

FAO/WHO Framework for the Provision of Scientific Advice on Food Safety and Nutrition



**FAO/WHO Framework for the
Provision of Scientific Advice on
Food Safety and Nutrition**

**FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
WORLD HEALTH ORGANIZATION**

Rome, 2007

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Contributions received from units in FAO and WHO are gratefully recognized. They include the Animal Production and Health Division (AGA); the Fisheries Industry Division (FIIU) in FAO, and the Department of Nutrition for Health and Development (NHD) at WHO.

Abbreviations

ADI	Acceptable Daily Intake
ARfD	Acute Reference Dose
CAC	Codex Alimentarius Commission
CCFAC	Codex Committee on Food Additives and Contaminants
FAO	Food and Agriculture Organization of the United Nations
GEMS/Food	Global Environment Monitoring System – Food Contamination and Assessment Programme
IAEA	International Atomic Energy Agency
IPCS	International Programme on Chemical Safety
JECFA	Joint FAO/WHO Expert Committee on Food Additives
JECN	Joint FAO/WHO Expert Committee on Nutrition (JECN)
JEMRA	Joint FAO/WHO Expert Meetings on Microbiological Risk Assessment
JMPR	Joint FAO/WHO Meeting on Pesticide Residues
JMPS	Joint FAO/WHO Expert Meetings on Pesticide Specifications
MRL	Maximum Residue Level
OIE	World Organisation for Animal Health
ProScAd	Provision of Scientific Advice
SPS	Sanitary and Phytosanitary Measures
WHO	World Health Organization
WTO	World Trade Organization

Foreword

Since the early years following their establishment, the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO) have offered a neutral, international forum for scientific discussions related to food safety and nutrition. The scientific advice¹ produced through these discussions has been used extensively by member countries, the Codex Alimentarius Commission (CAC) and its subsidiary bodies and specific units within FAO and WHO to inform and support their decision making processes. It has provided an essential basis for the development of guidelines, recommendations and standards by the CAC.

The strength of FAO and WHO activities focused on the provision of scientific advice is based on their complementary mandates in food safety and nutrition, and in the close coordination of activities (including the management of resources). FAO's mandate is to raise levels of nutrition, improve agricultural productivity, better the lives of rural populations and contribute to the growth of the world economy. WHO's objective, as set out in its constitution, is the attainment by all peoples of the highest possible level of health. Together both organizations are engaged in a wide range of activities that focus on the entire food production chain, from primary production to consumption, and take food safety and quality, as well as nutritional aspects into consideration.

FAO/WHO scientific advice is provided through the convening of established expert committees (known as expert bodies²) and other expert meetings and *ad hoc* consultations on issues related to:

- the safety assessment of chemicals in food (e.g. food additives, veterinary drug residues, pesticide residues, contaminants, natural toxins);
- the safety assessment of biological agents in food (e.g. micro-organisms, fungi, parasites and prions);
- the assessment of practices and technologies used for the production of foods (e.g. the safety assessment of foods derived from biotechnology); and
- human nutrition³ (e.g. probiotics, human nutrient requirements, food fortification).

Individuals serving in these expert bodies and consultations are independent experts with specializations in a range of scientific subjects. They come from many different countries and organizations but act in their individual capacity and not as representatives of any institution or country.

¹ Scientific advice is “the conclusion of a skilled evaluation taking account of the scientific evidence, including uncertainties”. FAO/WHO. 2004. *Provision of Scientific Advice to Codex and Member Countries*. Report of Joint FAO/WHO Workshop. WHO Headquarters, Geneva, Switzerland. 27-29 January 2004. Page v (available at: <ftp://ftp.fao.org/docrep/fao/007/y5388e/y5388e00.pdf>).

² The term “expert body” is used throughout this document to refer to all established expert committees (i.e. those which have a statutory basis), such as the Joint FAO/WHO Expert Committee on Food Additives (JECFA) and the Joint FAO/WHO Meetings on Pesticide Residues (JMPR).

³ For the purposes of this document, the term nutrition refers to the provision of scientific advice on activities relating to human nutrient requirements, food composition, diet, obesity and the prevention of chronic disease.

This framework document describes the principles, practices and procedures currently applied by FAO and WHO for the provision of scientific advice through the following mechanisms:

- The Joint FAO/WHO Expert Committee on Food Additives (JECFA) (active since 1956)
- The Joint FAO/WHO Meetings on Pesticide Residues (JMPR) (active since 1963)
- The Joint FAO/WHO Expert Meetings on Microbiological Risk Assessment (JEMRA) (active since 2000)
- The Joint FAO/WHO Expert Meetings on Pesticide Specifications (JMPS) (active since 2002)
- The Joint FAO/WHO Expert Committee on Nutrition (JECN) (established in 1952⁴)
- *Ad hoc* expert consultations and meetings organized in response to specific *ad hoc* requests or emergency situations.

This framework document has been prepared to enhance the transparency of the processes and procedures used by FAO and WHO to deliver scientific advice in food safety and nutrition. Public comments on the framework for the provision of scientific advice were invited from the beginning of October 2006 until the end of January 2007. This is the final version of the framework, following the review of comments received.

The framework will be reviewed periodically and amended as appropriate, to take account of new developments and procedures as part of the process to continually improve the provision of scientific advice (such as the development of various guidelines on specific aspects of the process). It will therefore serve as the basis for a continuous review of practices and procedures for the provision of scientific advice related to food safety and nutrition.

⁴ First established in 1948 as the FAO Standing Advisory Committee, this Expert Committee has been inactive for several years. However, FAO and WHO are considering the possible approaches to provide scientific advice on nutrition issues.

1. Introduction

The provision of scientific advice is essential for the effective planning and implementation of food control and nutrition programmes at the international and national level. Its role in informing policy and decision making processes related to food safety and nutrition has gained a new prominence during the last decade reflecting developments and trends in human nutrition and trade in food and agricultural products. Members of the Codex Alimentarius Commission have agreed on the importance of ensuring that “the food standards, guidelines and other recommendations of Codex Alimentarius shall be based on sound scientific analysis and evidence, involving a thorough review of all relevant information...”⁵. The relevance of scientific advice for global trade in food and agricultural products has further been reaffirmed in the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) of the World Trade Organization (WTO), which refers to the necessity of scientific and technical advice for the effective administration of the agreement and the need to establish SPS measures on the basis of scientific risk assessment⁶. In 1999, the Conference on International Food Trade Beyond 2000 reiterated the importance of scientific advice for food safety decision making⁷.

FAO and WHO have a long history of providing scientific advice on matters concerning food safety and nutrition to the Codex Alimentarius Commission (CAC) and its subsidiary bodies, member countries, and other interested parties (such as industry, consumer groups, academic and research institutes). Recently, the need has emerged to clearly document the principles and procedures for the provision of scientific advice as a means to promote transparency.

This document sets out a framework for the provision of scientific advice (ProScAd) by FAO and WHO on matters related to food safety and nutrition. It discusses the different types of scientific advice provided, as well as the current principles, practices and procedures that underpin this advice. The purpose is to enhance the outcomes and transparency of scientific advice generated by FAO and WHO. The target audience is all those individuals and groups with an interest in FAO/WHO activities related to the provision of scientific advice. This could include experts who participate in FAO and WHO activities to provide scientific advice, members of the CAC, national delegations attending meetings of the CAC or its committees, scientific experts and institutions,

⁵ The Statements of Principle concerning the role of science in the Codex decision-making process and the extent to which other factors are taken into account (21st session of the CAC, 1995)

⁶ Article 12, Clause 1 of the SPS Agreement states: “The Committee shall maintain close contact with the relevant international organizations in the field of sanitary and phytosanitary protection, especially with the Codex Alimentarius Commission, the International Office of Epizootics, and the Secretariat of the International Plant Protection Convention, with the objective of securing the best available scientific and technical advice for the administration of this Agreement and in order to ensure that unnecessary duplication of effort is avoided.”

⁷ Report of the conference on International Food Trade Beyond 2000: Science-based Decisions, Harmonization, Equivalence and Mutual Recognition. Melbourne, Australia, 11–15 October 1999 (available at <http://www.fao.org/docrep/meeting/X4015E.htm>)

donors, NGOs or other stakeholders. In addition, the document may be useful for food safety regulators establishing similar procedures at the national level.

1.1 Background to the FAO/WHO review of the provision of scientific advice

The 24th session of the CAC, held in July 2001, recommended that FAO and WHO carry out “a review of the status and procedures of the expert bodies in order to improve the quality, quantity and timeliness of scientific advice”⁸. In response to this request, FAO and WHO convened a preparatory meeting on the elaboration of a common framework for the functioning of Joint FAO/WHO expert bodies and consultations in Rome in 2001⁹.

In 2003, following the 25th session of the CAC, FAO and WHO agreed to convene a consultative process to review the provision of scientific advice related to food safety and nutrition to Codex and member countries, as a means to improve its quality, quantity and timeliness¹⁰. The ultimate objective was to provide a transparent, balanced and unified approach for the provision of scientific advice to Codex and member countries, based on commonly accepted best practices and scientific expertise.

As part of this consultative review, FAO and WHO organized a number of technical meetings (including meetings in Geneva in January 2004 and in Belgrade in December 2005), as well as an electronic forum, to obtain guidance and opinions from scientific experts and relevant groups on how to strengthen the provision of scientific advice¹¹. During the process, special emphasis was paid to the inclusion of contributions from developing countries, and issues related to the independence, transparency, timeliness, efficiency, integrity, sustainability and quality of scientific advice were addressed.

1.2 FAO/WHO framework for the provision of scientific advice

This framework document is one of the major outputs of the review process outlined above. It describes the principles, practices and procedures currently applied by FAO and WHO when providing scientific advice on food safety and nutrition, including provisions

⁸ FAO/WHO. 2001. *Summary and Conclusions of the 24th Session*. Geneva, Switzerland, 2-7 July 2001. Codex Alimentarius Commission. ALINORM 01/41, para 61 (available at: ftp://ftp.fao.org/codex/alnorm01/Al01_41e.pdf).

⁹ FAO/WHO. 2001. *Report of the preparatory meeting on the elaboration of a common framework for the functioning of Joint FAO/WHO expert bodies and consultations*. Rome, Italy, 3-4 September 2001 (available at: <ftp://ftp.fao.org/es/esn/proscad/preparatory.pdf>).

¹⁰ FAO/WHO. 2003. *Report of the 25th (Extraordinary) Session of the Executive Committee of the Codex Alimentarius Commission*. Geneva, Switzerland, 13-15 February 2003 (available at: ftp://ftp.fao.org/codex/alnorm03/alx3_05e.pdf).

¹¹ For information, see: i) FAO/WHO. 2004. *Provision of Scientific Advice to Codex and Member Countries. Report of the Joint FAO/WHO Workshop*. Geneva, Switzerland, 27-29 January 2004 (available at: <ftp://ftp.fao.org/docrep/fao/007/y5388e/y5388e00.pdf>); ii) FAO/WHO. 2006. *Enhancing developing country participation in FAO/WHO scientific advice activities*. Report of a Joint FAO/WHO meeting. Belgrade, Serbia and Montenegro, 12-15 December 2005 (available at: <ftp://ftp.fao.org/ag/agn/proscad/belgrade.pdf>); and iii) background papers and report of the E-Forum (available at: http://www.fao.org/ag/agn/agns/advice_eforum_en.asp).

related to prioritization and management of scientific advice activities, as well as budgetary considerations.

The framework elaborated in this document is to be used by FAO and WHO for the provision of all types of scientific advice related to food safety and nutrition. This includes the provision of advice in response to requests from CAC or its subsidiary bodies, as well as FAO/WHO member countries. It includes expert bodies, scientific meetings or *ad hoc* consultations tasked with formulating an opinion, assessment or conclusion on health risk.

2. Overview of the provision of scientific advice by FAO and WHO

2.1 Introduction

As recommended by a joint FAO/WHO workshop in January 2004, scientific advice is defined as “the conclusion of a skilled evaluation taking account of the scientific evidence, including uncertainties. It may comprise an appraisal of the consequences of one or more options based on an analysis of the available scientific knowledge and on scientific judgement. Such advice should include explicit recognition of any uncertainty either in the current state of knowledge or in the adequacy of the available data. If necessary, it should include any alternative interpretations of the data”¹².

This “advice may take many different forms, from a response to a specific question, or provision of scientific information related to specific needs, to a full quantitative risk assessment. Depending on the degree of uncertainty, advice may range from a clear conclusion on risk to a recommendation to obtain additional data. Advice may be sought at any time throughout the risk analysis process or even subsequently”¹³.

Scientific advice provided by FAO and WHO makes an important contribution to inform and strengthen decision making processes focused on food safety and nutrition. This advice is used by risk managers, policy makers, food safety regulators and others at both the international and national level. One of the primary clients is the CAC. Indeed, scientific advice generated by FAO and WHO provides an essential foundation for the work of the CAC and its specialized committees, and is used extensively in the development of Codex recommendations and guidelines. Other users include national governments, the food industry, academics, consumers as well as specific units within FAO and WHO. This advice is particularly important in cases where expertise or resources to conduct research necessary for the formulation of national food standards or control programmes, and guidelines on human nutrient and dietary requirements are lacking.

Scientific advice reflects the conclusions of the experts at a given meeting as a whole. In those rare events where one or more experts cannot agree to the conclusions, the

¹² FAO.WHO. 2004. *Provision of Scientific Advice to Codex and Member Countries. Report of the Joint FAO/WHO workshop*. Geneva, Switzerland, 27-29 January 2004 (available at: <ftp://ftp.fao.org/docrep/fao/007/y5388e/y5388e00.pdf>).

¹³ Definition of the *scope of scientific advice*, recommended by the joint FAO/WHO workshop in Geneva in January 2004 (see previous footnote).

positions of these dissenting expert(s) and the reason for their disagreement is recorded in the report.

2.2 FAO/WHO scientific advice in the international risk analysis paradigm

The provision of scientific advice, and especially risk assessments, is essential for food safety risk analysis. Scientific advice may be sought at any time during the risk analysis process. In some cases, this advice may indicate the need for further research and activities to generate new data and information.

FAO and WHO promote the application of risk analysis in all matters involving food safety. In this regard considerable progress has been made by FAO, WHO and the CAC in developing a systematic framework for applying principles and guidelines for food safety risk analysis. This framework is based on the functional separation between risk assessment and risk management in order to ensure scientific integrity and independence, avoid confusion over the respective roles of risk assessors and risk managers, and reduce potential conflicts of interest. In accordance with the principles and procedures of the CAC, the Commission and its subsidiary bodies are responsible for risk management (risk managers), while the joint FAO/WHO expert bodies and meetings, which are independent of the CAC, are primarily responsible for risk assessment (risk assessors). However, it is recognized that risk analysis is an iterative process and interaction between risk managers and risk assessors is essential. Optimal advice requires effective dialogue between risk assessors and risk managers.

The scientific advice generated by FAO and WHO is normally based on risk assessment. The availability of sound scientific data, information and expertise is an essential requirement for successful risk assessments, which are developed by expert bodies, panels or *ad hoc* meetings of competent and independent scientific experts. However, a risk assessment may not always be possible, in which exceptional cases an expert evaluation of the available scientific data forms the basis for scientific advice.

2.3 Products of scientific advice

The outputs of scientific advice may vary depending on the subject of consideration. While the majority of scientific advice focuses on activities associated with risk assessment, advice related to broader risk management questions, food production technology or animal feedstuffs may also be given.

The main products of scientific advice provided by FAO and WHO comprise:

1. Risk assessments

- For chemicals, in most cases, the product is a risk assessment leading to the establishment of an Acceptable Daily Intake (ADI) or Acute Reference Dose (ARfD), and the elaboration of Maximum Residue Levels (MRLs) for

veterinary drugs or pesticide residues and Maximum Limits (MLs) in relevant commodities. Advice is also provided on exposure assessment methodology at both national and international levels.

- Risks associated with food-borne pathogens are addressed through risk assessments of specific pathogen-commodity combinations such as *Salmonella* spp. in eggs and broiler chickens.
2. **Guidelines and resource documents** on various topics related to food safety and nutrition including risk analysis, food fortification, food allergens, acrylamide, probiotics, food composition, diet, nutrition and the prevention of chronic disease and human nutrient requirements. Specific examples include: i) guidelines on hazard characterization for pathogens in food and water¹⁴; ii) guidelines for incorporating microbiological risk assessment in the development of food safety standards¹⁵; and iii) guidelines for the safety assessment of foods derived from biotechnology including nutritional aspects¹⁶;
 3. **Risk assessment methodology and international harmonization** which aims at the promotion, development and harmonization of scientifically sound methodologies for risk assessment. The results of such work enhance the acceptance of risk assessment outputs. This is an ongoing activity, for example a large project aimed at revising and harmonizing methodology for chemical risk assessment is currently ongoing.

In situations when addressing new areas of work, where scientific information is evolving, FAO and WHO may decide to facilitate discussion and an exchange of views among experts on the topic as a means to decide on appropriate future action.

2.4 Mechanisms for the provision of scientific advice

FAO and WHO provide scientific advice related to food safety and nutrition in response to specific requests from member countries, Codex Committees or occasionally specific units within FAO and WHO through different mechanisms. These mechanisms range from formally established expert bodies with a scheduled programme of work (e.g. JECFA), through a series of regularly convened expert meetings on a given topic (e.g. JEMRA), to *ad hoc* expert consultations that address a particular topic. Although these mechanisms differ in their legal status, terms of reference and composition, they follow the same basic working principles. Individual experts selected by FAO and WHO participate in these expert bodies and meetings, contributing collectively to the development of scientific advice.

¹⁴ FAO/WHO. 2004. *Hazard characterization for pathogens in food and water: Guidelines*. Microbiological Risk Assessment Series 3 (available at: <ftp://ftp.fao.org/docrep/fao/006/y4666E/y4666E00.pdf>).

¹⁵ FAO/WHO. 2002. *Principles and guidelines for incorporating microbiological risk assessment in the development of food safety standards, guidelines and related texts*. Report of a Joint FAO/WHO Consultation. Kiel, Germany, 18-22 March 2002 (available at: <ftp://ftp.fao.org/docrep/fao/006/y4302e/y4302e00.pdf>).

¹⁶ FAO/WHO. 2003. *Report of the FAO/WHO expert consultation on the safety assessment of foods derived from genetically modified animals, including fish*. Rome, 17-21 November 2003 (available at: <ftp://ftp.fao.org/docrep/fao/006/y5316E/y5316E00.pdf>).

2.4.1 Expert bodies

Expert bodies are generally formally established entities with a statutory status defined in the basic texts of FAO and WHO¹⁷. They are considered as the highest level of scientific bodies within the FAO and WHO legal frameworks. These bodies and committees comprise:

- The Joint FAO/WHO Expert Committee on Food Additives (JECFA) which has been meeting since 1956, initially to evaluate the safety of food additives. Its mandate has since been expanded to cover contaminants, natural toxins and residues of veterinary drugs in food. The membership of the meetings varies depending on the subject matter.
- The Joint FAO/WHO Meeting on Pesticide Residues (JMPR) which has been meeting regularly since 1963 to evaluate pesticide residues in food. Experts attend as independent internationally-recognized specialists who act in a personal capacity and not as representatives of national governments.
- The Joint FAO/WHO Expert Meetings on Pesticide Specifications (JMPS) was established in 2001 as a statutory body based on a Memorandum of Understanding between FAO and WHO. Its purpose is to develop specifications for pesticides that provide unique, robust and universally applicable quality standards. It follows a formal and transparent evaluation process.

Both JECFA and JMPR provide independent, international scientific advice on chemicals in food, including their toxicological evaluation. Both committees regularly update general risk assessment principles based on new scientific knowledge.

2.4.2 Other expert meetings and ad hoc consultations

Expert meetings and *ad hoc* consultations to generate scientific advice may be convened by FAO and WHO as required, subject to available resources. The legal status of these meetings and consultations may differ from one another. Some, like the Joint FAO/WHO Expert Meetings on Microbiological Risk Assessment (JEMRA) comprise a series of regular meetings on a given topic as described below. Other such meetings, including *ad hoc* consultations, are convened to respond to requests for advice on a specific scientific subject (such as acrylamide, residues of veterinary drugs without ADI and/or MRL, science and ethics, etc.). The general principles applied by these meetings and consultations are the same as those for the expert bodies.

¹⁷ FAO, 2000, Basic Texts, Art. VI of the Constitution, and Rule XXXV of General Rules of the Organization. WHO. 2005. Basic documents; 45th edition. Regulations for Expert Advisory Panels and Committees. Note that regulation 2.3 recognizes that "*The World Health Assembly and the Executive Board have authority under Article 18 (e) and 38 of the Constitution of the Organization to establish and dissolve experts committees*".

JEMRA¹⁸ has been meeting since 2000 to evaluate technical data and make recommendations in the area of microbiological hazards in foods. It was established to respond to the urgent need to develop risk assessment tools to evaluate the safety of microbial pathogens in food and water. The main outputs of JEMRA include risk assessments of specific pathogen-commodity combinations and guidelines and tools for conducting and utilizing microbiological risk assessment.

2.5 Composition of FAO/WHO expert bodies, meetings and consultations

The composition of expert bodies and meetings, and the designations used for the participating experts, may vary based on the legal status of the meeting. In general, expert bodies and meetings may comprise the following participants:

- **Members/Experts¹⁹** are invited on the basis of their particular expertise and in their personal capacity. Their responsibility is to consider the questions posed, review available data, prepare draft evaluations in advance for discussion, draw appropriate conclusions, draft report sections and adopt the final report. Members at expert bodies may be involved over a long period of time, thereby developing an invaluable institutional memory and facilitating consistency in the development of the scientific advice.
- **FAO and WHO advisers** are external resource experts who provide technical support to the JECFA and JMPR secretariats. Responsible for the preparation of draft discussion documents in advance of meetings and the provision of technical advice during meetings, these individuals participate in discussions but cannot influence the adoption of the final report. They are selected and nominated according to the same rules that apply to the selection, nomination and declaration of interest of members.
- **Chairpersons** for the plenary and working groups (if required) are elected by the participants. During the opening session, a representative of the host organization requests proposals and nominations from members/experts.
- **Joint FAO/WHO secretariats** comprise professional staff members from FAO and WHO, who are responsible for the preparation, organization and appropriate follow-up of expert meetings. Each organization designates one staff member as a fully responsible joint secretary; other staff members are members of the joint secretariat.
- **Rapporteurs** are selected from among the experts attending the meeting in question to document the discussions.
- **Other participants** such as representatives of international organizations (such as the OIE) involved in related activities, representatives of the CAC, its Secretariat

¹⁸ The FAO/WHO evaluation of Codex recommended that JEMRA be formalized through an appropriate decision of the relevant governing bodies. *Report of the evaluation of the Codex Alimentarius and other FAO and WHO food standards work*. FAO/WHO, Rome, 2001.

¹⁹ Participants at expert bodies are called “members”. Participants at expert consultations and meetings are referred to as “experts”.

or one of its committees, or representatives of data providers (e.g. when meetings evaluate proprietary data) or other groups may attend some of the sessions of expert body meetings. Such individuals are invited on the basis of their organizational affiliation rather than in their individual capacity.

- **Editors and communication specialists** may also be invited to participate by the secretariat as a means to improve the quality of reports (e.g. executive summaries or monographs) approved by expert bodies or other documentation (e.g. press releases, consumer information) related to their work.

The statutes of FAO provide a working definition of an expert body, whether statutory or ad hoc, that only foresees the attendance of experts who serve in their individual capacity. They do not foresee the attendance of observers based on their affiliation to any group or organization.

2.6 Resources for the provision of scientific advice

FAO and WHO activities related to the provision of scientific advice on food safety and nutrition are financed using the regular programme budget of both organizations as well as extra-budgetary resources. Financial contributions from FAO and WHO cover the costs of convening expert meetings and consultations including the participation of experts (travel and subsistence expenses only; experts are not remunerated for their work), the preparation of working papers and documents, and the publication of meeting/consultation reports and background papers as appropriate. Decisions on the amount of FAO and WHO regular programme funding to be allocated towards the provision of scientific advice are made within the context of other ongoing activities and priorities.

Usually provided by national governments, extra-budgetary resources from donors are normally linked to specific activities and often cover only part of the total costs (e.g. expenses associated with the organization of an *ad hoc* consultation or publication of reports). In-kind contributions (such as the secondment of experts from government, scientific or academic institutions to FAO and WHO to participate in meetings and/or support their preparation) represent another very important type of support. Seconded experts are not paid by FAO and WHO for their services. FAO and WHO ensure that all extra-budgetary resources received are utilized in a manner that does not compromise the objectivity, independence and transparency of the provision of scientific advice.

The allocation of all the resources (from FAO and WHO budgets and extra-budgetary sources) used for the provision of scientific advice is consolidated, documented, reviewed, and made publicly available every year, primarily through a report presented to the CAC. FAO and WHO seek to share the financial costs associated with the provision of scientific advice. As some flexibility is required, particularly in response to new or emerging issues, budgetary equality is sought on a mid- to long-term basis.

3. Legal framework and core principles for the provision of scientific advice

FAO and WHO activities on the provision of scientific advice are planned and implemented in accordance with a clear legal framework, as well as core principles and other operational procedures. The legal framework for activities related to the provision of scientific advice is laid down in the basic texts of both organizations (see Annex A). More specific guidance for statutory bodies and regularly-convened expert meetings is stipulated in terms of reference and other procedures prepared for each of these bodies and meetings (see Annex B). In addition, a number of other documents are prepared in advance of all scientific meetings (including those convened by expert bodies and *ad hoc* consultations) to address particular aspects related to their preparation and operation (see Annex C).

3.1 Legal framework

General rules and procedures for expert bodies, committees and meetings have been adopted by the governing bodies of FAO and WHO and are published in the respective basic texts of both organizations. In particular, Article 6 of the FAO Constitution stipulates that “the Director-General on the authority of the Conference or Council may establish committees and working parties to study and report on matters pertaining to the purpose of the Organization and consisting . . . of individuals appointed in their personal capacity because of their special competence in technical matters”. WHO’s Regulations for Expert Advisory Panels and Committees, also by recalling constitutional provisions, state that the Director-General shall establish the number of experts to be invited to a meeting of an expert committee, determine its date and duration and convene the committee. These basic texts provide the overall legal framework for the provision of scientific advice on matters relating to food safety and nutrition (see Annex A).

3.2 Core principles

All FAO and WHO activities related to the provision of scientific advice are carried out in adherence with the following core principles²⁰:

- **Soundness** is the need for scientific excellence, and applies to both the experts and the process. Soundness of experts includes consideration of adequacy of competence, recognized standing in their discipline and ensuring that those producing advice represent a suitable balance of expertise. Soundness of the process includes the ability of opinions and advice to withstand scrutiny by peers and the application of current scientific knowledge in reaching a conclusion.

²⁰ These principles were agreed upon at the Joint FAO/WHO workshop on the provision of scientific advice to Codex and Member countries, which took place at WHO Headquarters, in Geneva from 27-29 January 2004. The report of this meeting is available at: http://www.fao.org/ag/agn/agns/advice_codex_en.asp

- **Responsibility** encompasses the various aspects of accountability, and applies both to the need to safeguard the integrity of the process and to consider experts answerable for their views. This includes the responsibility of participants to justify their views by adequate citation of reputable sources, the application of a suitable level of caution in data interpretation, timeliness, compliance with agreed task description, efficiency in conducting the assessment, cost-effectiveness of the process and maintenance of confidentiality as mandated and updating scientific advice on the basis of new knowledge (i.e. review of conclusions). An additional aspect of responsibility is that sponsors should be asked to submit all appropriate relevant data, and not just those necessary to comply with the data requirements. In addition, the process is well defined to ensure that the opinions and advice of the experts withstand scrutiny by peers and the current scientific knowledge is applied in reaching a conclusion.
- **Objectivity** is considered to include neutrality and applies both to the experts and to the advice provided. While experts may be drawn from different sectors, including those where there may be potential conflicts of interest, whenever an opinion is provided it should be independent and unbiased. Both the opinions of experts and the advice provided should be based only on scientific evidence. In reaching a conclusion it is necessary to balance the opinions from participants with different perspectives and to seek a scientifically-based consensus. The views expressed should be weighted according to the degree of certainty underpinning them. Where scientific advice is the outcome of a risk assessment, there should be adequate separation from risk management.
- **Fairness** applies to the conduct of the scientific advice process, and requires respect of all participants for each other and for their scientific views. Participants should be given adequate and equal opportunities to express their views. Minority views should be properly considered. Participants themselves should contribute appropriately to the process. The selection of participants should be objective and inclusive to the extent possible. The process should be conducted in an ethical manner.
- **Transparency** involves the design and implementation of mechanisms that ensure that the process whereby advice is formulated and that the advice itself is clearly understandable to others. Transparency could involve the provision of access to pivotal scientific information that is comprehensive, understandable and timely, while respecting legitimate concerns to preserve confidentiality. It could also involve the provision of explicit documentation of all procedures, policies and practices. Transparency may also involve review of both the advice and the procedures involved in providing advice.
- **Inclusiveness** is considered to include group balance. Two aspects of inclusiveness were identified: minority scientific opinion and the balance of skills and expertise necessary for the assessment. Inclusiveness requires that due respect and consideration be given to minority scientific opinion. In the selection of participants, in addition to their expertise, due consideration should be given to geographical and socioeconomic balance, but not to the extent that it

compromises scientific integrity. Particular emphasis should be placed on improving the participation of developing countries. Where participation is limited by a skill or knowledge gap, appropriate capacity building activities should be undertaken.

By ensuring the integrity and independence of the experts involved and focusing on the needs and priorities identified by Codex, member countries and specific units within FAO and WHO, these principles provide a fundamental foundation for the role of FAO and WHO as a neutral, international forum for the provision of sound scientific advice.

4. Management of activities related to the provision of scientific advice

4.1 Management, coordination and supervision within FAO and WHO

Different units of FAO and WHO are engaged in activities related to the provision of scientific advice on food safety and nutrition. Within FAO, the following divisions²¹ are involved:

- Nutrition and Consumer Protection Division (AGN)
- Animal Production and Health Division (AGA)
- Plant Production and Protection Division (AGP)
- Fisheries Industry Division (FII)

WHO departments²² involved in the provision of scientific advice include the:

- Department of Food Safety, Zoonoses and Foodborne Diseases (FOS)
- Department of Nutrition for Health and Development (NHD)
- Department of Public Health and the Environment (PHE)

Focal points for activities related to the provision of scientific advice have been established within FAO and WHO to facilitate internal communication and coordination. Efforts are also made to ensure effective collaboration between both organizations in the management of activities focused on the provision of scientific advice. This collaboration helps to achieve optimal use of human and financial resources, facilitate priority setting and the identification of new areas of work, harmonize procedures and scientific approaches, strengthen interfaces between risk assessors and risk managers, and ensure a transparent and high-quality process.

Expert bodies are managed transparently as a means to ensure the technical independence and quality of the scientific advice generated. Secretariats stress the confidentiality of the documentation, deliberations and conclusion until reports are issued.

²¹ Further information is available on the FAO web site: AGN (<http://www.fao.org/ag/agn/>), AGA (<http://www.fao.org/ag/againfo/home/en/home.html>), AGP (<http://www.fao.org/ag/AGP/Default.htm>), FII (<http://www.fao.org/fi/struct/fii.asp>).

²² Further information is available on the WHO web site: FOS (http://www.who.int/topics/food_safety/en/), NHD (<http://www.who.int/nutrition/en/>), PHE (<http://www.who.int/phe/en/>).

4.1.1 FAO/WHO Scientific Advice Coordination

The coordination of scientific advice is handled by representatives from relevant units of FAO and WHO. These representatives (which include the joint secretariats) meet regularly during meetings of the CAC and as necessary during other FAO/WHO meetings to facilitate ongoing collaboration. Those responsible for the coordination of scientific advice:

- assure that all scientific advice is elaborated in accordance with the principles laid out in this framework document;
- facilitate the setting of priorities among multiple requests for scientific advice in accordance with FAO/WHO criteria and criteria recommended by the Codex Alimentarius Commission, taking into account the resources available;
- maintain an inventory of ongoing/proposed activities and to identify new areas of work;
- identify new funding sources;
- evaluate annually the activities implemented;
- regularly review the framework and guidelines for the provision of scientific advice;
- harmonize procedures and approaches; and
- present reports and make recommendations to senior management of both Organizations.

Secretariats of expert bodies organize their workload based on prioritized requests from Codex and member countries, plan and match resources to the extent possible, and work closely with relevant Codex Committees. They coordinate their work as outlined in the operational rules and procedures.

4.1.2 Coordination with Codex and other interested parties

Activities related to the provision of scientific advice are carried out in coordination with the CAC, its Executive Committee and subsidiary bodies, government institutions, non-governmental organizations (NGOs) and other concerned stakeholders (such as farmers groups, associations of food producers and consumers, trade associations, etc.) in order to make the best use of available resources and expertise, prevent duplication of work and avoid inconsistencies. Inputs and opinions to evaluate and improve activities related to the provision of scientific advice are periodically sought from external stakeholders including qualified scientists and risk managers from various backgrounds.

Expert bodies normally interact with the CAC through the appropriate FAO/WHO secretariats and/or FAO/WHO representatives. Members of the FAO/WHO Scientific Advice Coordination Group attend *ex officio* sessions of the CAC, the Codex Executive Committee and other relevant bodies. They also meet representatives of stakeholders and other institutions involved in the provision of relevant scientific advice on an *ad hoc* basis.

Joint secretariats of specific expert committees, meetings and consultations participate directly in appropriate Codex Committee sessions where they present the results of their work; e.g. the JECFA secretariat attends the Codex Committee on Food Additives and Contaminants (CCFAC²³). This facilitates the use of their outputs and provides an essential link between the scientific committees and the CAC. These secretariats also participate in meetings of professional and scientific organizations, government and academic institutions, and specialized international NGOs as necessary. New ways to improve interaction with Codex and other interested parties are currently being explored.

4.2 Planning and prioritizing work

Ongoing and pending requests for scientific advice are documented in an active list²⁴. This list is regularly reviewed and updated by the FAO/WHO Scientific Advice Coordination Group and presented to the CAC, its Executive Committee and/or other relevant bodies for consideration as appropriate.

Priorities are set following consultation with the CAC, its Executive Committee and other subsidiary bodies, member countries and other relevant international organizations in order to make the best use of available resources and expertise. An annual work programme is normally developed for all established expert bodies (e.g. meetings of JECFA and JMPR).

The following criteria²⁵ are used to prioritize requests from Codex for the provision of scientific advice:

- relevance in relation to the strategic objectives and priorities as defined in Codex Strategic Plan;
- clear definition of the scope and objective of the request as well as clear indication of the way in which the advice will be used in the work of Codex;
- significance and urgency to the development or advancement of Codex texts taking into account public health and/or food trade relevance of the issue and the needs of developing countries; and
- availability of scientific knowledge and data required to conduct the risk assessment or to elaborate the scientific advice.

Requests for scientific advice which do not fall under the responsibility of an existing expert body are evaluated on a case by case basis by FAO and WHO, considering resource requirements.

²³ The 29th Session of CAC (3 – 7 July 2006) agreed to split CCFAC into two Committee, i.e. the Codex Committee on Food Additives (CCFA) and the Codex Committee on Contaminants in Foods (CCCF).

²⁴ Available at: http://www.fao.org/ag/agn/agns/advice_framework_en.asp.

²⁵ These criteria were agreed by the 55th session of the Executive Committee of the CAC (ALINORM 05/28/03) and adopted by the 28th session of CAC.

5. Procedures for the management and operation of expert bodies and meetings

Detailed guidance on the way in which expert bodies and meetings are to be convened and managed is set out in various procedural documents tailored to the respective expert body or meeting. While these may vary to some extent, they all adhere to the core principles described above. Annex B provides further information on the procedures (comprising terms of reference, working procedures, selection of experts, declaration of interests, etc.) governing expert bodies and regularly-convened meetings (notably JECFA, JMPR, JEMRA and JMPS).

5.1 Procedures for expert bodies

Terms of reference exist for all expert bodies and regularly convened meetings defining their exact role and scope, including the work to be performed by the respective secretariats and invited experts (see Annex B).

Standard procedures that are prepared for all expert bodies comprise the following:

- procedures for the preparation of the agenda for the scientific meetings and respective calls for data;
- procedures for the identification and selection of experts;
- declaration of interests;
- procedures for the selection of chair(s), rapporteur(s);
- procedures for preparation and adoption of the final report;
- procedures for the preparation of executive summary and/or press release (if applicable);
- rules on confidentiality;
- guidelines for the preparation of discussion/working papers; and
- guidelines for conduct and participation in the meetings including rules to record minority opinions, change of policies of the committee and where there is a change in policy the basis for their decisions.

Other policies and guidelines have been developed by Codex for particular expert bodies. For example, guidelines on the interaction between risk assessors and risk managers may be prepared by the appropriate Codex Committee (the 28th session of the CAC adopted the risk analysis principles applied by CCFAC²⁶). Risk assessment policies for JECFA and JMPR are normally developed by the relevant Codex committee posing the questions to be answered by the expert body in close collaboration with the appropriate FAO/WHO secretariats.

²⁶ Codex Procedural Manual, 15th Edition.

Specific rules, procedures and operational documents for the various expert bodies are reviewed and amended as required by the representatives of FAO and WHO responsible for coordination of scientific advice in consultation with the appropriate expert body.

5.2 Procedures for other expert meetings and *ad hoc* consultations

Procedures for other expert meetings and *ad hoc* consultations are developed based on the procedures for expert bodies with the introduction of necessary modifications depending on the subject of the meeting in question.

5.3 Procedures for the selection of experts

FAO and WHO have established procedures for the selection of experts involved in the provision of scientific advice as a means to ensure the soundness, integrity and credibility of the advice produced. All experts selected – whether for expert bodies or *ad hoc* consultations – are required to be recognised in their area of specialization, highly respected by their scientific peers, and impartial and objective in their judgement. Applications are welcomed from all experts irrespective of their affiliation (e.g. government agency, national or regional institute, non-government organizations, industry groups, independent consultants). Efforts are made to promote inclusiveness (in terms of scientific opinion and geographic balance) and enable the involvement of experts from different schools of thought. All experts selected are appointed to function in their personal capacity and not as representatives of any government, industry or other group.

Revised procedures for the selection of experts serving in joint FAO/WHO expert bodies and consultations were adopted in 2000 and are currently in use. These procedures, outlined below, aim to enhance the principles of transparency, equal opportunity, excellence and independence, and to harmonize working procedures between different expert bodies and between FAO and WHO.

5.3.1 Selection of experts for expert bodies and their meetings

Roster of experts for expert bodies

Established expert bodies that meet regularly maintain their own roster of experts, which are valid for a specified number of years (e.g. the Joint FAO/WHO Roster of Experts for JECFA is valid for five years). These rosters include applications received in response to periodic open calls for experts. Those selected remain on the roster for the specified time period. At the end of this period, a new call is issued to update the roster.

Calls for experts clearly stipulate the requirements (e.g. expertise, experience, time commitments, etc.) candidates must meet, and describe the selection criteria and process.

They are disseminated widely via the FAO and WHO web sites²⁷, the Codex e-mail list and other available channels (e.g. scientific journals, scientific and professional associations, technical mailing lists, and FAO and WHO regional offices, etc.).

All applications for rosters are reviewed by a selection panel composed of representatives of FAO and WHO, as well as two external experts on the relevant subject. All applicants who fulfil the specified requirements, and agree to sign a standard “Declaration of Interests” (see section 5.4 below) and indicate institutional affiliation, are placed on the roster of the appropriate expert body, subject to final approval by the FAO and WHO Directors-General. Once approved, rosters are posted on the FAO and WHO web sites and appointees informed. Applicants not selected are informed in writing; the reasons for their not being selected may be released on written request.

Experts from these rosters are subsequently appointed to serve as members of expert bodies, and FAO experts or WHO temporary advisers for specific meetings. The curricula vitae and evaluation records of experts on the roster are kept on file so that experts can be assigned to particular activities based on their specific knowledge and expertise.

Experts for the WHO Food Safety Advisory Panel

In the case of WHO, an additional mechanism, known as the WHO Food Safety Advisory Panel exists to select committee members for established expert committees such as the JECFA. The WHO secretariat nominates distinguished scientists, including the most experienced experts from the roster, for appointment to the Food Safety Advisory Panel; the WHO Director-General makes the final nomination.

Selection of experts for specific meetings

Experts to serve in specific meetings are selected from the relevant roster (or advisory panel in the case of WHO) based on pre-established criteria, as well as the meeting agenda, particular expertise required, geographical and gender representation and coverage of different schools of thought on the topic to be addressed. Efforts are made to ensure that the experts selected by secretariats in FAO and WHO complement each other. The selection is made in accordance with FAO and WHO rules and procedures, and is subject to final approval by the FAO and WHO Directors-General. Following the initial selection, FAO and WHO notify the governments of the selected experts to obtain their consent (no objection). Invitations to experts are then issued.

²⁷ See the JECFA Call for Experts for 2007-2011 (available at: http://www.fao.org/ag/agn/agns/jecfa_experts_en.asp) and the call by WHO for toxicological experts to serve as members and temporary advisers for JECFA (available at: <http://www.who.int/ipcs/food/jecfa/experts/en/index.html>).

In the case of JMPR, experts from the rosters are selected to serve as members of the FAO Panel on Pesticide Residues in Food and the Environment, and the WHO Core Assessment Group.

Recognition and reward

The quantity and quality of work performed by expert bodies relies largely on voluntary contributions provided by individual participants and the willingness of their employers to allow them to devote significant time to such work. Joint secretariats acknowledge these contributions in communications to individual experts and their employer. In general, experts are recognized as authors in meeting reports and monographs. In some cases, support has been made available to publish background documents in peer-reviewed scientific journals.

5.3.2 Selection of experts for other expert meetings and *ad hoc* consultations

The procedures used for the selection of experts for other expert meetings and *ad hoc* consultations differ slightly from those described above for expert body meetings reflecting the fact that these expert meetings and *ad hoc* consultations address a broad range of issues and therefore a short-term roster or list of potential experts is developed for each meeting. In order to ensure the participation of experts with the appropriate knowledge and specializations, new rosters are normally created for regularly convened expert meetings and *ad hoc* consultations.

In general, experts for such meetings and *ad hoc* consultations are identified and selected by joint secretariats on the basis of specific calls for expertise in the required subject. Such calls describe the background, objective and agenda of the meeting or consultation, specify the selection criteria (e.g. expertise, time commitments) and process. They are normally issued well in advance of the meeting in question and disseminated widely (using the same channels described above). In cases where there are known to be few individuals with the required specialization, calls may be targeted to scientific associations or particular experts.

Applications received for the roster are reviewed against the selection criteria by a four-person selection panel. This panel comprises: i) one representative from the concerned technical unit in FAO; ii) one representative from the concerned technical unit in WHO; and iii) two independent experts designated by FAO and WHO. Based on the roster, the secretariat produces a short list of experts; the final list is cleared by higher management of FAO and WHO. As far as possible, the selected group should include geographical balance.

Experts who satisfy the requirements are requested to sign a “Declaration of Interests” (see below) and indicate their institutional affiliation. The performance of experts at previous meetings is assessed and recorded for possible re-selection.

5.4 Declaration of interests

To ensure the objectivity and independence of the scientific advice developed, all experts involved in expert bodies and meetings are required to declare any interests that could constitute a real, potential or apparent conflict of interest²⁸ with respect to his/her involvement. For this purpose, FAO and WHO have separate forms requesting experts to declare any interests –however overall requirements are similar. It is imperative that situations be avoided in which such interests may unduly affect, or may be perceived to affect, an expert's impartiality or the outcome of work in which he/she was involved. This "Declaration of Interests" addresses the various financial or other interests (including intellectual) of experts or his/her partner²⁹ on a personal basis as well as in relation to their employment that could unduly influence the expert's position with respect to the subject-matter being considered. This covers both relationships that may exist between: i) commercial entities³⁰ and the expert personally; and ii) commercial entities and the administrative unit with which the expert has an employment relationship.

An apparent conflict of interest exists when an interest would not necessarily influence a particular expert but could result in the expert's objectivity or independence being questioned by others.

Interests declared by experts are scrutinized by the joint secretariats, which decide whether or not they could constitute a conflict in relation to the items on the agenda. The FAO and WHO legal units are available to provide advice if needed. The secretariats inform the chairperson of the meeting about possible conflicts and in consultation with the Chair shall decide whether the expert should participate in the discussion and be involved in drawing the final conclusions and recommendations. Participants are informed about any possible conflict of interest at the beginning of meetings and signed "Declaration of Interests" forms are available for consultation if requested. When there is a conflict of interest, the person who disclosed such a conflict (i) may be asked not to take part in the portion of the discussion or work relevant to that interest (ii) may be asked not to take part in the meeting or work altogether, or (iii) if deemed by FAO/WHO to be appropriate under particular circumstances may be asked to take part in the meeting or work provided that the interest of the expert, is publicly disclosed. Possible conflicts of interest and the agreement on how to manage them are recorded in the report of the meeting.

²⁸ As stated in regulation 4.6 of the WHO Regulations for Expert Advisory Panels and Committees "(...) they shall disclose all circumstances that could give rise to a potential conflict of interest as a result of their membership of an expert committee, in accordance with the mechanisms established by the Director-General for that purpose". A potential conflict of interest exists with an interest which any reasonable person could be uncertain whether or not should be reported.

²⁹ 'Partner' includes a spouse or other person with whom s/he has a similar close personal relationship.

³⁰ WHO defines "Commercial entity" as referring to any company, association (e.g. trade association), organization or any other entity of any nature whatsoever with commercial interests.

FAO defines "Commercial entity" as including – aside from any commercial venture – an industry association, research institution or other organization whose funding is significantly derived from commercial concerns having an interest related to the subject of the meeting or work.

FAO and WHO each have “Declaration of Interests” forms. The WHO form stipulates that it may be made available to persons outside of WHO only if the objectivity of the meeting has been questioned. FAO allows for declared interests to be made public. These forms are reviewed periodically.

5.5 Data used for the provision of scientific advice

FAO and WHO seek to make use of the best available data for the provision of scientific advice. Data from a wide variety of sources is used. The most common sources comprise government agencies (including risk management bodies), national and regional research institutes, manufacturers of food additives, pesticides and veterinary drugs, food producing industries, and the chemical and pharmaceutical industry. Publicly available peer-reviewed literature may be used, as well as unpublished or proprietary data submitted to the relevant FAO/WHO secretariat for this purpose. Where possible, data requirements (e.g. type of data, way in which data is generated) are harmonized with requirements used by other international and regional bodies.

5.5.1 Procedures for data collection

Data is sought through a “Call for Data”, which stipulates the particular data requirements – including the format and rules for submission (e.g. media, deadline, person to receive data) – and provides background on the meeting in question. This Call is disseminated by joint secretariats as early and as broadly as possible via the Internet, Codex e-mail lists, industry and professional associations, etc.

Efforts are made to ensure that data representing the current state of the scientific evidence and different geographic regions is available. For some data (e.g. dietary intake), consideration is given to ensure that the data represents all populations, subgroups and geographical areas. However, limited communication, infrastructure, training and financial support are recognized as significant constraints in data acquisition, particularly in developing countries.

The joint secretariats interact with data providers as necessary during the collection process to respond to specific questions and encourage timely submission. Data may be submitted in electronic format or hard copy as required. Analytical data on chemical contaminants in food should be submitted in the GEMS/Food format³¹. All data received is kept on file by both organizations for five years. Issues related to trade-sensitive data, intellectual property rights and any other concerns are discussed and addressed before the meeting.

³¹ Further information of GEMS/Food is available at <http://www.who.int/foodsafety/chem/gems/en/>

5.5.2 Procedures for data selection and use

Data collected should be adequate for the provision of scientific advice. While the procedures for data selection vary across expert bodies and meetings, the basic principles used are the same. In general, these are indicated in Calls for Data, which are issued for meetings.

Expert drafting groups review the data collected and determine its usefulness for the purpose of the scientific advice to be provided. Where additional data is required, the appropriate joint secretariat requests those who submitted the data to make this available. In some cases, as work progresses, the need to issue a revised or additional call for data may become apparent. All data received is acknowledged to the extent possible in the final documentation of meetings, with appropriate references.

FAO and WHO seek to ensure that the use of data is consistent with intellectual property rights and confidentiality requirements. Attention is given to ensure that data involving human subjects and animals were gathered in accordance with proper ethical considerations. Members of expert bodies and meeting participants may be required to sign a form on confidentiality undertakings.

Members of expert bodies are required to raise any questions about the data to be used before the meeting. Clarifications from the data provider are shared with experts by the joint secretariat and filed with the other data submitted (such documents are available to all participants during meetings). In cases where substantial questions are raised, secretariats and expert bodies may decide to convene a meeting for clarification with the data provider. Such meetings are organized outside of the normal sessions of the expert body (i.e. the expert body is temporarily adjourned or not in operation) and are normally attended by all the expert body members. However, where this is not feasible, the secretariat reports the findings to the plenary. More specific guidance on interaction with data providers has been developed for specific expert bodies (see Annex B).

5.5.3 Quality assurance

Quality data is the basis for the provision of scientific advice. FAO and WHO seek to ensure that the criteria used to ensure the quality of data used are clear and harmonized with existing international, national and professional guidelines on quality assurance. Efforts are made to ensure the reliability of data sources and procedural guidelines encourage the submission of current and high-quality data that is properly documented. In cases where the quality of data is less than optimal, but no other data is available, the available data may be used taking into account its limitations and the uncertainty associated with it. Where this is the case, the limitations and/or assumptions made as a basis for the scientific advice, are clearly described in the final report.

5.6 Language

Scientific and technical meetings require participants to interact directly and use the same terminology. Use of translators would limit the speed of interaction and render deliberations less effective. The working language for expert bodies and meetings is English. FAO and WHO are aware that the restriction to one language could limit the attendance of otherwise qualified experts since the capability to communicate effectively in writing and verbally is an important criterion when selecting participants. However, in cases where this language restriction would decrease the quality of advice by excluding valuable scientific knowledge (data, expertise), both organizations may consider providing a means to allow for this input on a case by case basis.

5.7 Documentation for meetings

In addition to the guidelines that focus on the procedures and processes for the operation of expert bodies and meetings, a number of other documents are prepared in advance of expert body meetings and *ad hoc* consultations. These documents set out the objectives of the meeting, the questions posed, and the working procedures to be followed. They are essential to enable the invited experts to fully understand the purpose of the meeting and how the work will be organized.

The exact number and type of these meeting documents will vary for expert body meetings and *ad hoc* consultations given their different requirements. In general, however, they may include a number of background scientific reports, as well as documents that address: i) preparatory aspects of the meeting (e.g. call for data or experts); ii) the way in which the meeting is to be run and managed (e.g. the agenda, work plan, division of responsibilities, rules for discussion and decision making); or iii) the nature of the outputs of the meeting (e.g. the draft structure of the meeting report). A more detailed list of meeting documents is available in Annex C.

6. Communication of scientific advice

Scientific advice on food safety and nutrition is documented in different forms (e.g. monographs, technical reports) and documents are published using different media according to the target audience. In the case of JECFA, which has been in existence for fifty years, three publications series are produced, a report series and two technical series, one on toxicology and one on specifications. Like JECFA, these are in existence for 50 years. As another example, for JEMRA, a new publication series, the Microbiological Risk Assessment Series, was established in 2002 to document the outputs of these expert meetings.

FAO and WHO seek to ensure that the language and style of documents produced by expert meetings effectively communicate the scientific advice developed. Joint secretariats analyse specific communication requirements before expert body meetings and *ad hoc*

consultations and agree on follow-up actions, which are presented to the meeting for endorsement.

6.1 Meeting reports

The findings and conclusions of meetings to provide scientific advice are documented in a meeting report. Agreement is reached on the contents of this report before the close of the meeting. In general, such reports contain the following information:

- a description of the question to be answered;
- a summary of the most relevant available data and sources;
- a summary of data used to answer the question;
- the reasons for not using certain data;
- an explanation of the reliability of the data and assumptions made (and their impact on uncertainty);
- the strength of the hypothesis on which the advice is based (if applicable);
- a summary of the discussions;
- the main conclusions and findings;
- reference to any possible conflict of interest;
- a record of minority opinions if any; and
- a list of experts/participants.

Meeting reports go through a thorough editorial process, which may take considerable time. To enable the findings to be disseminated more quickly, summary reports are published on the FAO and WHO web sites within two to four weeks after the meeting. In some cases, interpretative and executive summaries may be added to reports or published separately to enhance the usefulness of the advice for target audiences. Where such additional documentation is considered necessary, the expert body approves the contents before the close of the session.

With the exception of editorial revisions (to reflect FAO and WHO editorial guidelines), joint secretariats do not modify or amend the interpretation of data, recommendations or advice produced by expert bodies, meetings or *ad hoc* consultations. Attention is given to ensure that the advice produced is not altered by the editorial process. Where changes of a substantive nature are considered necessary, they are referred to subsequent meetings for consideration.

Reports of expert bodies are published subject to final approval from the FAO and WHO Directors-General.

Working papers and other documents prepared by expert bodies to support discussions on specific subjects, as part of the process of producing scientific advice, are published as

quickly as possible after meetings. In particular, when scientific advice is needed for the Codex standard setting process (e.g. specifications of food additives, etc), the relevant secretariat seeks to publish it promptly.

6.2 Press releases

Occasionally, depending on the nature of the advice sought (e.g. in connection with a major food safety incident), a press release is issued presenting a summary of the conclusions and recommendations of the expert group.

7. Future outlook: enhancing expert capacity for the provision of scientific advice

FAO and WHO are exploring ways to improve expert's understanding of the international framework under which they work, and the core principles and working procedures of expert bodies, as a means to maximize their contribution. This covers preparation of working documents, drafting of statements for expert meetings and more active participation in meetings (e.g. drafting responsibilities, serving as chairperson or vice-chairperson, etc.).

In this context, a joint FAO/WHO meeting was convened in 2005 to identify specific ways and means to enhance the availability of data and expertise from developing countries in FAO/WHO scientific advice activities³². Participants at the meeting developed recommendations focusing on three main areas: i) greater inclusion of data from developing countries; ii) enhancement of the potential for experts from developing countries to be selected as members of expert meetings and have an effective participation in these meetings; and iii) means to enhance the enabling environment at national, regional and international levels. Agreement was reached on the need for multiple interventions, at both the national and international level, to minimize the constraints related to the use of data and experts from developing countries in activities to provide scientific advice, and the identification of extra-budgetary funding for this purpose. Such interventions could comprise the development of training and advocacy materials, development of information sharing networks, development of mentoring and twinning activities, and other targeted capacity building activities.

³² Enhancing developing country participation in FAO/WHO scientific advice activities. Report of a Joint FAO/WHO Meeting Belgrade, Serbia and Montenegro, 12-15 December 2005 (available at http://www.fao.org/ag/agn/agns/advice_countries_en.asp).

Glossary

<i>Ad hoc</i> consultation / meeting	An FAO/WHO meeting convened to address a specific request for scientific advice on an evolving issue in the field of food safety and nutrition. These meetings follow the same principles and same formal procedures as expert body meetings.
Food Safety	Assurance that food will not cause harm to the consumer when it is prepared and/or eaten according to its intended use.
Hazard	A biological, chemical or physical agent in, or condition of, food with the potential to cause an adverse health effect.
Statutory Expert Body	Scientific Expert Body, with legal status in FAO/WHO, assigned to a general area that meets regularly (e.g. JECFA, JMPR).
Normative work	“Normative work involves the design and testing of innovative methodologies; carrying out research; building databases; and establishing norms and standards. In addition, normative work includes getting the technical information out to end users...” (see http://www.fao.org/ruralyouth/program.html)
Joint Secretariat	FAO and WHO staff (and temporary resource persons where appropriate), responsible for the planning and implementation of a given ad hoc meeting and expert body meetings
Risk Analysis	A process consisting of three components: risk assessment, risk management and risk communication.
Risk Assessment	A scientifically based process consisting of the following steps: (i) hazard identification, (ii) hazard characterization, (iii) exposure assessment and (iv) risk characterization
Risk Assessment Policy	Documented guidelines on the choice of options and associated judgements for their application at appropriate decision points in the risk assessment such that the scientific integrity of the process is maintained.
Risk Management	The process, distinct from risk assessment, of weighing policy alternatives, in consultation with all interested parties, considering risk assessment and other factors relevant for the health protection of consumers and for the promotion of fair trade practices, and, if needed, selecting appropriate prevention and control options.

Annex A: General guidance and legal framework

The following documents set out the legal framework for the provision of scientific advice on food safety and nutrition by FAO and WHO and provide general guidance that is relevant for the provision of scientific advice.

General guidance

Working Principles for Risk Analysis for Application in the Framework of the Codex Alimentarius. Codex Alimentarius Commission, Procedural Manual, p. 101-107, 15th Edition (http://www.codexalimentarius.net/web/procedural_manual.jsp)

Essential core principles for the provision of scientific advice. In Food Safety Consultations: Provision of Scientific Advice to Codex and Member Countries. Report of Joint FAO/WHO Workshop. WHO Headquarters, Geneva, Switzerland. 27-29 January 2004. Page v. (<ftp://ftp.fao.org/docrep/fao/007/y5388e/y5388e00.pdf>)

Codex Alimentarius Commission Procedural Manual, Fifteenth Edition (http://www.codexalimentarius.net/web/procedural_manual.jsp)

Website of FAO Nutrition and Consumer Protection Division (AGN)

- Web page on Provision of Scientific Advice (http://www.fao.org/ag/agn/agns/advice_en.asp)
- Web page on Nutritional Requirements (http://www.fao.org/ag/agn/nutrition/requirements_en.stm)

Website of WHO Department of Food Safety, Zoonoses and Foodborne Diseases (<http://www.who.int/foodsafety/en/>)

For Pesticide Specifications: Manual on Development and Use of FAO and WHO Specifications for Pesticides. First Edition (http://www.fao.org/documents/show_cdr.asp?url_file=/docrep/007/y4353e/y4353e00.htm)

Legal framework

FAO Constitution (http://www.fao.org/documents/show_cdr.asp?url_file=/docrep/x1800e/x1800e01.htm)

Article VI Commissions, Committees, Conferences, Working Parties and Consultations (<http://www.fao.org/docrep/x1800e/x1800e01.htm#6>)

FAO Basic Texts (<http://www.fao.org/docrep/x1800e/x1800e00.HTM>)

Principles and procedures which should govern conventions and agreements concluded under articles XIV and XV of the constitution, and commissions and committees established under article vi of the constitution (http://www.fao.org/documents/show_cdr.asp?url_file=///docrep/007/j2954e/j2954e18.htm)

WHO Constitution (<http://www.who.int/governance/en/>)

WHO Basic Documents

(http://policy.who.int/cgi-bin/om_isapi.dll?hitsperheading=on&infobase=basicdoc&record={9D5}&softpage=Document42)

Editorial guidelines

FAO House Style

(http://www.fao.org/documents/show_cdr.asp?url_file=/docrep/004/AC339e/AC339e00.htm%1D)

WHO Style Guide

(http://whqlibdoc.who.int/hq/2004/WHO_IMD_PUB_04.1.pdf)

Annex B: Guidelines applicable to established expert bodies and regularly convened meetings

This annex presents guiding documents for the following established expert bodies and regularly scheduled expert meetings:

- B1. Joint FAO/WHO Expert Committee on Food Additives (JECFA)
- B2. Joint FAO/WHO Expert Meetings on Pesticide Residues (JMPR)
- B3. Joint FAO/WHO Expert Meeting on Microbiological Risk Assessment (JEMRA)
- B4. Joint FAO/WHO Expert Meetings on Pesticide Specifications (JMPS)

Annex B.1 Joint FAO/WHO Expert Committee on Food Additives (JECFA)

What is JECFA?

The Joint FAO/WHO Expert Committee on Food Additives (JECFA) is an international expert scientific committee that is administered jointly by the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO). It has been meeting since 1956, initially to evaluate the safety of food additives. Its work now also includes the evaluation of contaminants, naturally occurring toxicants and residues of veterinary drugs in food.

To date, JECFA has evaluated more than 1,500 food additives, approximately 40 contaminants and naturally occurring toxicants, and residues of approximately 90 veterinary drugs. The Committee has also developed principles for the safety assessment of chemicals in food that are consistent with current thinking on risk assessment and take account of recent developments in toxicology and other relevant sciences.

Guidelines, terms of reference and procedures for the work of the experts and the committee

Guidelines and Terms of Reference available from the FAO and WHO Joint Secretariats as follows:

Residues of veterinary drugs in foods

- FAO procedural guidelines for the Joint FAO/WHO Expert Committee on Food Additives, Rome, September 2002
(ftp://ftp.fao.org/es/esn/jecfa/2002-09-24_Vet_Drugs_Proc_Guidelinesb.pdf)
- WHO procedural guidelines for the Joint FAO/WHO Expert Committee on Food Additives, Geneva, January 2001
(http://www.who.int/ipcs/food/jecfa/procedural_guidelines%20_drugs.pdf)
- FAO Guidelines for the preparation of JECFA monographs and summaries for veterinary residues in food, Rome, September 2002
(ftp://ftp.fao.org/es/esn/jecfa/2002-09-27_Vet_Drugs_Mono_Guidelines.pdf)
- JECFA/JMPR Informal Harmonization Meeting, February, 1999
(<http://www.fao.org/ag/agp/agpp/pesticid/jmpr/Download/JEC-JMPR.doc>)
- JECFA Procedures for Recommending Maximum Residue Limits - Residues of Veterinary Drugs in Food (1987 1999), Rome, 2000
(ftp://ftp.fao.org/es/esn/jecfa/2000-06-30_JECFA_Procedures_MRLVD.pdf)
- Guidelines for the preparation of toxicological working papers for the JECFA, Geneva, August, 1996
(http://www.who.int/ipcs/food/jecfa/en/guidelines_vet_drugs.pdf)

Food additives and contaminants

- FAO procedural guidelines for the Joint FAO/WHO Expert Committee on Food Additives, Rome, February 2003
(ftp://ftp.fao.org/es/esn/jecfa/2003-02-24_Food_Add_Cont_Guidelines.pdf)

- WHO procedural guidelines for the Joint FAO/WHO Expert Committee on Food Additives, Geneva, January 2001
(http://www.who.int/ipcs/food/jecfa/en/procedural_guidelines_additives.pdf)
- FAO guidelines on the structure and content of the document called “Chemical and Technical Assessment (CTA)”, Rome, February 2003
(ftp://ftp.fao.org/es/esn/jecfa/2003-02-24_CTA.pdf)
- Contaminants: Guidelines for the preparation of working papers
(<http://www.who.int/ipcs/food/jecfa/guidelines/en/>)
- Guidelines for the preparation of toxicological working papers on food additives, Geneva, December 2000
(http://www.who.int/ipcs/food/jecfa/en/tox_guidelines.pdf)
- Limit test for heavy metals in food additive specifications - Explanatory note, September 2002
(ftp://ftp.fao.org/es/esn/jecfa/2002-09-10_Explanatory_note_Heavy_Metals.pdf)
- FAO/WHO Guidelines for the preparation of working papers on intake of food additives, Geneva, January 2001
(http://www.who.int/ipcs/food/jecfa/en/intake_guidelines.pdf)
- Guidelines for the preparation of working papers (monographs) on flavouring agents, November 2002
(http://www.who.int/ipcs/food/jecfa/en/flavouring_agents.pdf)
- Guidelines for the preparation of working papers on contaminants, Geneva/Rome, January, 2001
(http://www.who.int/ipcs/food/jecfa/en/contaminant_guidelines.pdf)

JECFA outputs

Reports from JECFA meetings are published in the WHO Technical Report Series and toxicological monographs on food additives, flavouring agents and veterinary drugs are published in the WHO Food Additive Series.

(<http://www.who.int/ipcs/publications/jecfa/en/index.html>)

Monographs on specifications for the identity and purity of food additives and flavouring agents are published in the FAO JECFA Monograph series (see below), which replaces the previous FAO Food and Nutrition Paper No. 52:

- The Combined Compendium of Food Additive Specifications has been published as the first in the FAO JECFA Monograph series and is available online in an updated format on the FAO JECFA website. The query pages and background information are available in five languages (English, Spanish, French, Arabic and Chinese).
(<http://www.fao.org/ag/agn/agns/jecfa-additives/search.html?lang=en>).
- Monographs on residues of veterinary drugs and Maximum Residue Limits are published in the FAO JECFA Monograph series (previously FAO Food and Nutrition Paper 41) which is available on the JECFA website. The query pages and background information are available in five languages (English, Spanish, French, Arabic and Chinese).
(http://www.fao.org/ag/agn/agns/jecfa/jecfa_vetdrug_en.jsp).

Selection of experts

General information on FAO/WHO calls for experts
(ftp://ftp.fao.org/ag/agn/jecfa/general_info.pdf)

Call for experts (2007 – 2011)

Documents related to the FAO/WHO call and selection of experts for 2007 – 2011
(http://www.fao.org/ag/agn/agns/jecfa_experts_en.asp)

WHO Call for experts and rosters of experts
(<http://www.who.int/ipcs/food/jecfa/experts/en/index.html>)

Declaration of interests

Declaration of interests form used by FAO Joint Secretariat
(http://www.fao.org/documents/show_cdr.asp?url_file=//docrep/007/y4353e/y4353e01.htm)

Declaration of interests form used by WHO Joint Secretariat (not available online)

Rosters

Roster of WHO experts in biological sciences
(<http://www.who.int/ipcs/food/jecfa/en/roster.pdf>)

Roster of FAO experts on food additives and contaminants and natural toxicants (2002-2006)
(ftp://ftp.fao.org/es/esn/jecfa/roster_fa_cont2002.pdf)

Roster of FAO experts on residues of veterinary drugs in animals and foods (updated 2003)
(ftp://ftp.fao.org/es/esn/jecfa/roster_vet_drugs2002_upd_2003.pdf)

Joint roster of FAO/WHO experts on exposure assessment of food chemicals
(ftp://ftp.fao.org/es/esn/jecfa/roster_ex_asses2002.pdf)

Scientific guidelines

Principles for the Safety Assessment of Food Additives and Contaminants in Food (EHC 70. 1987) plus further amendments by subsequent meetings of JECFA (revision is being elaborated by the Joint Project to update)
(<http://www.inchem.org/documents/ehc/ehc/ehc70.htm>)

Food additives

- FAO guidelines on the structure and content of the document called "Chemical and Technical Assessment (CTA)", Rome, February 2003
(ftp://ftp.fao.org/es/esn/jecfa/2003-02-24_CTA.pdf)
- Guidelines for the preparation of toxicological working papers on food additives, Geneva, December 2000
(http://www.who.int/ipcs/food/jecfa/en/tox_guidelines.pdf)

- FAO/WHO Guidelines for the preparation of working papers on intake of food additives, Geneva, January 2001
(http://www.who.int/ipcs/food/jecfa/en/intake_guidelines.pdf)
- Guidelines for the preparation of working papers (monographs) on flavouring agents, November 2002
(http://www.who.int/ipcs/food/jecfa/en/flavouring_agents.pdf)

Contaminants

- Guidelines for the preparation of working papers on contaminants, Geneva/Rome, January, 2001
(http://www.who.int/ipcs/food/jecfa/en/contaminant_guidelines.pdf)

Residues of veterinary drugs in food

- Procedures for Recommending Maximum Residue Limits - Residues of Veterinary Drugs in Food (1987 1999), Rome, 2000
(ftp://ftp.fao.org/es/esn/jecfa/2000-06-30_JECFA_Procedures_MRLVD.pdf)
- Guidelines for the preparation of toxicological working papers for the JECFA, Geneva, August, 1996
(http://www.who.int/ipcs/food/jecfa/en/guidelines_vet_drugs.pdf)

Annex B.2 Joint FAO/WHO Expert Meetings on Pesticide Residues (JMPR)

What is JMPR?

JMPR is the Joint FAO/WHO Meetings on Pesticide Residues which provide independent scientific expert advice to the Codex Alimentarius Commission and its specialist Committee on Pesticide Residues as well as to FAO, WHO and member countries. It has been meeting since 1963

Within FAO, pesticide management is an activity carried out within the overall framework of the Plant Protection Service. It is designed to work together with member countries as a partner to introduce sustainable and environmentally sound agricultural practices that reduce health and environmental risks associated with the use of pesticides. At WHO, the International Programme on Chemical Safety (IPCS), established in 1980, is the secretariat for JMPR. IPCS is a joint programme of three cooperating organizations (ILO, UNEP and WHO) implementing activities related to chemical safety. The two main roles of the IPCS are to establish the scientific basis for the use of chemicals and to strengthen national capabilities and capacities for chemical safety.

Terms of reference

The history of JMPR and the development of the Terms of Reference is described in detail in the FAO Manual – Submission and evaluation of pesticide residues data for the estimation of maximum residue levels in food and feed (Chapter 1, p.1 – 3)
(<http://www.fao.org/WAICENT/FAOINFO/AGRICULT/AGP/AGPP/Pesticid/JMPR/Download/faom2002.doc>)

General information on JMPR at FAO
(<http://www.fao.org/ag/AGP/AGPP/Pesticid/Default.htm>)

General information on JMPR at WHO
(<http://www.who.int/ipcs/food/jmpr/about/en/index.html>)

Call for experts and selection of experts

FAO Call for submission of applications to establish a roster of experts as candidates for membership of the FAO Panel of the JMPR
(<http://www.fao.org/WAICENT/FAOINFO/AGRICULT/AGP/AGPP/Pesticid/roster1.DOC>)

WHO Call for experts
(http://www.who.int/ipcs/food/jmpr/expert_calls/en/index.html)

FAO Roster of experts on pesticide residues
(http://www.fao.org/ag/agp/agpp/pesticid/JMPR/JMPR_Roster_2005.pdf)

WHO Roster of experts
(http://www.who.int/ipcs/food/jmpr/expert_calls/en/index)

Declaration of interests

Declaration of Interests (form used by FAO Joint Secretariat)
(http://www.fao.org/documents/show_cdr.asp?url_file=//docrep/007/y4353e/y4353e01.htm)

Declaration of Interests (form used by WHO Joint Secretariat)
(not available online)

Procedural guidelines

WHO Procedural guidelines for the Joint FAO/WHO Meeting on Pesticide Residues, Geneva, January 2001

(http://www.who.int/ipcs/food/jmpr/en/jmpr_procedural_guidelines.pdf)

FAO – Submission and evaluation of pesticide residues data for the estimation of maximum residue levels in food and feed (specifically Chapter 1, 2, 3 and some of the Appendices)

(<http://www.fao.org/WAICENT/FAOINFO/AGRICULT/AGP/AGPP/Pesticid/JMPR/Download/faom2002.doc>)

Scientific guidelines

FAO - Submission and evaluation of pesticide residues data for the estimation of maximum residue levels in food and feed (specifically Chapter 4, 5, 6, 7)

(<http://www.fao.org/WAICENT/FAOINFO/AGRICULT/AGP/AGPP/Pesticid/JMPR/Download/faom2002.doc>)

Guidelines for the preparation of toxicological working papers
(http://www.who.int/ipcs/food/jmpr/en/prst_wp_gls.pdf)

Guidance on setting acute reference dose (ARfD) for pesticides
(<http://www.who.int/ipcs/food/jmpr/arfd/en/index.html>)

Additional references

A summary report to follow-up the development of the concept of minimum data requirements for establishing maximum residue limits (MRLs) including import tolerances for pesticides, FAO, Rome, 2004

(http://www.fao.org/ag/AGP/AGPP/Pesticid/JMPR/DOWNLOAD/survey_min_data_req_mrls.pdf)

Report of the OECD/FAO Zoning Project

(http://www.fao.org/ag/AGP/AGPP/Pesticid/JMPR/PM_JMPR.htm)

Review of the working procedures of JMPR

(http://www.fao.org/ag/AGP/AGPP/Pesticid/JMPR/DOWNLOAD/crit_review.pdf)

Guidance for interaction with data providers

FAO – Submission and evaluation of pesticide residues data for the estimation of maximum residue levels in food and feed (Appendix X – Communication with the compound sponsor, p. 160)

(<http://www.fao.org/WAICENT/FAOINFO/AGRICULT/AGP/AGPP/Pesticid/JMPR/Download/faom2002.doc>)

Interaction with Codex

FAO - Submission and evaluation of pesticide residues data for the estimation of maximum residue levels in food and feed (Chapter 2 – Selection of compounds for evaluation, p.7)
(<http://www.fao.org/WAICENT/FAOINFO/AGRICULT/AGP/AGPP/Pesticid/JMPR/Download/faom2002.doc>)

JMPR outputs

Publications on WHO website
(<http://www.who.int/ipcs/publications/jmpr/en/index.html>)

Summary conclusions of recent JMPR meetings
(<http://www.who.int/ipcs/food/jmpr/summaries/en/index.html>)

JMPR reports and evaluations on FAO website
(<http://www.fao.org/ag/AGP/AGPP/Pesticid/Default.htm>)

Annex B.3 Joint FAO/WHO Expert Meeting on Microbiological Risk Assessment (JEMRA)

What is JEMRA?

JEMRA is the Joint FAO/WHO Expert Meetings on Microbiological Risk Assessment. JEMRA. In response to requests from the CAC, and FAO and WHO member countries and the increasing need for risk based scientific advice, JEMRA aims to optimise the utility of MRA as a useful tool to inform actions and decisions aimed at improving food safety and to make it equally available to both developing and developed countries.

Terms of reference

The terms of reference of JEMRA are to:

- i. provide expert advice on risk assessment of microbiological hazards in foods to FAO and WHO Member countries and the Codex Alimentarius Commission; and
- ii. evaluate the likely impact of different risk management options in the reduction or control of specific microbiological risk in food.

General information

Background to JEMRA

(http://www.fao.org/ag/agn/agns/jemra_background_en.asp)

Overview of JEMRA (introduction activities, objectives)

(http://www.fao.org/ag/agn/agns/jemra_jemra_en.asp)

General information related to microbiological risks

(<http://www.who.int/foodsafety/micro/general/en/index.html>)

Call for experts and selection of experts

Current process for the selection of experts: Call for Experts

(http://www.fao.org/ag/agn/agns/jemra_procedures_en.asp)

Procedural guidelines (not available online)

Call for data (general procedure)

Joint FAO/WHO Secretariat for JEMRA: Duties

Roles and responsibilities of the experts, drafting groups, resource personnel and secretariat

Scientific guidelines

Principles and guidelines for the conduct of microbiological risk assessment. CAC/GL-30 (1999)

(ftp://ftp.fao.org/es/esn/jemra/CAC_GL30.pdf)

Hazard Characterization Guidelines

(http://www.fao.org/ag/agn/agns/jemra_guidelines_hazard_en.asp)

Exposure Assessment Guidelines

(http://www.fao.org/ag/agn/agns/jemra_guidelines_exposure_en.asp)

Risk Characterization Guidelines

(http://www.fao.org/ag/agn/agns/jemra_guidelines_risk_en.asp)

Interaction with Codex

The interaction between assessors and managers of microbiological hazards in food (Kiel, 2000)

(<ftp://ftp.fao.org/docrep/nonfao/ae586e/ae586e00.pdf>)

Principles and guidelines for incorporating microbiological risk assessment in the development of food safety standards, guidelines and related texts. Kiel, March 2002

(http://www.fao.org/documents/show_cdr.asp?url_file=/docrep/006/y4302e/y4302e00.htm)

JEMRA outputs

Publications at WHO

(<http://www.who.int/foodsafety/publications/micro/en/index.html>)

Publications at FAO

(http://www.fao.org/ag/agn/agns/jemra_riskassessment_en.asp)

List of past JEMRA meetings

(<http://www.who.int/foodsafety/micro/jemra/meetings/en/index.html>)

Annex B.4 Joint FAO/WHO Expert Meetings on Pesticide Specifications (JMPS)

What is JMPS?

The JMPS is composed of scientists collectively possessing expert knowledge for the development of pesticide quality criteria, called “pesticide specifications”. Their opinions and recommendations to FAO/WHO are provided in their individual expert capacities, not as representatives of their countries or organizations. The JMPS is a statutory body of FAO whose panel members are appointed by the Director-General. Experts appointed by WHO are drawn from the WHO Panel of Experts on Vector Biology and Control, together with a representative of the WHO/IPCS. The primary function of the JMPS is to produce recommendations to FAO and/or WHO on the adoption, extension, modification or withdrawal of specifications.

Terms of reference

Manual on development and use of FAO and WHO Specifications for Pesticides, March 2006. Revisions of the First Edition, see Background pp x – xiii and Introduction pp 1 – 7. (http://whqlibdoc.who.int/publications/2006/9251048576_eng_update_2006.pdf)

Meetings and functions of the JMPS
(<http://www.fao.org/docrep/007/y4353e/y4353e06.htm#bm06.3>)

Call for experts and selection of experts

Call for submission of applications to establish a roster of experts as candidates for membership of the FAO Panel of the JMPS
(<http://www.fao.org/WAICENT/FAOINFO/AGRICULT/AGP/AGPP/Pesticid/Specs/rostercall.htm>)

Declaration of interests

Procedures for handling confidential proprietary pesticide data and potential conflicts of interest by the Joint FAO/WHO Meetings on Pesticide Specifications (JMPS)
(<http://www.fao.org/docrep/007/y4353e/y4353e03.htm#bm03>)

Appendix H. Declarations of interests and confidentiality of the FAO of the Manual on Development and Use of FAO and WHO Specifications for Pesticides
(<http://www.fao.org/docrep/007/y4353e/y4353e01.htm#bm21>)

Procedural guidelines

FAO - Manual on Development and Use of FAO and WHO Specifications for Pesticides, Rome, 2004
(http://www.fao.org/documents/show_cdr.asp?url_file=/docrep/007/y4353e/y4353e00.htm)

Guidelines for submission of data - FAO - Manual on Development and Use of FAO and WHO Specifications for Pesticides, Rome, 2004³³
(<http://www.fao.org/docrep/007/y4353e/y4353e06.htm#bm06.2>)

Scientific guidelines

Manual on Development and Use of FAO and WHO Specifications for Pesticides, Rome 2004
(http://www.fao.org/documents/show_cdr.asp?url_file=/docrep/007/y4353e/y4353e00.htm)

Guidance for interaction with data providers

Manual on Development and Use of FAO and WHO Specifications for Pesticides, Rome, 2004. Section 14. Participation by the Pesticide Industry (pp 4-5) and Section 2. The Process of Developing FAO/WHO Specifications (pp 8-16)
(http://www.fao.org/documents/show_cdr.asp?url_file=/docrep/007/y4353e/y4353e00.htm)

Rules on confidentiality

Procedures for handling confidential proprietary pesticide data and potential conflicts of interest by the FAO/WHO Joint Meeting on Pesticide Specifications (JMPS), Rome 2004, Section 2.4 Confidentiality of Information, Appendix H. Declaration of Interests and Confidentiality (pp 271 – 279), and Appendix I (p 280).
(<http://www.fao.org/docrep/007/y4353e/y4353e06.htm#bm06.4>)

Interaction with Codex

The data submissions to JMPS are coordinated with JMPR evaluations (hence there is this link to the Codex process, however it should be noted that JMPS itself does not serve Codex directly).

JMPS outputs

FAO Pesticide Specifications
(<http://www.fao.org/ag/agp/agpp/pesticid/>)

WHO Specifications for pesticides used in public health
(<http://www.who.int/whopes/quality/newspecif/en/>)

WHO analytical methods
(http://www.who.int/whopes/quality/analytical_methods/en/)

³³ Some relatively minor revisions have been made to the manual and are only included on the internet. Manual on development and use of FAO and WHO Specifications for Pesticides, March 2006, revisions to the first edition.

Annex C: Documents prepared for all expert meetings

The following documents are prepared for all meetings (including meetings convened by expert bodies, regularly convened meetings and *ad hoc* consultations)

- Preparatory documents addressing:
 - ~ Problem formulation
 - ~ Questions to be answered: Formulated on the basis of relevant requests from Codex, member countries or FAO/WHO units, these questions define the scope of scientific advice to be provided and are generally used to develop the draft meeting agenda, call for data and call for experts.
 - ~ Terms of reference
 - ~ List of expertise required³⁴
- Working plan/Project description/Plan of Action: An internal document that describes the work to be accomplished, the assignments to individuals, drafting groups or teams, the distribution of responsibilities during the preparatory phase.
- Agenda (scope, objectives, information on any side events such as press conferences, etc.)
- Call for experts³⁵
- Call for data
- List of documents submitted and list of reference materials: This includes information on the considerations and conclusions reached by previous meetings.
- List of participants
- Draft structure of the report including rules for drafting sections of the report³⁴
- Document detailing division of responsibilities among experts: Responsibilities are assigned by the joint secretariats based on the expertise available and meeting agenda.
- Briefs to participant: All participants at an expert body meeting receive in advance a description of their role and principal tasks assigned to them.
- Brief for drafting experts and rapporteurs³⁴
- Draft evaluations and documents on the scientific issues to be discussed
- Rules for discussion and interaction at the meeting, and for decision making (e.g. consensus building)³⁴

³⁴ Note that in certain cases these may not be prepared for each individual meeting. For example in the cases of JECFA documentation on some of the items listed such as, report structures, briefings for meeting participants and rules for discussions do not change from one meeting to the next.

³⁵ For instance, see the JECFA Call for Experts, 2001–2006 on the FAO and WHO web sites (available at: http://www.fao.org/ag/agn/agns/jecfa_experts_en.asp and <http://www.who.int/ipcs/food/jecfa/experts/en/index.html>).

The Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO) implement a joint programme on the provision of scientific advice on food safety and nutrition. Among others, issues related to risk assessment of chemicals and biological agents in food, assessment of foods derived from biotechnology and human nutrition are covered.

This scientific advice is used extensively by member countries, the Codex Alimentarius Commission (CAC) and its subsidiary bodies to inform and support the decision-making processes and facilitate the establishment of "...food standards, guidelines and other recommendations based on sound scientific analysis and evidence".

This document has been prepared to enhance the transparency of the practices and procedures applied by FAO and WHO to deliver scientific advice. It illustrates that the same basic principles and rules apply to the different expert groups such as the Joint FAO/WHO Expert Committee on Food Additives (JECFA), the Joint FAO/WHO Expert Meetings on Pesticide Residues (JMPR), the Joint FAO/WHO Expert Meetings on Microbiological Risk Assessment (JEMRA) and consultations and meetings organized in response to specific *ad hoc* requests or emergency situations.

It provides essential reading for food safety regulators and experts working on establishing similar procedures at a national level, experts participating in FAO/WHO meetings and activities related to scientific advice, and national delegations attending CAC meetings or its subsidiary bodies.

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