in place

ACTIONS:

- Updating of Roster of experts for Risk Assessment
- Definition of national procedures and guidelines for Risk assessment
- Establish Technical committees for risk assessment and opinion for decision making within national authorities in the field of agriculture and food industry, health care and the Academy of Sciences of Moldova
- Strengthening laboratory capacity for GMOs detection

Architecture of the BCH system in Moldova

General scheme





Law on Biosafety

Art. 3. To assess potential danger for human health and environment generated by activities regulated by the above law, the following risk classes were specified for isolated systems for GMOs:

- **Class I: activities with negligible risks comparable to the risk of using non-pathogenic microorganisms, or without any risk;**
- **Class II: activities with low risks comparable to the risk of using conventional pathogenic microorganisms;**
- **Class III: activities with moderate risks comparable to the risk of using microorganisms potentially capable to spread infections;**
- **Class IV: activities with grave risks comparable to the risk of using microorganisms capable to spread very dangerous infections in contained use**

Art. 34

Risk assessment is required in all procedures and shall be based on two principles: (a) scientifically sound character and (b) transparency. Risk assessment is performed by public authorities or scientific institutions chosen by the Committee and paid for by the notifier



Research institutions: national potential for RA

- ***Institute of Genetics and Plant Physiology, and the Centre of Vegetal Genetic Resources*** is to carry out work on the collection of cultivated plants forms and their forebears.
- ***Botanical Garden (Institute) of the Academy of Sciences*** holds a collection of 12400 species, sorts and forms of decorative, medicinal, aromatic, fodder, fruit growing, vegetable species etc. The Herbarium contains about 200 thousand samples of plant species and fungi, which reflect the floristic diversity of the republic.
- ***Institute of Maize and Sorghum Research*** has a collection of 1091 species, 1830 lines (autopollinators) and 1033 genetic sources of maize.
Institute of Crops Research , Balti Association holds about 65000 sorts and forms of wheat, pea, soybean, 123 hybrids of sunflower and 1300 hybrids of sugar beet etc. in its collections.
Institute of Fruit Trees Research preserves the genetic sources of walnut, apricot and quince, sorts of apple, peach, plum etc.
National Institute of Wine and Viticulture Research stores the genetic bank constituted of 2800 sorts and bunch shapes from the whole world.
Institute of Microbiology of the Academy of Sciences holds a collection of microorganisms which includes about 500 types of algae, bacteria, fungi, yeasts, actinomycetes and microalgae.
- ***State University of Moldova***: Chair of vegetal biology;
State Agricultural University of Moldova: Chair of genetics and plant improvement



The National Biosafety Testing Center
Order MENR and ME
Nr.28/61 of 18 February 2004

- ***The National Biosafety Testing Center's*** task is to perform tests and control plants, seeds and foodstuffs to identify GMO presence and content therein. The Center will also perform assessment of potential risks such organisms might present for the environment and human health; and assessment conclusions will be used as the basis for decision-making in this sphere.



LESSONS LEARNED

- Significant interest of the government and relevant NGOs in Biosafety activities
- Concern of governmental, non-governmental sector, academia & civil society to respect biosafety principles
- Lack of best practices for monitoring, risk management regarding:
 - transboundary movement
 - direct use for FFP
 - crops production
 - coexistence of GM and non-GM crops in agriculture
- Unauthorized import of GMOs for food and unlabeled feed (9 samples)



PROPOSALS & INITIATIVES

I. Sub-regional level

To enlarge the Sub-regional cooperation through:

- ✚ regulatory harmonization
- ✚ bilateral and multilateral agreements (art.14)
- ✚ strengthening joint capacities for Information exchange & Risk management (art.20 & art.16)
- ✚ cooperation in Biotech research and Risk assessment/detection (art. 15)

GMOs testing of food market in Moldova/SGS

№ пробы	Название колбасы или сосисок	Производитель	Дата закупки	Вес, кг	Дополнительная информация
1	Колбаса «Мозаичная», высший сорт	ООО Карди, Бендеры	15.09.08	0,72	ТУ У 15.1-25878614.006-2002
2	Сосиски «Венские», первый сорт	Тираспольский мясокомбинат	_»_	0,8	ТУ У-15.1-30978685-018-2004
3	Вареная колбаса «Столовая», второй сорт	Бендерский мясокомбинат	15.09.08	0.79	ТУ У 15.1-00443111.002-2001
4	Сосиски «Лакта», высший сорт	Фирма «Pegas»	15.09.08	0.542	Magazin «Plaza» / Green Heels, Chişinău
5	Сосиски «Лакта», высший сорт	Фирма «Banian»	15.09.08	0.518	Magazin nr. 1, Chişinău
6	Сосиски «Лакта», высший сорт	Фирма «Valul Traian»	15.09.08	0.506	Magazin «Plaza» / Green Heels, Chişinău
7	Сосиски «Slivochnye»	Фирма «Basarabia Nord»	15.09.08	0526	Magazin «Plaza» / Green Heels, Chişinău
8	Сосиски «Gingasie»	Firm «Carmez»	15.09.08	0.520	Magazin nr. 1, Chişinău
9	Сосиски «Лакта»	Фирма «R&R»	15.09.08	0.520	Magazin nr. 1, Chişinău
10	Колбаса «Лакта», высший сорт	Фирма «Soro Meteor»	15.09.08	0.570	Magazin «Plaza» / Green Heels, Chişinău

GMOs detection of soy products in Moldova

Nr. d/o	Denumirea produsului	Țara de origine	Testarea calitativă	Testarea cantitativă
1.	Făină din soia	SUA	Depistat MG	> 5 %
2.	Făină din soia	Israel	Depistat MG	> 5 %
3.	Făină din soia	Polonia	Depistat MG	> 5 %
4.	Proteină din soia	SUA	Depistat MG	În limita de 0,1%
5.	„Carne „ din soia	Ucraina	Depistat MG	> 5 %
6.	„Carne” din soia	Olanda	Nu s-au depistat MG	--
7.	Șrot din soia	România	Depistat MG	2,6 % +_ 3,3%
8.	Șrot din soia	Brazilia	Depistat MG	> 5 %
9.	Șrot din soia	Moldova	Depistat MG	Nu s-au depistat MG