State of play EFSA risk assessment on meat inspection

II Round Table on Meat Inspection
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Unit on Biological Hazards
EFSA's Mission

- Provide **scientific advice** and **scientific and technical support** for the Community’s legislation and policies in all fields which have a direct or indirect impact on **Food and Feed Safety**.

- Provide **independent** information on all matters within these fields with a high level of **openness** and **transparency**;

- **Risk Communication**;

- **Collaboration and Networking**.
Risk Analysis [CAC,01]: a decision paradigm for Food Safety Governance

Risk Assessment = The Science
Risk Management = The Policy
Risk Communication = The Exchange

EC+EFSA

Options identification
Options selection
Implementation
Review
Monitoring
Preliminary activities
The Panel on Biological Hazards deals with questions on biological hazards relating to Food Safety and Food-borne Diseases, including:

- Food-borne Zoonoses;
- Food Hygiene;
- Microbiology;
- Transmissible Spongiform Encephalopathies;
- Associated Waste Management.
Risk Assessment players

“Question”

BIOHAZ Risk Assessment

“Answer”

- DG-SANCO
- DG-RTD – JR-IRMM
- European Parliament
- EU Agencies: ECDC, EMEA, EUROSTAT
- National Administration
- EU wide industry bodies
- BIOHAZ BSE-TSE Network
- BIOHAZ MRA Network
- Art 36 Grants: Appointed Institutions
- Procurement: All, selected

Calls for data: All
EFSA work on Meat Inspection

“Classical” Meat Hygiene Inspection

Microbiological Meat Hygiene

Specified Risk Materials controls
Ongoing Risk Assessments on Meat Inspection

“Public Health Hazards to be covered by inspection of meat”
New Mandate from the EC: background

- In Nov 2008 CVO’s agreed on conclusions on modernisation of sanitary inspection in slaughterhouses based on the recommendations issued during a seminar organised by the French Presidency. They were considered at a the Commission report.

- Council Conclusions on the Commission report (Nov 2009) invite the Commission to prepare concrete proposals allowing the effective implementation of modernised sanitary inspection in slaughterhouses while making full use of the principle: 'risk-based approach'.

- In accordance with Article 20 of Regulation (EC) No 854/2004, the Commission shall consult EFSA on certain matters falling within the scope of the Regulation whenever necessary.
New Mandate from the EC

- As described, EFSA (BIOHAZ Panel) and the Commission's former SCVPH issued in the past a number of opinions on meat inspection considering separately
  - specific hazards
  - production systems

- In order to guarantee a more **risk-based approach**, it is needed:
  - an assessment of the risk caused by specific hazards, taking into account the evolving epidemiological situation in Member States.
  - In addition, methodologies may need to be reviewed taking into account
    - risks of possible cross-contamination,
    - trends in slaughter techniques and
    - possible new inspection methods.
Requests for scientific opinions on the hazards to be covered by inspection of meat
SCOPE:
• To evaluate meat inspection in order to assess the fitness of the meat for human consumption
• To monitor food-borne zoonotic infections (public health)
  – without jeopardizing the detection of certain animal diseases nor the verification of compliance with rules on animal welfare at slaughter

For the species:
  ❖ domestic swine,
  ❖ poultry
  ❖ bovine animals over six weeks old,
  ❖ bovine animals under six weeks old,
  ❖ domestic sheep and goats,
  ❖ farmed game and
  ❖ domestic solipeds

i. Ensuring a risk-based approach
ii. Considering relevant international guidance (CAC, OIE)
iii. In consultation with ECDC
• **Identify and rank the main risks** for PH that should be addressed by meat inspection at EU level. General and specific biological risks as well as chemical risks (e.g. residues of veterinary drugs and contaminants) should be considered.

• **Assess the strengths and weaknesses** of the current meat inspection methodology and recommend possible alternative methods, taking into account implications for animal health and welfare.

• **Recommend additional inspection methods** in case other previously not considered hazards have been identified above (e.g. salmonellosis, campylobacteriosis).

• **Recommend possible alternative methods and adaptations of inspection methods and/or frequencies of inspections** that provide an equivalent level of protection within the scope of meat inspection or elsewhere in the production chain that may be used by risk managers in case they consider the current methods disproportionate to the risk.
  
  - e.g. based on the risks or on data obtained using harmonised epidemiological criteria. When appropriate, food chain information should be taken into account.
• Issues outside the scope of the mandate:
  – Transmissible Spongiform Encephalopathies (TSEs)
  – Issues other than those of PH significance that compromise fitness of meat for human consumption (e.g. sexual odour)
  – Impact of changes to meat inspection procedures on occupational health of abattoir workers, inspectors, etc
  – The definition of the responsibilities of the different actors (official veterinarians, official auxiliaries, staff of food business operators) is excluded from this mandate
Harmonised epidemiological criteria
- Interpretation

Original wording from CVO conclusions:
EFSA and ECDC should establish the criteria or the quantitative data necessary for MS to carry out a risk analysis allowing the adaptation of the general inspection methods provided by the legislation

Interpretation:
For each hazard, the relevant epidemiological indicators (e.g. prevalence, incidence, risk factors such as production systems etc) and other data to be used by MS to carry out a risk analysis to support decisions on adaptation of meat inspection methods or practices

Alternative wording proposed:
Harmonised epidemiological indicators
Requests for technical assistance defining harmonised human health epidemiological criteria to carry out risk analysis within the scope of meat inspection
SCOPE:

- technical assistance on harmonised epidemiological indicators for specific PH hazards in food and animals to be used by risk managers in case they consider the current methods for meat inspection address the relevant risk not adequate


For the species:

- domestic swine,
- poultry,
- bovine animals over six weeks old,
- bovine animals under six weeks old,
- domestic sheep and goats,
- farmed game and
- domestic solipeds
Terms of reference (Annex 2)

• Define **harmonised epidemiological indicators** (e.g. prevalence, status of infection, production systems) for specific hazards already covered by current meat inspection (trichinellosis, tuberculosis, cysticercosis, …) and for possible additional hazards identified in a scientific opinion on the hazards to be covered by inspection of meat (see Annex 1), which can be used to consider adaptations of meat inspection methodology.

• Provide a summary of comparable data from Member States based on the above defined harmonised epidemiological criteria, if existing, e.g. from ongoing monitoring in humans, food or animals.

• Recommend methodologies and minimum monitoring/inspection requirements to provide comparable data on such harmonised epidemiological indicators, in particular if comparable data are missing.
EFSA Approach

- **Integrated answer:**
  - EFSA statement: approach taken and state-of-the art of meat inspection in the EU
  - 1 opinion and 1 report/species

- **In each opinion:**
  - Chapters from BIOHAZ Panel
  - Chapter from AHAW Panel
  - Chapter from CONTAM Panel in collaboration with DATEX Unit
  - Overall conclusions and recommendations

- **In each report:**
  - Work from Zoonoses Monitoring Unit in collaboration with Assessment Methodology Unit
EFSA’s organisational structure

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  - **ZOONES** (Data Collection)
    - P. Makela

**ORGANISATIONAL CHART 2009**
1. State-of-the art of Meat inspection practices in the EU
   (Unit on Biological Hazards)

2. Meat Inspection and implications for AHAW →Procurement procedure (Open call)
   (Unit on Animal Health and Welfare)

3. Support on technical assistance on epidemiological criteria
   (Unit on Zoonoses Data Collection)
Implications of meat inspection mandate on AHAW

_Suggested changes in the light of public health risks [BIOHAZ, CONTAM]_

Given the need for _equivalent achievement of objectives_, what are the implications for:

- _animal disease monitoring/surveillance (other than food borne zoonoses), and_
- _compliance with rules on animal welfare?_

- _Key issue: Cooperation/synergy with other EFSA panels/units_
AHAW Outsourcing: Scope

The target of the contract is:

• collection of relevant data
• implementation of models
• to assist AHAW Panel and its WG to:
  Estimate the effectiveness of monitoring and surveillance (with respect to AHAW) of both meat inspection and the overall surveillance system, both:
  • In the current legislation
  • following suggested system changes
Outsourcing activities made to support the report on technical assistance on epidemiological criteria:

1. Contract on assistance in descriptive and statistical analyses of surveillance and monitoring data on zoonotic agents related to public health hazards to be covered by meat inspection;

2. Contract on literature searches for data on some zoonotic bacteria and parasites in humans, food and animals

Launched by the Zoonoses Data Collection unit

Both contracts will be signed in the coming weeks
The application of the epidemiological criteria is understood to work as follows:

- **Current meat inspection method**

  - Found inadequate

  - **MS’s risk analysis**

  - **Adapted meat inspection method**

- **Epidemiological criteria met**

- EFSA will provide the stage of meat chain and the harmonised monitoring requirements for the criteria, while the Commission will set the threshold.
List of dataset needs I (Zoonotic hazards)

Data collected within the annual data collection in accordance with the Directive 2003/99/EC on monitoring of zoonoses

Data from years 2004-2010 (sometimes from years 1994-2003) regarding all animal species mentioned earlier and for the following items:

*Salmonella*  
*Yersinia*  
*Listeria monocytogenes*  
*Brucella*  
*Echinococcus*  
*Cysticercus*  
Food-borne outbreaks

Antimicrobial resistance in:

- *Salmonella*, *Campylobacter*, indicator *E.coli* and enterococci, MRSA
Data collected in the framework of the EU-wide baseline surveys on zoonotic agents

Data from the following baseline surveys:

- *Salmonella* in slaughter pigs and holdings of breeding pigs
- *Salmonella* in flocks of broilers and flocks of turkeys
- *Campylobacter* and *Salmonella* in broilers and broiler meat
- MRSA in holdings of breeding pigs
Conclusions

• EFSA in its role as risk assessment body in the EU, provides scientific advice and scientific and technical support for legislation and policies in all fields which have a direct or indirect impact on food and feed safety.

• EFSA’s scientifically based risk assessments serve as a means for the identification of food safety risk control options, which are then reflected in EU legislation.

• EFSA applies an integrated approach in its reply to the request received by the EC

• Current meat inspection mandate: complex due to the number of species to be assessed and the different expertise required (6 EFSA Units involved + Outsourcing)

• Data availability is “key” in providing the most useful answer to the EC request
EFSA is committed to:

Excellence,
Independency,
Responsiveness and
Transparency

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