



Scientific Panel on Biological Hazards

Address to Management Board. Ljubljana, 25th June 2008

Outline of Presentation

- Who we are
- What we do
- Examples of Opinions
- Other Outputs
- Interaction with other Bodies
- Impact – Examples
- Current Work
- Self Assessment – SWOT Analysis

Panel of Scientific Experts

Working Groups of Scientific Experts

BIOHAZ Scientific Secretariat

BIOHAZ Administrative Secretariat

BIOHAZ Panel expertise

food safety and public health

food technology



food microbiology

diagnostics

parasitology, virology

zoonoses, TSE

neuropathology

epidemiology

meat and dairy hygiene and inspection

medicine, veterinary medicine.

.....took over the tasks of the previous :

- TSE/BSE *ad hoc* group under the Scientific Steering Committee (DG Sanco C1-SSC)
- Scientific Committee on Veterinary Measures related to Public Health (DG Sanco C2-SCVMPH)
- Scientific Committee on Foods (DG Sanco C2-SCF) on Food Microbiology

Addresses biological hazards including

- food-borne zoonoses
- transmissible spongiform encephalopathies

along with microbiology relating to

- other food-borne diseases, food safety and food hygiene, and
- associated waste management issues

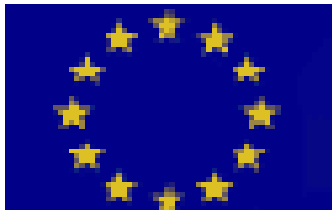
Work themes of BIOHAZ Panel

- **General questions:** providing scientific opinions, guidance and advice in response to questions
- **Applications:** Assessing the risk of regulated substances and development of proposals for risk-related factors: **ABP's, TSE testing, Decontaminants**
- **Investing in food safety science:** Development, promotion and application of new and harmonized scientific approaches and methodologies for (quantitative) risk assessment
- **Networking:** Collaboration with national authorities/bodies on microbiological risk assessment

The BioHaz Panel adopts
an holistic approach
to food safety with a
particular emphasis on risk
assessment



Who asks?



European Commission



European Parliament

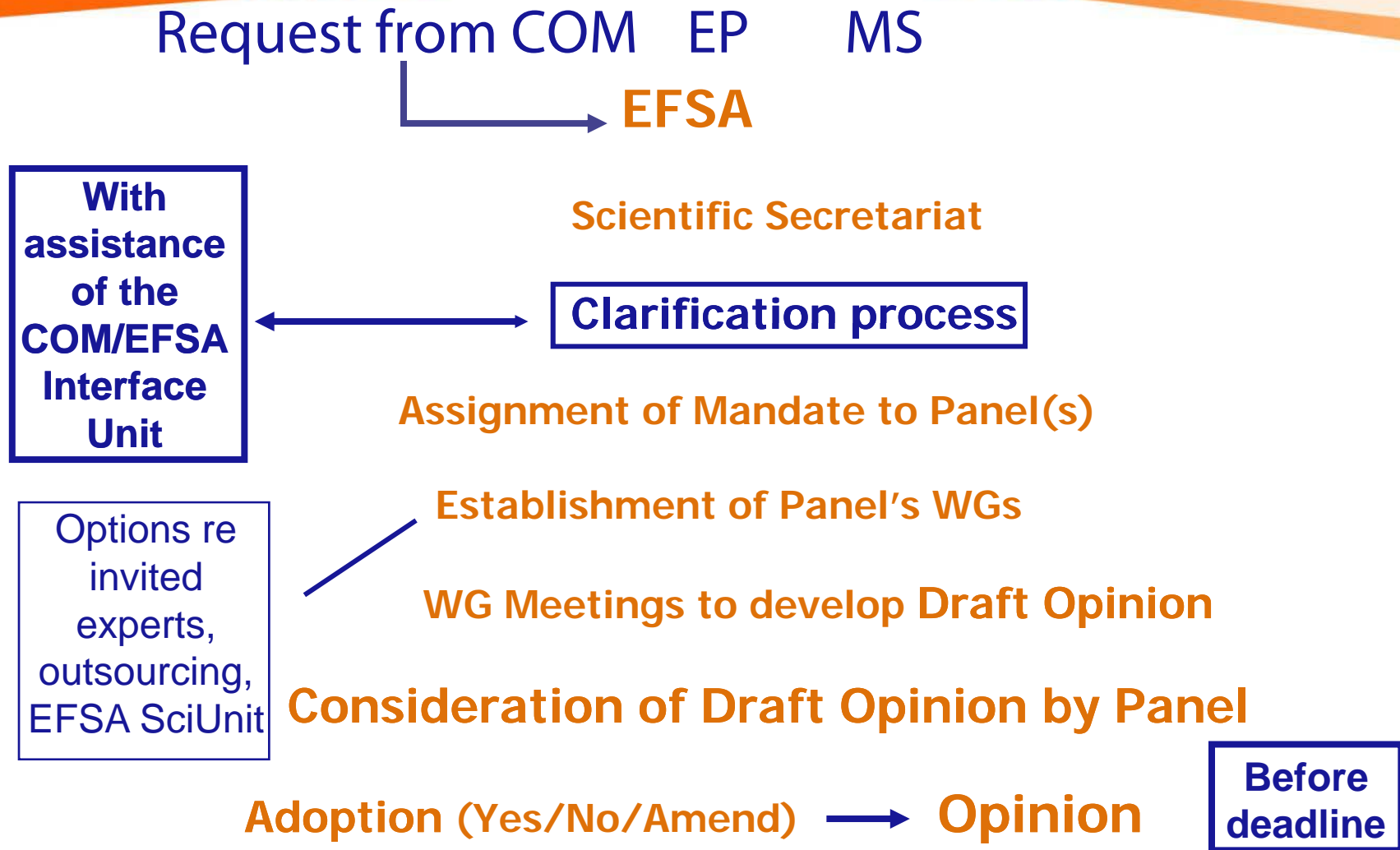


Member States



Self-tasking

EFSA Protocol for Mandates and Opinions



Opinions adopted to date by the BIOHAZ Panel (2003 – 2008)

ABP and Waste Management	12
BSE	33
Decontamination Treatments	4 + guidance document
Food Hygiene	7
Food Microbiology	6
Foodborne Zoonoses	11
AHAW chapters on Food Safety	5

**The risk assessor
provides a scientific
basis for decision
making by the [risk]
managers.**

**Mutual understanding
of the complementary
roles of the RA and
the RM is essential.**



1. Identification of foodstuffs/processes for a defined hazard

- *Clostridium, Campylobacter, Bacillus cereus* and other *Bacillus* spp. in foodstuffs

2. Identification of microbiological hazards for a defined foodstuff

- Microbiological risks in infant formulae and follow-on formulae
- Microbiological risks in reptile meat

3. Evaluation of control methods/measures

- Effect of nitrites and nitrates on meat products
- The advantages and disadvantages of egg washing
- Use of antimicrobials and vaccines for the control of *Salmonella* in poultry

Examples of adopted opinions (II)

4. The risk assessment of a defined hazard throughout the whole food chain

- Risk assessment and mitigation options for *Salmonella* in pig production (First EU-wide QMRA, first call Art 36)

5. The evaluation of methods of meat inspection

- Revision of meat inspection procedures for lambs, goats and beef;
- Revision of inspection of slaughter animals in areas with low prevalence of *Cysticercus* and *Trichinella*

6. Risk assessment as a part of authorizations

- Evaluation of the efficacy of substances intended to be used to **decontaminate** the surfaces of products of animal origin
- The biological safety of **heat treatment of manure**; (ABP)
- The public health risks of feeding farmed animals with **ready-to-use dairy products** that have not received further treatment (ABP)

Examples of adopted opinions (III)

7. BSE/TSE area: Animal Feeding

- The use of bovine spray dried red cells in feeds for fish
- Feeding animal proteins to farm animals
- Feeding ruminants with fishmeal

8. BSE/TSE area: TSEs in Small Ruminants

- Certain aspects related to the risk of TSEs
- Quantitative risk assessment on the residual BSE risk in sheep meat and meat products

9. BSE/TSE area: Methodologies

- Revision of the Geographical BSE Risk Assessment Methodology

Examples of adopted opinions (IV)

10. BSE/TSE area: TSE tests

- Protocol for preliminary evaluation *ante-mortem* TSE tests;
- Protocol for evaluation new rapid *post-mortem* BSE tests;
- Protocol for evaluation new rapid *post-mortem* TSE tests in small ruminants;
- Opinion on Batch testing of TSE rapid tests

11. BSE/TSE area: Specified Risk Material

- Consumption of Beef Tongue;
- Assessment of the likelihood of the infectivity in SRM derived from cattle at different age groups
- Re-assessment of the BSE related risk of bovine intestines after processing into natural sausage casings

The EFSA Journal (2005) 220, 1-21

Procedure adopted

1. Assessment

- 1.1. Experimental studies
- 1.2. Epidemiological data

2. Conclusions

Justification to eventually change the age limit on the basis of the results of pathogenesis studies and epidemiological data

3. Recommendations

**Opinion of the Scientific Panel on Biological Hazards on
microbiological criteria and targets based on risk analysis
Adopted on 7 March 2007**

- The BIOHAZ Panel recommended that when developing guidelines for the use of Food Safety Objectives (FSO) and Performance Objectives (PO), the existing terms in current legislation (i.e. the EU legislation on microbiological criteria and targets) need to be taken into account in order to avoid too many different terms being used to address the same issues.
- The Panel also recommended that the goal for risk management is defined before evaluating possible control options, including the establishment of microbiological criteria and their purpose.

BioHaz Opinions published as chapters in conjoint Opinions published with the Animal Health and Animal Welfare Panel include:

Rift Valley Fever

Stunning of Cattle

Food safety implications of different welfare systems for:

Laying Hens

Farmed pigs

Dairy Cows

Fish

Joint review of the Community Summary Report (2005 and 2006): AH and PH perspectives

From risk assessment to risk management. Examples

BIOHAZ opinion	EC policy
Assessment of the health risks of feeding of ruminants with fishmeal in relation to the risk of TSE (qn from the Parliament)	Voted in the Standing Committee 22 April 2008 (proposal to allow feeding of fishmeal to young ruminants)
Animal by-products. Safety of a thermo-mechanical process to convert Cat 2 and Cat 3 ABPs into bio-fuel	Commission Regulation 1678/2006 of 14 Nov 2006
Microbiological risks in infant formulae and follow-on formulae	Amendment of Reg. 2073/2005: Microbiological criteria set for <i>Salmonella</i> and <i>Ent. sakazakii</i> for draft infant formulae placed on the market
Risk assessment and mitigation options of <i>Salmonella</i> in pig production	Commission Decision 2006/668 for a baseline survey on the prevalence of <i>Salmonella</i> in pigs

- **Draft Opinion on Microbiological Testing, Criteria and other Objectives.**
- **Joint AFC/BIOHAZ Draft Guidance Document on antimicrobial treatments for the removal of microbial surface contamination of foods of animal origin**
- **Food as a vehicle for antimicrobial resistance**

Examples:

- DG-SANCO: Codex, SCENIHR*
- ECDC
- EMEA
- JRC-IRMM
- European Parliament
- Network EFSA-BIOHAZ BSE-TSE
- Network EFSA-BIOHAZ Risk Assessment
- Units within EFSA e.g. ESCO Botanicals, ESCO EmRisk, Zoonoses Data Collection, AFC, FEEDAP

* Scientific Committee on Emerging and Newly Identified Health Risks

Current Activities of the BIOHAZ Panel:

Examples

From Scientific Committee:

- **Qualified Presumption of Safety (QPS) procedure**
- **Approach to Uncertainty**

Self tasking issues:

- **Source Attribution methodology**
- **Foodborne antimicrobial resistance as a biological hazard**
- **Public Health significance of MRSA in animals and foods**

New challenges:

- **Emerging hazards, risks**

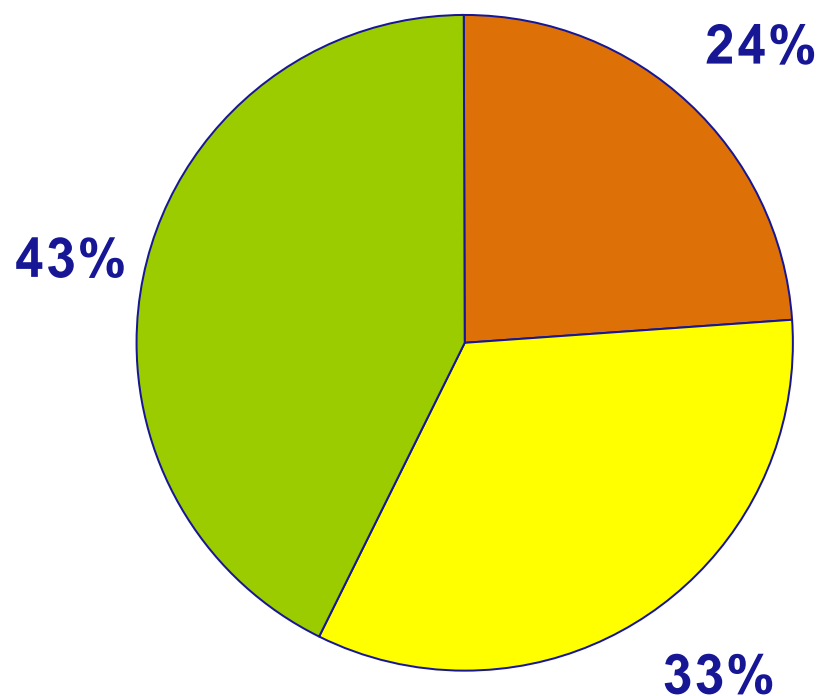
BIOHAZ Panel: Extracts from Minutes of 40th Plenary, 4-5 June 2008

Progress reports and discussion on the following mandates

- Assessment on the risk related to TSEs from carcasses of ovine and caprine animals below 6 months of age *
- Microbiological risk assessment on feedingstuffs for food-producing animals*
- Overview of source attribution methodology**
- Assessment on the risk for human and animal health related to the revision of the BSE monitoring regime in some MS**
- Foodborne antimicrobial resistance as a biological hazard**
- Public health significance of meticillin resistant *Staphylococcus aureus* (MRSA)
- Quantitative estimation of the public health impact of setting a new target for the reductions of *Salmonella* in certain poultry productions
- TSE infectivity in milk and milk products from small ruminants
- QMRA on *Salmonella* in slaughter and breeding pigs

* *Opinions now adopted* ** *Opinions for possible adoption 9-10 July 2008*

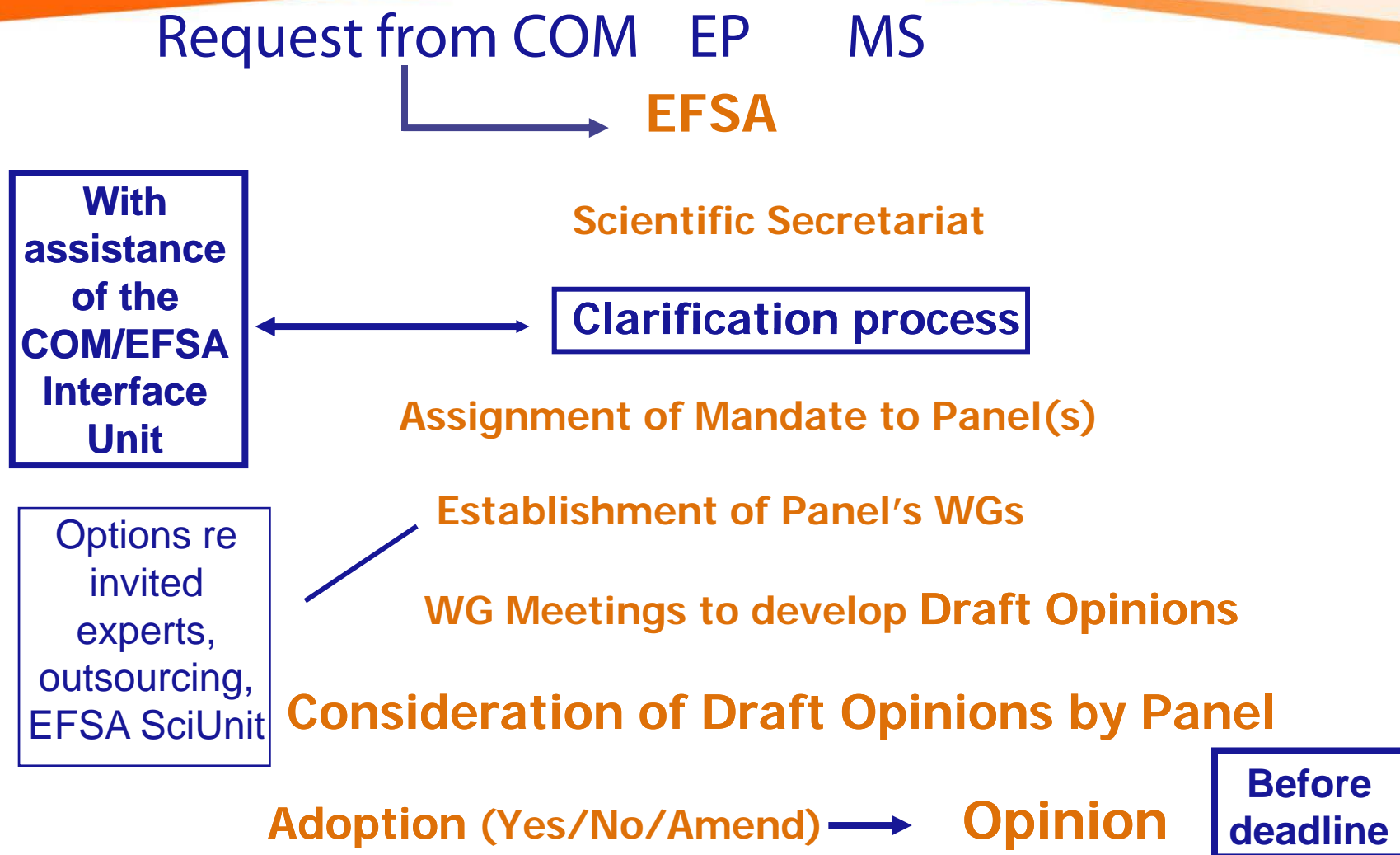
BSE/TSE Range of Deadlines



BSE/TSE mandate deadlines
(mandates received 1 Jan 05 - 31 Mar 08)



EFSA Protocol for Mandates and Opinions



***To: Members of the Scientific Panel on Biological
Hazards***

“ Please find herewith the link to a Commission Regulation (1091/2005) implementing Regulation No. 2160/2003 as regards the requirements for the use of specific control methods in the framework of the national control programmes for the control of *Salmonella*, based on opinions adopted by the BIOHAZ Panel.”

BIOHAZ Panel: Self Assessment

Strengths:

- knowledge, experience, expertise, openness, confidence, independence, collegiality, enthusiasm, focus, credibility
- Supported by
- high quality and enthusiasm of EFSA staff

Weaknesses:

- availability of experts
- constraints on interpretation of mandates
- ra-rm interface-related constraints
- communication constraints
- capacity to address coincidental priorities
- level of preparedness to deal with emerging risks

Opportunities:

- to direct decision makers towards risk-based criteria for food safety
- to encourage a uniform approach to data collection and analysis
- to help consolidate food safety as a multidisciplinary specialisation at MS and COM level

Threats:

- to be taken for granted
- loss of staff and resources
- constraints on ability of experts to participate: short deadlines

BIOHAZ Panel





Thank you