



Role and position of HAH in relation to GMO

PhD Sanja Miloš

Croatian Food Agency

Croatian Food Agency (HAH)

- has started with activities at 3rd of January 2005
 - is a legal body with rights, obligations and responsibilities written in Food Law ("Official Gazette" No. 81/13, 14/14)
- was established by the Republic of Croatia
- Government has the rights and duties of the establisher



□ *Focal Point*

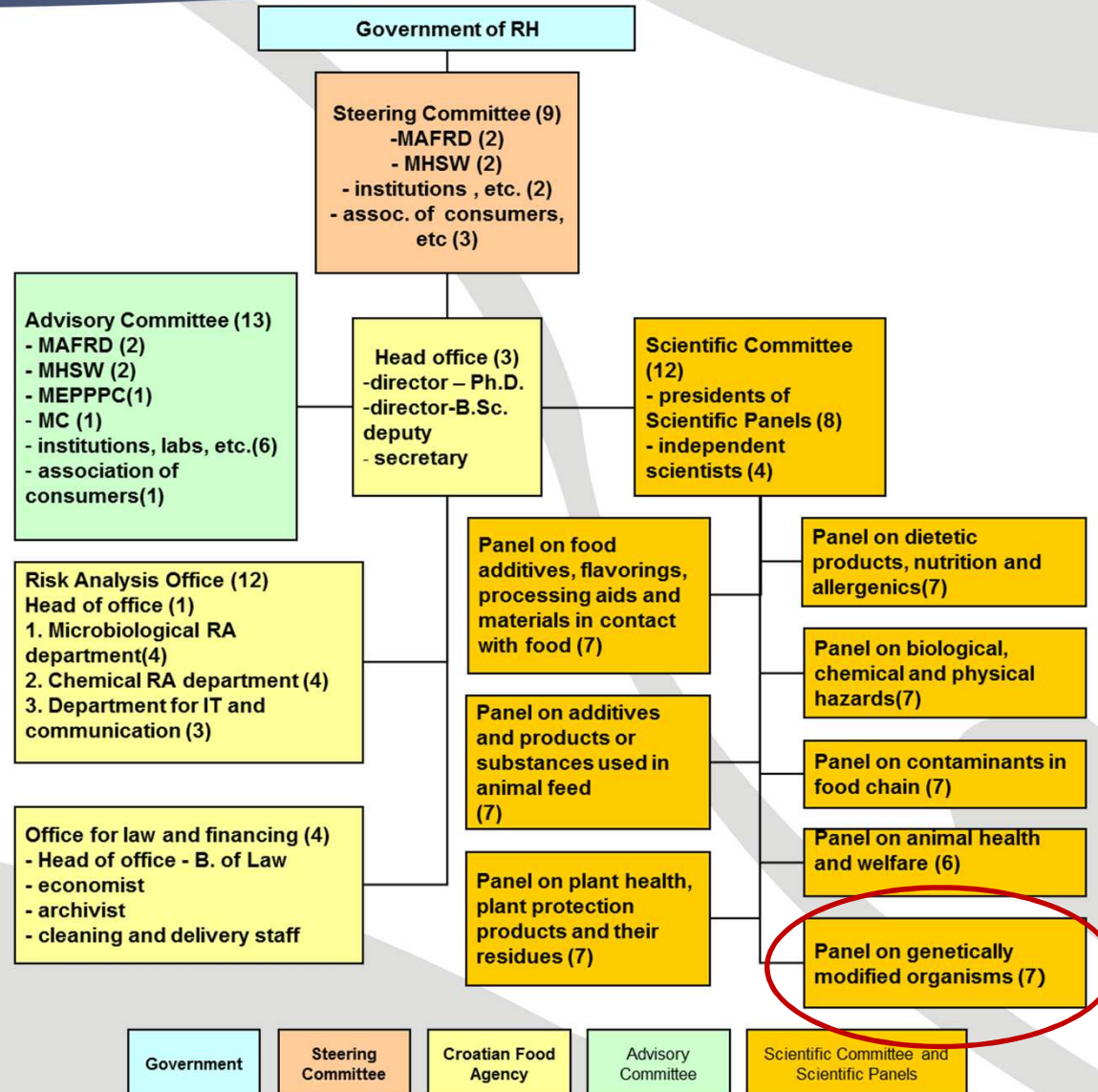
act as an interface between EFSA and the national food safety authorities, research institutes, consumers and other stakeholders.

Tasks of the HAH

- **scientific risk assessment** in the field of food and feed safety
- to provide **scientific studies or opinions** in the field of food and feed safety (at the request of the competent authorities, of third parties, self task)
- to provide **technical opinions and scientific and technical support** to the competent authorities in the areas of food and feed safety, food and feed quality, human nutrition, animal health and welfare, plant health, novel food, nutrient enriched food, food and feed for particular nutritional uses and GM food and feed...



Former HAH organisation



The promise and the reality of GM crops

- Genetic modification in food production is one of the biggest technological challenges of the modern era by providing:
 - possibilities for development of agriculture and food technology

○ introducing new, sometimes controversial issues related to the sustainability of the production with respect to the environment and food safety



Croatian consumers and GMO

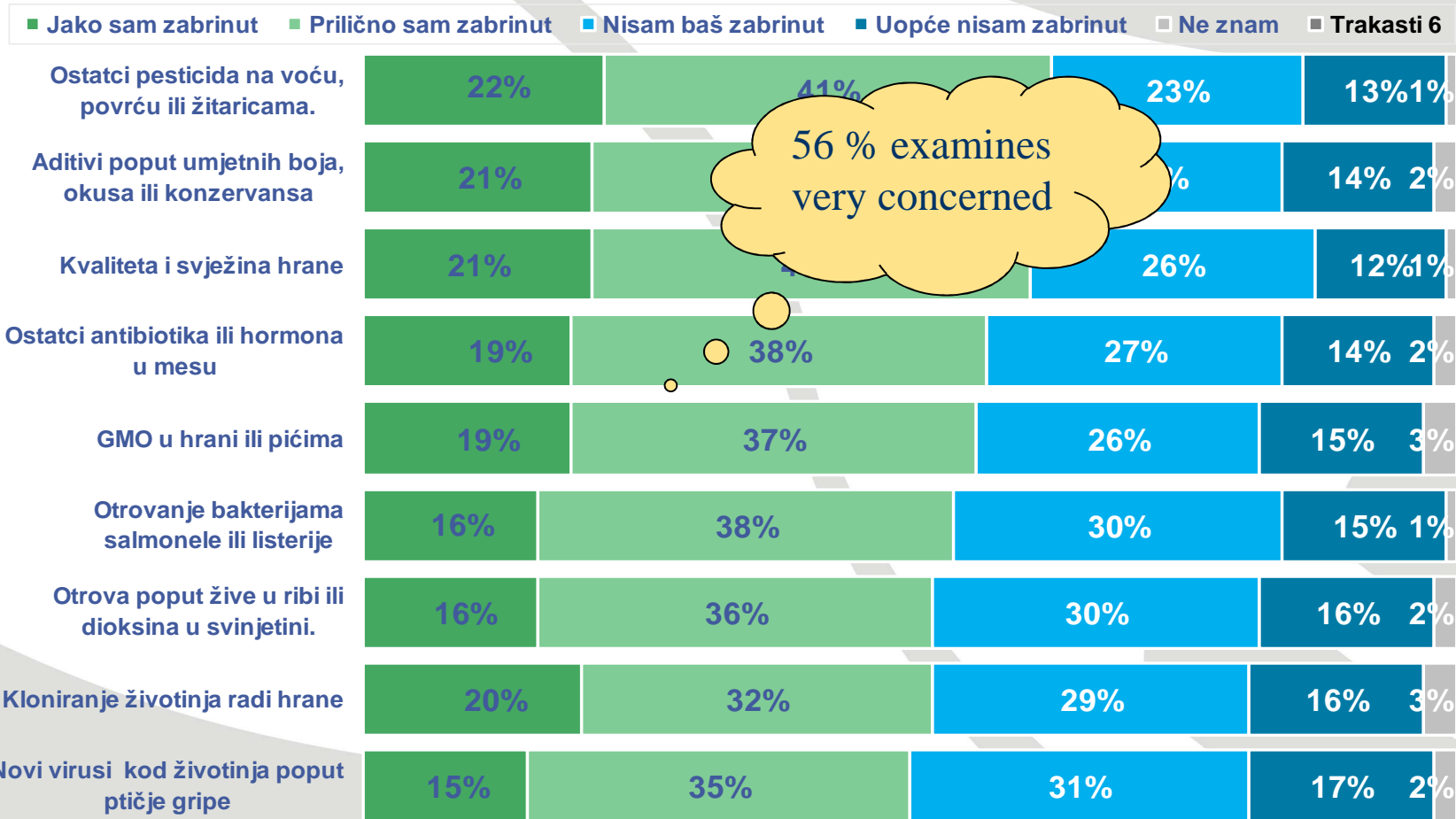
- Croatian Food Agency (2011) conducted a survey (Ipsos Puls Public Affairs):

Citizens' perception of risk from food

- representative sample of 580 examines
 - random
 - aged 15 to 50 years
 - from all over Croatia

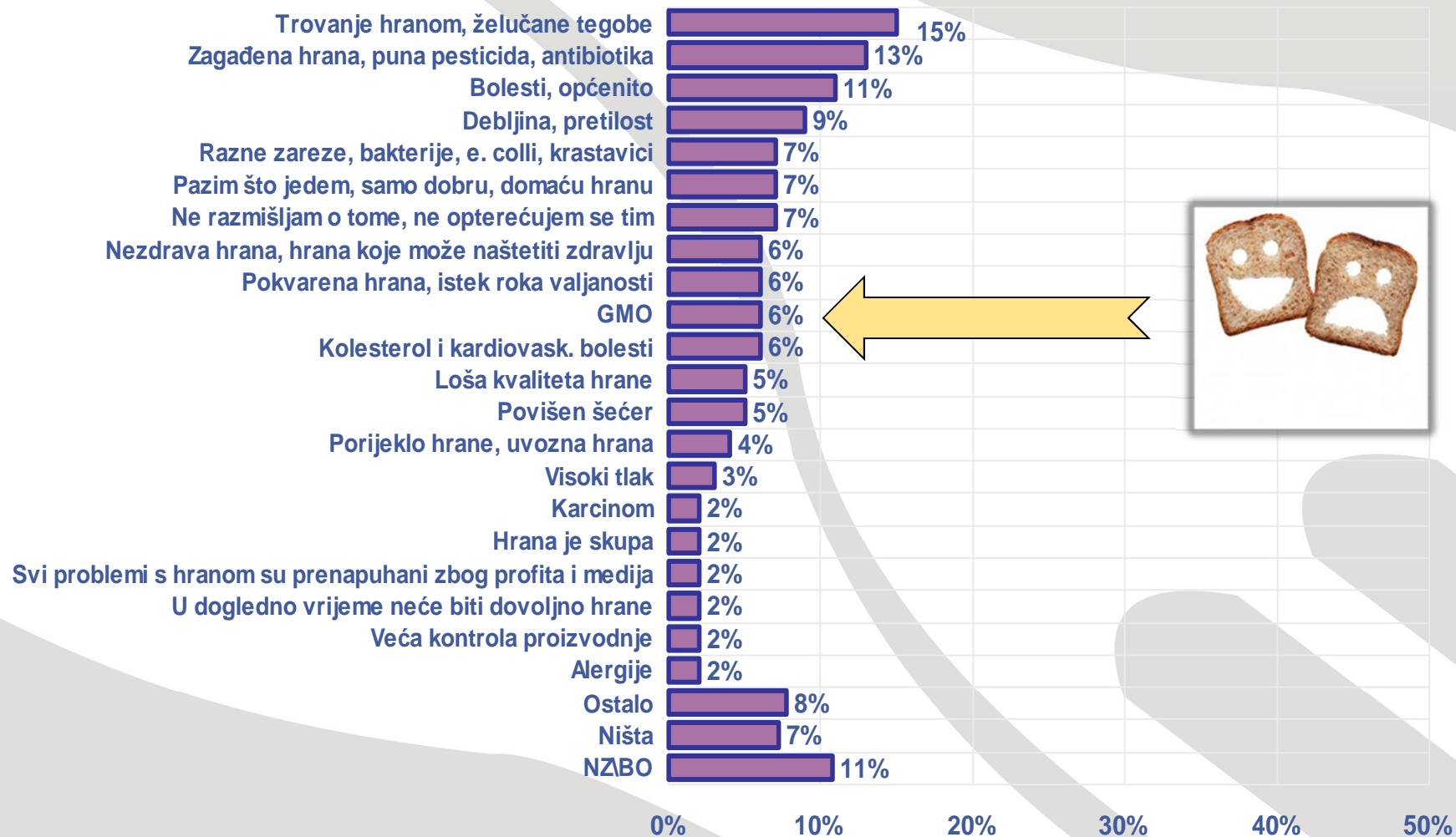


Question: How much are you worried or not worried regarding the following topics?



29th of June 2011

Question: thoughts related with potential problems or risks associated with food and eating?



Scientific Panel for Novel Food and Food and Feed containing GMOs



- ✓ constituted on 28 February 2005
- **D.sc. Jelena Žafran-Novak**, Croatian Institute of Public Health
- **prof. D.sc. Vladimir Mrša**, Faculty of Food Technology and Biotechnology, Zagreb
- **prof. D.sc. Srećko Jelenić**, Faculty of Science of the University of Zagreb
- **prof. D.sc. Gordan Lauc**, Faculty of Pharmacy and Biochemistry, Zagreb
- **D.sc. Domagoj Šimić**, Agricultural Institute Osijek

Scientific Panel for Novel Food and Food and Feed containing GMOs

During the time Panel were joined by new scientists:

- prof. dr. sc. **Zoran Zgaga**, Faculty of Food Technology and Biotechnology, Zagreb
- dr. sc. **Marin Mitak**, Croatian Veterinary Institute, Zagreb
- dr. sc. **Hrvoje Fulgosi**, Ruđer Bošković Institute

- **President** - prof. D.sc. **Vladimir Mrša**
- **Deputy** - prof. D.sc. **Gordan Lauc**
- **Coordinator** - **Sanja Miloš**



Panel activities in pre-accession period 2005-2013

From their first meeting Panel members have recognized necessity of:

- ✓ collection of scientific data in GM area
- ✓ following the work of EFSA Panel on Genetically Modified Organisms outputs (Scientific Opinions, Statements, Guidance documents)
- ✓ analysis and determination control mechanisms that exist in other countries, particularly in the European Union



Panel activities in legal affairs

- ❑ On the request of the competent Authority, Panel work was focused on:
 - national legislation in the field of genetically modified food and feed and novel food - by improvement of existing and adoption of new legislation
 - comprised  harmonizing regulations with the relevant Directives of the European Union



becomes a permanent activity of the Panel



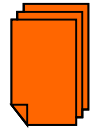
Panel activities in legal affairs

- ❑ Panel actively participated in discussions in drafting:
 - GMO Act and many amendments
 - Regulations on the conditions and procedure for issuing permission for the placing of GM food and feed first time on the market of the Republic of Croatia and the requirements relating to traceability, in particular labelling of GM food and feed
 - Regulations on the content and scope of the risk assessment for the placing on the market of GMO or products containing and/or consisting of or derived from GMOs, assessment methodology and criteria which must be met by the legal person carrying out the risk assessment
 - Regulations on conditions for monitoring the impact of GMOs or products containing and/or consisting of or derived from GMOs and their use...and many others
- **endorsed and supported implementation of „National monitoring programs of the presence of GMOs in food of plant and animal origin on the market of Croatia” by the Ministry of Health**

Other Panel activities

- Intensive cooperation with laboratory for GMO testing in Croatian Institute for Public Health, Zagreb
- visits the Laboratory for control of GM seeds at the Institute for Seed and Seedlings, Osijek
- ❑ 2006, Panel issued the first opinion regarding the occurrence of GM rice LLRICE 601 in markets of Europe and the United States
- ❑ 2011, Scientific Opinion about possibilities of findings GMO (DNA transgenic sequences) in diary food obtained from animals that were fed with GM feed (Requested by Ministry of Agriculture) = HAH Register
http://www.hah.hr/upisnik_z_m.php?id=21
- ❑ 2012, Statement of Panel on the scientific study published by Seraline et al. (2012): "Long term toxicity of a Roundup herbicide and a Roundup-tolerant genetically modified maize"

Panel activities in communication



2010 - information leaflet for consumers

Što je GMO?

Biljke i životinja uzgajane su od više milijuna od njih stada nekolicu tisuća godina. Uz to sve više molekula DNA iz drugih organizama ugrađuju se u genetski materijal organizma kao dio predstava uzgajanih organizama. Dio predstava uzgajanih organizama su i genetički inženjering i ugrađivanje strane DNA u organizam. Biljke i životinje uzgajane su od drugih organizama kao dio predstava uzgajanih organizama. Tako promjena jedne molekule DNA u organizmu može dovesti do promjena u njegovom izgledu, veličini, boji i sposobnosti da se razmnožava. Također, promjena jedne molekule DNA može dovesti do promjena u njegovom ponašanju i sposobnosti da se prilagodi na okoliš. Također, promjena jedne molekule DNA može dovesti do promjena u njegovom životnom vijeku i sposobnosti da se prilagodi na okoliš. Također, promjena jedne molekule DNA može dovesti do promjena u njegovom ponašanju i sposobnosti da se prilagodi na okoliš.

Prednosti i nedostaci GMO-a

Genetski inženjering je samo jedna nova tehnologija, slično drugim tehnologijama kao što su farmakološki, kemijski i fizički. Također, genetski inženjering je samo jedna nova tehnologija, slično drugim tehnologijama kao što su farmakološki, kemijski i fizički. Također, genetski inženjering je samo jedna nova tehnologija, slično drugim tehnologijama kao što su farmakološki, kemijski i fizički.

GMO i zakonska regulativa

U Republici Hrvatskoj je razvijen zakoniti okvir kako bi se osigurala sigurnost i pouzdanost kontrole GMO-a i proizvoda od GMO-a. Također, zakoniti okvir osigurava sigurnost i pouzdanost kontrole GMO-a i proizvoda od GMO-a.

HAH 2005 2010

HRVATSKA AGENCIJA ZA HRANU

Genetski modifikirani organizmi

HAH 2005 2010

HRVATSKA AGENCIJA ZA HRANU

Participation of Panel members at GMO conferences, workshops, educations

- Under EFSA Pre-Accession Assistance (IPA Programme):
“Preparatory Measures for the Participation of the Candidate countries and the Potential Candidate countries in EFSA”

**„EFSA and GMO Risk Assessment”,
Istanbul on 27/28 September 2007**



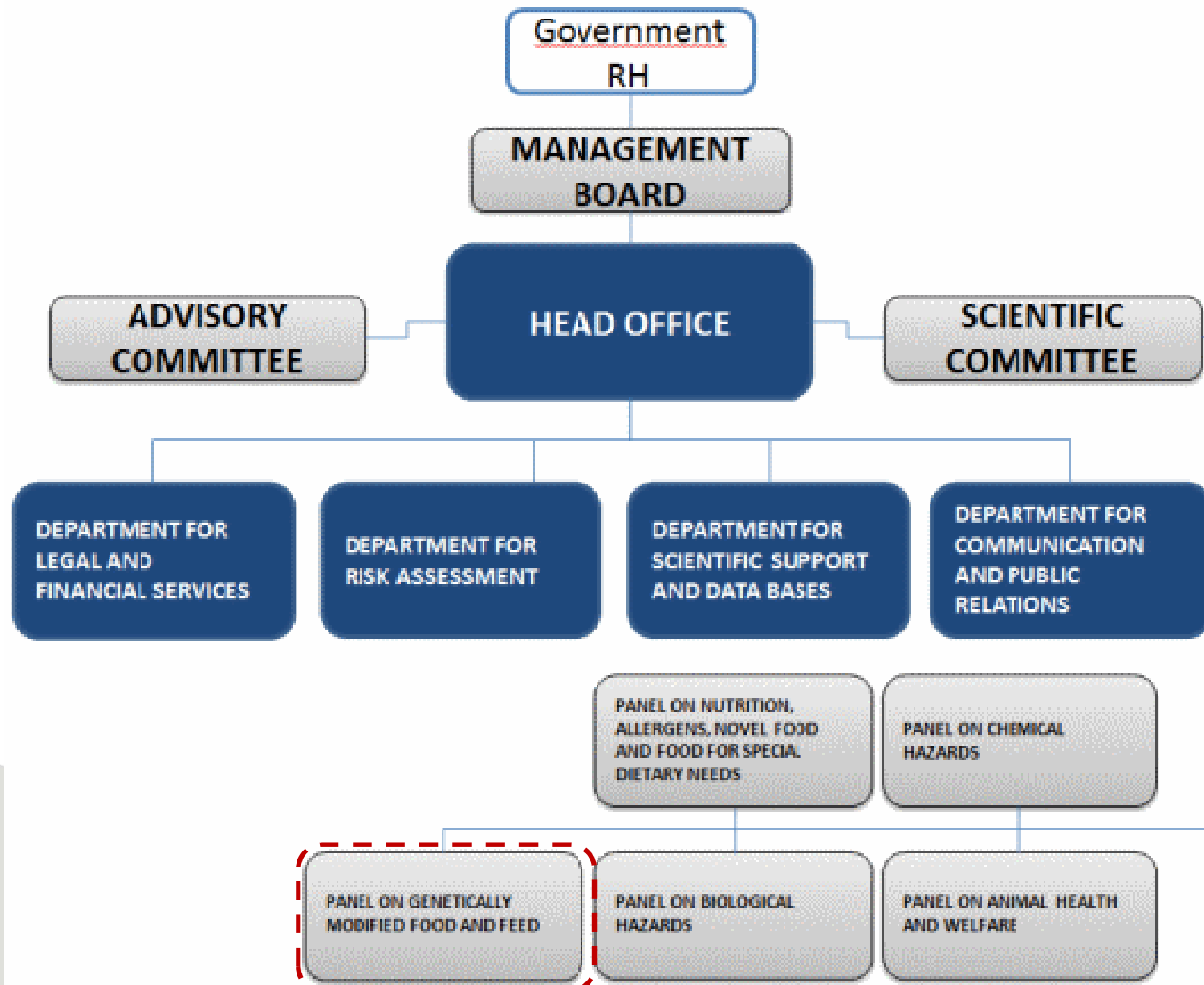
Participation of Panel members at GMO conferences, workshops, educations

- The EFSA's 8th Scientific Colloquium: „Environmental Risk Assessment of Genetically Modified Plants - Challenges and Approaches“
- TAIEX „Handling applications for release of GMOs into the environment and placing GMOs on the market“
- FAO „Capacity building of regulatory agencies for handling and monitoring genetically modified crops, products and processed food- Biosafety workshop“
- TAIEX „Enlargement/Networking Workshop on Harmonisation of GMO Analysis“
- TAIEX „Post-release and post-market monitoring of GMOs“
- ICGEB Workshop „Field Trails, Post-Release and Post-Market Monitoring of GMO“
- TAIEX „Workshop on Introduction to National Monitoring and Evaluation system for Contained Use of Genetically Modified Organisms (GMO)“

Participation of Panel members at GMO conferences, workshops, educations

- ❖ EC DG Health and Consumers - Better Training for Safer Food (BTSF) - **“TRAINING COURSE ON RISK ASSESSMENT IN GENETICALLY MODIFIED ORGANISMS AND OTHER BIOTECHNOLOGIES”**
 - training for Safer Food - Commission training initiative covering food and feed law, animal health and welfare and plant health
 - principles and methods of food safety risk assessment
 - ✓ conceived - train Member State and candidate country national authority staff involved in any aspects of food safety
 - Participants from Croatia:

Current organization of HAH



PANEL ON GENETICALLY MODIFIED FOOD AND FEED, 2014

- D.sc. **Donatella Verbanac**, Faculty of Medicine, Zagreb
- Prof. D.sc. **Jasenka Ćosić**, Faculty of Agriculture ,
Osijek
- Prof. D.sc. **Ivan Krešimir Svetec**, Faculty of Food
Technology and Biotechnology, Zagreb
- Prof. D.sc. **Hrvoje Fulgosi**, Ruđer Bošković Institute,
Zagreb, deputy
- Prof. D.sc. **Vladimir Mrša**, Faculty of Food Technology
and Biotechnology, Zagreb, president, member of
Scientific committee in Croatian Food Agency

Field of activity

- Panel on genetically modified food and feed deals with issues defined by EU Directive 1829/2003 about placing on the market genetically modified food and feed
- The term “**placing on the market**” refers to the holding of food or feed for the purpose of sale, including offering for sale, or any other form of transfer, whether free of charge or not, and the sale, distribution and other forms of transfer themselves
- at national level; article 43. „GMO Act” (OG 70/05; 137/09; 28/13; 47/14)
- Upon request of the competent authority, during the approval procedure for the placing on the market genetically modified food and feed, Panel makes a scientific opinion on the basis of previously conducted risk assessments
- The Panel may be engage in writing and performing scientific studies, development and application of unique methodologies within the scope of their work, as well as providing technical assistance to the competent authorities or at the request of third parties

Relationship with EFSA in GMO field

□ EFSA Scientific Network for Risk Assessment (RA) of GMOs

- supporting the EFSA GMO unit
- consist of nationally appointed experts all EU Member State (representatives of the Commission and other organisations)

Their aim is to facilitate scientific cooperation in the field of GMO:

- coordinating activities
- exchanging information
- developing and implementing joint projects
- and exchanging expertise and best practices

Representatives from Croatia:

Hrvoje Fulgosi - GMO environmental RA

Sanja Miloš - GMO food and feed RA

Thank you for attention

*Ivana Gundulića 36 b
31 000 Osijek
Croatia*

*www.hah.hr
info@hah.hr*

*Free Phone
for consumers:
0800 0025*

