Scientific structures in EFSA and the expertise required for Risk Assessment

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The European Food Safety Authority (EFSA) was established by the Regulation No EC/178/2002 of the European Parliament and of the Council also laying down the principles and requirements of food law and the procedures in matters of food safety. The mission of EFSA is to 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. EFSA shall provide independent information on all matters within these fields and communicate the risks.

In particular, EFSA has been assigned the following tasks:
• Providing to the Community institutions and the Member States with the best possible scientific opinions based on risk assessment
• Promotion and coordination of the developments of uniform risks assessment methodologies
• Providing scientific and technical support to European Commission
• Commissioning scientific studies necessary to accomplishment of its mission
• Searching for, collecting and analysing scientific and technical data
• Identifying and characterising emerging risks
• Establishing networks of relevant organisations
• Assistance of the Commission in crisis management
• Risk communication
• Independent expression of own conclusions and orientations

Four distinct bodies make up EFSA. They are the Management Board, the Executive Director and staff, the Advisory Forum and the Scientific Committee and Panels. Scientific work is undertaken by EFSA’s eight Panels, each responsible for a different aspect of food safety.

Some of the above tasks are being carried out in the remit of the Scientific Committee and the 8 Scientific Panels while other tasks are dealt with in the Scientific Expert Services of EFSA. The Committee and the Panels have been functional since May 2003.

• Panel on food additives, flavourings, processing aids and materials in contact with food (AFC)
• Panel on additives and products or substances used in animal feed (FEEDAP)
• Panel on plant health, plant protection products and their residues (PPR)
• Panel on genetically modified organisms (GMO)
• Panel on dietetic products, nutrition and allergies (NDA)
• Panel on biological hazards
• Panel on contaminants in the food chain (CONTAM)
• Panel on animal health and welfare (AHAW)

The Panels are made up of leading independent scientists coming from all over Europe and even in a few cases from beyond Europe, and were appointed following an open call for expression of interest. The Scientific Committee co-ordinates the work of the Panels, proposes common methodology and guidance in carrying out risk assessments, and addresses transversal issues common to all Panels (for instance, exposure assessment).

The Scientific Committee and Expert Panels are supported by EFSA’s own scientific staff. In addition, the Authority expects to reinforce its Science department by creating a series of expert service “teams” each dedicated to a specific area of risk assessment (eg data collection, epidemiology

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1 OJ L 31, 1.2.2002, p. 1
and exposure...). In total EFSA’s team of highly qualified scientists, experts in their respective fields, and support staff is expected to number 70 in 2004, representing approximately 50% of total headcount.

Finally, the Authority will also build scientific networks involving Community institutions, national food safety authorities and scientific institutions in and outside the EU as well as international organisations in order to: facilitate exchange of information and expertise; evaluate possible collaboration in areas of mutual interest and continuously improve its own scientific knowledge and expertise.

Scientific Panel on biological hazards

The Panel on biological hazards (BIOHAZ Panel) deals with questions on biological hazards relating to food safety and food-borne disease, including food-borne zoonoses and transmissible spongiform encephalopathies, microbiology, food hygiene and associated waste management.

It consists of 21 members, who have expertise in the fields of food hygiene, food technology, food microbiology, public health, animal health, parasitology, virology, zoonoses, meat inspection, epidemiology, TSEs, neuropathology and TSE exposure. The opinions of the panels represent qualitative risk assessments based on the best available information on the subject in question.

The BIOHAZ panel has already issued following opinions related to foodborne zoonoses and other foodborne pathogens:

- Opinion on meat inspection procedures for lambs and goats.
- Revision of meat inspection procedures for beef.
- Opinion on tuberculosis in bovine animals: risks for human health and control strategies.
- Use of nitrates and nitrates for the safety of meat products (mainly to control C. botulinum).
- Opinion on microbiological risks in infant formulae and follow on formulae.
- Use of antimicrobials to control Salmonella in poultry flocks.
- Use of vaccines to control Salmonella in poultry flocks.
- Freezing of cold tolerant strains of Trichinella and Cysticercus.
- Several opinions on TSEs and BSEs.

Currently the BIOHAZ panel is working on several other questions related to foodborne zoonoses and pathogens. These include questions on:

- Campylobacter in animals and foodstuffs
- Bacillus spp. in foodstuffs
- Clostridium spp. in foodstuffs
- Risk assessment of Cysticercus bovis and Trichinella

In most cases the opinions of the BIOHAZ Panel follow the outline of Codex agreements on Risk Assessments. The opinions are available on the EFSA web site: http://www.efsa.eu.int/science/catindex_en.html.

EFSA is also planning to start activities in the field of Quantitative Microbiological Risk Assessments, and as a first step it is in the process of developing, with assistance of a scientific consultant, a strategy for this field.

Scientific Expert Services

Data collection activities in EFSA are performed under the Scientific Expert Services. The monitoring of zoonoses is the first data collection system being transferred from the Commission to EFSA.

With Directive 2003/99/EC of the European Parliament and of the Council on monitoring of zoonoses and zoonotic agents, EFSA is assigned a task to collate, assess and report data on zoonoses, zoonotic agents and antimicrobial resistance. According to the Directive, EFSA shall examine the annual national reports on zoonoses submitted by the Member States, analyse the data and publish by the end of November each year a summary report on the situation in the Community.

In this summary report, EFSA may take into consideration other data provided for in the framework of Community legislation, such as data from control and eradication programmes for animal diseases

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2 OJ L 325, 12.12.2003, p. 31
and zoonoses co-financed by the Community, from coordinated control programmes for foodstuffs and from the disease networks in place in the Community. It is noteworthy that the data on zoonoses cases in humans will not any more be collected under the new zoonoses Directive, but instead it will be acquired from the Communicable Disease Networks established by the Decision 2119/98/EC of the European Parliament and of the Council setting up a network for the epidemiological surveillance and control of communicable diseases in the Community. The only exception from this rule is the food-borne outbreaks where all the aspects, including the human cases, are covered by the data collection under the new Zoonoses Directive.

The zoonoses data collection covers on a mandatory basis 8 zoonoses (brucellosis, campylobacteriosis, echinococcosis, listeriosis, salmonellosis, trichinellisis, tuberculosis due to Mycobacterium bovis and verotoxigenic Escherichia coli), antimicrobial resistance and food-borne outbreaks. All the other zoonoses should be reported according to the epidemiological situation in the Member State.

EFSA will take over the responsibility for the preparation of the Community summary report on zoonoses from the beginning of 2005. Currently it is preparing itself for this new task and it is initiating actions to review the report and the reporting system.