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Annex XXXV

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## REPORT OF THE OIE AD HOC GROUP ON ANIMAL WELFARE AND DAIRY CATTLE PRODUCTION SYSTEMS

Paris, 26–28 November 2013

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The OIE *ad hoc* Group on Animal Welfare and Dairy Cattle Production Systems (the *ad hoc* Group) met at the OIE Headquarters on 26–28 November 2013.

The members of the *ad hoc* Group and other participants at the meeting are listed at Annex I. The adopted agenda is at Annex II.

### 1. Welcome and introduction

Dr Derek Belton, Head of the International Trade Department of the OIE, welcomed all members and thanked them for their attendance.

### 2. Feedback from the Animal Welfare Working Group (AWWG) and from the Terrestrial Animal Health Standards Commission (Code Commission)

Dr Alex Thiermann, President of the Animal Health Standards Commission (Code Commission), presented relevant outcomes of the Code Commission meeting (September 2013) and the AWWG meeting (June 2013), (see Report of the meeting of the OIE Terrestrial Animal Health Standards Commission September 2013).

### 3. Draft Chapter 7.X. on Animal Welfare and Dairy Cattle Production Systems

The comments received from many OIE Member Countries and from a non-governmental organisation (NGO) on the draft Chapter on Animal Welfare and Dairy Cattle Production Systems were reviewed by the *ad hoc* Group. The *ad hoc* Group expressed its thanks to all who submitted comments and noted their critical review of the first draft would strengthen the content of the chapter. Comments that proposed a better wording or structure of the draft chapter were accepted on many occasions thereby providing an improvement. The document is based on the approach taken in the already-adopted chapter on animal welfare and beef cattle production systems. However, several provisions were proposed to reflect issues of specific importance to the welfare of dairy cattle, e.g. additional detail regarding disbudding, a husbandry procedure carried out on millions of dairy calves every year.

The *ad hoc* Group noted Member Country comments had suggested that the chapter contains considerable detail that would not be appropriate for all Member Countries and production systems, and that it is overly focused on housing/confined systems. While recognising all recommendations cannot apply to all systems, the *ad hoc* Group considered it important to address the key principles and issues influencing the welfare of dairy cattle across all systems. Therefore, the *ad hoc* Group tried to provide general recommendations to the extent possible, and identify exceptions where the recommendation is limited to a particular system or situation.

## Annex XXXV (contd)

The Group noted the considerable number of Member Country comments on the list of measurables proposed for each recommendation. The Group drew to the Member Countries' attention the introductory text of Article 7.X.5.

As a consequence of general comments expressing concerns about the application of welfare criteria, the *ad hoc* Group recommended that the AWWG and Code Commission undertake further discussion with Member Countries about their development and use. Welfare criteria become the diagnostic material for welfare assessment. Knowledge and understanding of their application is now developing in many countries, e.g. many countries now have well-defined body condition scoring systems for dairy cows that have established benchmarks that have been validated against health outcomes, fertility and production performance. It is anticipated that additional benchmarks for welfare criteria, relevant to industry segments, e.g. a production system or region, will be developed for internal monitoring and welfare management. Refined definition and understanding about the application of individual welfare criteria, and methods to develop appropriate benchmarks, are essential next steps to encourage positive change. The *ad hoc* Group considered that OIE is the relevant body to move such a discussion forward.

The above discussion is also relevant to the NGO comment which asked that acceptable thresholds be defined for each criterion. The *ad hoc* Group was of the opinion that defining such thresholds is not yet possible, given the wide range of production systems encountered around the world for which this Chapter must cater.

The *ad hoc* Group considered it appropriate in some recommendations to include resource-based or input-based measurable. These include setting thresholds for ammonia concentrations and noise levels in housing systems, the number of individual lying spaces provided per cow in free stall barns, and a requirement for emergency plans and alert systems. Where levels are well established in the scientific literature the *ad hoc* Group believes these should be adopted as fixed thresholds.

### **Article 7.X.1. Definition**

Dr David Wilkins raised the point that the welfare of calves in veal production systems is not within the scope of this chapter. Despite veal calf production systems emanating from the dairy industry, the scope of this chapter is limited to animals for milk production, i.e. replacement calves, young stock and dairy cows in a production cycle and service bulls. Veal calf production systems were similarly considered outside the scope of Chapter 7.9. Animal welfare and beef cattle production systems. Considering the welfare risks associated with these production systems, the *ad hoc* Group recommended the AWWG and the Code Commission include in their work programme the development of a chapter on veal calf welfare.

In this context the *ad hoc* Group discussed the need to define 'calf'. The Group considered it difficult to develop such a definition, since age at weaning can vary widely, and the term is also used generically, not only limited to calves before weaning. The *ad hoc* Group decided to seek the advice of the AWWG and the Code Commission as to whether a chapter-specific definition of 'calf' would be beneficial.

### **Article 7.X.2. Scope**

No change.

### **Article 7.X.3. Commercial dairy cattle production systems**

Many Member Countries commented upon the definitions of dairy cattle production systems and a wide range of concerns were expressed, in particular whether the definitions implied preferences for particular systems. The *ad hoc* Group discussed the wide range of production systems that exist around the world, and recognised the many regional and country factors that contribute to the differences between them. One aspect which received prominence in submissions was whether access to graze pasture is an important welfare requirement for dairy cows.

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The *ad hoc* Group agreed with the previously expressed view of EFSA and DairyCo that there is no evidence that the provision of pasture for grazing is important in itself, but that there may be benefits from a higher level of activity and exercise. They concluded that the key difference between housing/confinement and pastured systems is that the cows live outdoors with some autonomy for diet selection, not that they receive pasture. Possible additional benefits may accrue because animals in pastured production systems are less exposed to concrete surfaces and receive additional exercise from walking, both of which may assist to reduce lameness. The definition has been redrafted to reflect this, and references to food being obtained by grazing have been removed. These changes allow flexibility for provision of fodder other than grazed pasture and are consistent with the FAO definition of “Good Feeding” for dairy animals.

**Article 7.X.4. Criteria (or measurables) for the welfare of dairy cattle****Article 7.X.4.1.2. Morbidity rates**

The *ad hoc* Group revised text referring to ‘morbidity rates for infectious and metabolic diseases, lameness, post-partum and post-procedural complications and injury rates’ according to Member Countries comments.

**Article 7.X.4.1.3. Mortality and culling rates**

The *ad hoc* Group agreed with a Member Country comment to add ‘culling’ and modified the text accordingly.

**Article 7.X.4.1.4. Changes in milk yield, body weight and body condition**

Member Countries varied in their views on the value of using milk production, and changes in milk production as welfare criteria. There is debate in the scientific literature about the extent and time-course of changes in milk production which do not always reflect welfare compromise. Nevertheless change can be rapid in some situations where welfare is poor. Even if production response lags behind the initiating event, it may still provide useful information about welfare. New technologies that monitor production at each milking identify cows requiring inspection based on changes in milk yield. While the usefulness or value of the information of changes in milk yield and quality depend on having systems to measure it, these are common in many parts of the dairy industry.

In the first draft the expression “growth curve” was used. The reason for this was technical, since reference to a growth curve implies that growth rate is not linear at all stages of life, and further that growth curves are not the same for all production systems and breeds. The expression has however caused confusion for submitters, and the text has been changed to refer to growth rate.

In the first draft the expression “score” was used with reference to body condition. This has caused some confusion since not all countries score body condition using the same system. Scoring systems vary in their range, e.g. 1-5, 1-8, or 1-10, but this is not important because their application is for internal comparison within a herd, or within a system, not for external comparison; furthermore it is the actual condition carried by the cow that is the important welfare matter, not the size of the score allocated. To reduce confusion, the *ad hoc* Group changed the criterion to ‘body condition’.

**Article 7.X.4.5. Reproductive efficiency**

The *ad hoc* Group discussed the comment from submitters that reproductive efficiency may not be a useful welfare criterion since its expression generally lags behind the initiating event. Despite these concerns, the *ad hoc* Group have retained reproductive efficiency as a welfare criterion since changes may reflect animal health and welfare problems. Measures of reproductive efficiency may also identify differences between breeds in their suitability for a particular system.

As proposed by Member Countries’ comments, the *ad hoc* Group included new measurables: ‘anoestrus or extended post-partum interval’ and ‘retained placentas’.

Annex XXXV (contd)**Article 7.X.4.6. Physical appearance**

As proposed by Member Countries' comments, the *ad hoc* Group included the new measurables: 'discharges (e.g. from nose, eyes, reproductive tract), 'abnormal animal posture indicating pain (e.g. rounded back, head low)' and 'dehydration' to the list of physical appearance measurables.

**Article 7.X.4.7. Handling responses**

The word 'percentage' was removed for measurables relating to handling responses, e.g. percentage of animals striking restraints or gates. This change was made in response to a Member Country's comment that expressing indicators of improper handling as a percentage implies a level of acceptability for potentially serious welfare problems such as lacerations and fractures.

**Article 7.X.4.8. Complications from common procedures**

Additions to this section in response to Member Countries' suggestions included the addition of "hoof trimming" and "repair of displaced abomasum" to the list of common procedures, and "post-operative pain behaviour" to the list of criteria.

**Article 7.X.5. Provisions for good animal welfare**

"Environmental management" was included amongst management factors that underpin good welfare delivery, alongside 'system design' and 'stockmanship', prompted by a comment from Member Country. While system design also applies to pastured systems, including environmental management further extends the application of this Article to all dairy production systems, not only housed production systems.

**Article 7.X.5.1. Recommendations on system design including physical environment****a) Thermal environment**

The Member Countries commented that stocking density should be included as a risk factor for heat stress. The *ad hoc* Group agreed with this addition, but preferred to refer to 'animal density'. This is because 'animal density' addresses not only the available floor area per animal, but also considers the lay-out of the space, and the air volume available per animal, which both influence the risk that heat stress will develop (see also discussion for point 1 e) of Article 7.X.5.).

**b) Lighting**

Member Countries' concerns about lighting regimes with high intensity light and extended circadian cycles prompted the inclusion of further advice that "The lighting should not cause discomfort to the animals. Housed dairy cows should be provided with subdued night time lighting".

**c) Air quality**

The *ad hoc* Group added a sentence to address concerns about air flow when cattle are kept on slatted floors since there is increased risk that cattle may be exposed to noxious gases from manure storage.

The *ad hoc* Group also proposed the provision that 'The ammonia level in enclosed housing should not exceed 25 ppm'. The *ad hoc* Group agreed with Member Countries' comments about adverse and toxic effects of high levels of ammonia. The *ad hoc* Group acknowledged that the use of ammonia levels is a resource-based measure, so falls outside the general approach of the chapter with its strong focus on outcome-based measurables. The *ad hoc* Group also acknowledged the limitations of measurement systems for ammonia in housing systems which are not always available in all countries. Nevertheless there is good evidence that high levels of ammonia can be harmful to animals, and the *ad hoc* Group wished to propose specific limits i.e. 25 ppm. The *ad hoc* Group sought the advice of the AWWG and Code Commission as to whether such a recommendation should be included. (See introductory text of point 3 of the Report.)

Annex XXXV (contd)**d) Noise**

The text was rephrased to reflect Member Countries' comments that all noises, not only sudden noises, should be minimised for dairy cattle.

As above, the *ad hoc* Group proposed a resource-based measure for maximum noise of 65 dBA for constant noise (DairyCo standards), and sought the advice of the AWWG and Code Commission whether such a recommendation should be included. (See introductory text of point 3 of the Report.)

**e) Flooring, bedding, resting surfaces and outdoor areas**

Provisions for calving pens were revised, with particular focus on hygiene to minimise risk of disease, and specific requirements for outdoor calving areas were added.

Further requirements about the provision of bedding for animals housed on concrete surfaces and the management of tethered animals to protect normal posture, movement, and exercise were included. The *ad hoc* Group had extensive discussions about flooring and bedding requirements in different systems, the importance of access to areas for safe exercise, and whether tethering should continue to be permitted. Given that tethering remains an important animal management tool especially in developing countries, where it is often for the animal's own safety (e.g. to prevent access to toxic plants) the *ad hoc* Group has retained tethering as a management tool, but provided some very specific guidance as to outcomes. In particular the *ad hoc* Group specifically proposed that cows kept in tie-stall housing should be untethered for periods to ensure exercise sufficient to prevent welfare problems.

In response to Member Countries' comments, the *ad hoc* Group discussed the need to provide specific recommendations for space allowance for dairy cattle, and which could form a resource-based recommendation. The *ad hoc* Group agreed that such specific recommendations are beyond the scope of this chapter since many factors need to be considered. Dairy systems generally have a range of potential areas where animals are kept, e.g. lying space, standing space especially in feed and walking alleys, and feeding space, making calculation of actual space per cow difficult. Further as mentioned in Article 7.X.5.1.a, the available air space and layout of different parts also needs to be considered. The *ad hoc* Group concluded that any focus on stocking rate should be limited to a requirement for at least one bed available per cow which has been scientifically demonstrated to provide welfare benefits, the space available to ensure access to food and water, and consideration of facility volume in relation to heat stress.

**f) Location, construction and equipment**

Several changes have been made to this section in response to Member Countries' comments. These include a requirement to evaluate potential impacts of climate and geographical features when establishing dairy farms, rather than specifying aspects of site suitability, and expansion to include a requirement to minimise walking distances when designing pastured and combination systems.

Safe use of the wide array of equipment available for use with dairy cattle was also discussed. The overall view of the *ad hoc* Group was that the obligation should be on manufacturers of such equipment to provide comprehensive information to users about its use and warrant its safety to protect animal welfare. This should be a general requirement for all equipment used with dairy cattle, i.e. it should include the milking plant, as well as restraint and other devices. An additional point was included to cover electric fences.

The specific issue of using electrified equipment was also discussed further, particularly in light of some Member Country views that this equipment can be essential to a hygienic dairy operation. After due consideration, the *ad hoc* Group nevertheless determined to retain its view that the electrified equipment to modify cow behaviour and which has been associated with increased incidence of welfare problems should not be used.

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Some Member Countries comments were critical of the description in the first draft that water should be clean and fresh. Some Member Countries asked for more extensive definitions of water quality, while others stressed that where water supply is limited, particularly in developing countries, that access to clean water may also be limited. Furthermore water that has been stored may not be considered “fresh”. In view of these difficulties, the *ad hoc* Group revised specifications about water quality.

The provisions for facilities for sick animals are also revised, since cows and calves may need to be kept together in hospital units, so the requirement for separate areas for each stage of life cannot be Emergency plans.

The section on emergency plans was revised to clarify that this section relates to emergencies occurring within a facility i.e. failure of power, water or feed supply. Emergency plans in relation to a serious disease outbreak (OIE listed disease) are in Article 7.X.2. and in relation to natural disasters or extreme climatic events are covered in Article 7.X.5. point 2 p). The *ad hoc* Group determined that for this section it is more relevant to use input/resource -based measurables, since the approach must be preventative.

**Article 7.X.5. 2. Recommendations on stockmanship and animal management****a) Biosecurity and animal health**

The introductory text and the list of the major sources and pathways for spread of pathogens that should be covered by biosecurity plans were revised according to Member Countries comments.

A Member Country questioned why mastitis was not given specific mention in this section, being an important disease of dairy cattle. The *ad hoc* Group considered that outlining management and prevention strategies for specific disease conditions was too complex for inclusion at this level, would need to go beyond mastitis alone, and is more appropriately managed at country or regional level.

The *ad hoc* Group considered it appropriate to include ‘change of herd disease status’ as an outcome-based measurable as proposed by Member Countries comments.

The *ad hoc* Group did not accept a Member Country comment suggesting restructuring of the list, to be consistent with the already adopted beef cattle chapter.

The *ad hoc* Group proposed a new paragraph on national or regional level programmes to gather records and monitor disease of importance for animal welfare.

The *ad hoc* Group revised the provision for non-ambulatory cattle according to Member Countries comments.

The *ad hoc* Group separately addressed provisions for emergency plans in disease outbreaks, emergency plans for events such as failure of power, water and feed supply systems, and emergency plans for disasters.

Provisions for emergency plans in this article 7.x.5.2.a.iiis are related only to disease outbreak emergency plans, (new title “disease outbreak emergency plans” instead of “emergency plans”).

**b) Nutrition**

To address a Member Country comment to allow all animals access to feed at the same time, a requirement that ‘Feeding systems should be designed to minimise agonistic behaviour’ was included.

In response to a Member Country comment provisions about hygienic storage of feedstuffs and feed ingredients were included. There was some discussion as to the extent to which nutritional advice should be offered, given the complexity of the subject when viewed at the international level.

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Accordingly specific comments around dietary composition are limited. Nevertheless the potential consequences of digestive upsets in dairy cows and its impact upon their health and welfare need to be addressed. Given that diets with a high amount of starch are a key contributing factor, specific provision in this point was included:

‘Therefore, when grain is given to dairy cattle it should be introduced slowly and constitute no more than 50% of the daily diet. Palatable fibrous food such as silage, grass and hay, should be available ad libitum to meet metabolic requirements in a way that promotes digestion and ensures normal rumen function.’

There was also discussion on diet composition for unweaned calves, given that there are a wide range of calf –feeding systems, and weaning age may vary from as young as five weeks, to many months of age. Accordingly some text relating to the importance of introducing fibrous food to promote rumen development was included, but the information does not specify weaning age *per se*.

**c) Social environment**

In response to Member Country comment text on management of animals with excessive agonistic behaviour was revised and made in to a separate paragraph.

In addition to the new recommendation on risk of injuries when mixing horned and non-horned cattle, the *ad hoc* Group considered it necessary to address the transition period from one phenotype to the other.

**d) Stocking density – Space allowance**

The text was revised to address issues of space allowance as discussed in point 1 e) of Article 7.X.5

**e) Protection from predators**

No changes.

**f) Genetic selection**

A Member Country comment suggesting a change in title was not accepted because the *ad hoc* Group considered that this section covers issues wider than breed selection.

The *ad hoc* Group agreed with Member Countries’ comments suggesting inclusion of the following text:

‘In breeding programs at least as much attention shall be paid to criteria conducive to the improvement of cattle welfare, including health, as to production criteria. The conservation and development of genetic lines of dairy cattle, which limit or reduce animal welfare problems, should be encouraged. Examples of these include nutritional maintenance requirement, ectoparasite resistance and heat tolerance’.

**g) Artificial insemination, pregnancy diagnosis and embryo transfer**

The *ad hoc* Group added cross references to appropriate *Terrestrial Animal Health Code (Terrestrial Code)* Chapters 4.6., 4.7. and 4.8.

**h) Dam and sire selection and calving management**

In response to a Member Country comment on heritable effect on final calf size and ease of calving, the *ad hoc* Group considered that the sire has a highly heritable effect on final calf size, not directly to ease of calving, and that selection of both sire and dam have a significant impact on ease of calving.

Annex XXXV (contd)**i) New born calves**

As suggested by Member Countries' comments the provisions on thermal comfort, colostrum for new born calves and care during their transport were added.

Member Countries suggested that serum total protein concentrations should be included as an output-based measurable of the adequacy of colostrum intake. While the *ad hoc* Group agreed that some producers use this approach successfully, this is not widespread and would be complex for producers to use as part of a monitoring routine.

**j) Cow-calf separation and weaning**

For the purposes of this chapter the definition of 'weaning' was revised to mean the change from a milk-based diet to a fibrous diet, and a weaned animal is then defined as "an animal that no longer receives milk in its diet".

**k) Rearing of replacement stock**

A Member Country and a NGO comment that calves should be reared in groups after two weeks of age, unless otherwise directed by a veterinarian was rejected by the *ad hoc* Group as being too directive. In many situations a calf may be the only one of its age, and so can only be reared in relative isolation. Consequently the *ad hoc* Group chose to promote the benefits of environmental enrichment for young calves, rather than require the use of group rearing systems.

Revision or modification of feeding practices and other environmental enrichments were added as management options, while specific advice to use cross-suckling nose guards and temporary separation were removed as they were considered too detailed.

**l) Milking management**

The *ad hoc* Group agreed that it is necessary that the chapter also acknowledges hand milking systems.

The text on the use, maintenance, and capacity of milking systems was revised. Provisions were developed to include automatic milking systems (robots) and regular checks of information provided by milking systems about milk quality, yield, and other factors as technology develops e.g. measures for ketosis.

Many aspects of milking machine management have been well defined in documents such as ISO standards and documents from the International Dairy Federation and do not need to be specified here.

**m) Painful husbandry procedures**

The *ad hoc* Group supported the revised introductory statement from Member Countries regarding future alternatives to painful procedures.

The *ad hoc* Group spent some time revising the section on disbudding and dehorning, and have deviated from the layout of the provisions in the chapter for beef production systems (Chapter 7.9.). The *ad hoc* Group took this course of action because these procedures are undertaken for the vast majority of dairy cattle. The intent is to emphasise the welfare benefits of removing horn-buds before they attach to the skull, preferably by thermal cautery, and the requirements for provision of anaesthesia and analgesia. They also emphasised that these are important subjects about which producers should seek veterinary advice.

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There was also extensive discussion about identification methods. In many places, permanent marking systems such as hot-iron branding are used in disease management programmes. Furthermore ear notching is also practiced in many places as permanent identification. For these reasons the *ad hoc* Group was unable to recommend against the use of branding or ear notching, but has changed the wording to clarify that the matter should be approached as a hierarchy of alternatives, with the least invasive approach to meet the purpose of identification being the preferred outcome.

**n) Inspection and handling**

Text referring to frequency of inspection of animals was changed to reflect Member Country comments.

Following Member Countries' comment, the paragraph on use of handling aids that may cause pain and distress was amended to specify that such handling aids could be used only when the animal can move freely. In addition, in line with Article 7.3.8. point 3 b), a recommendation not to use electric prods on calves was included.

The *ad hoc* Group agreed with Member Countries' comment that the use of dogs is not appropriate not only in housed systems, but also in collection yards or other small enclosures where the animal cannot move freely away, and changed the text accordingly.

In considering the visual environment new text on changes in visual contrast was included as suggested by a Member Country.

The *ad hoc* Group agree to include in the list of proposed outcome-based measurables "locomotory behaviour" and "vocalisations" as suggested by a Member Country.

**o) Personnel training**

The *ad hoc* Group agreed with the Member Country suggestion to include reproductive management techniques as one of the competences required for personnel responsible for dairy cattle.

**p) Disaster management**

The *ad hoc* Group revised text on emergency plans for disaster management to address Member Countries' comments (see point 2 a) of Article 7.X.5.) on guidelines for disasters or extreme climatic conditions (see also point 1 g) of Article 7.X.5.). Provision to include humane killing procedures for sick or injured cattle in the disaster management plan was added.

**q) Humane killing**

The *ad hoc* Group did not accept Member Country comments suggesting modification of this paragraph because it is harmonised with Chapter 7.9. However, the *ad hoc* Group added a point on disaster management response for completeness, with cross reference to Article 7.X.5. point 2 p).

The *ad hoc* Group included text suggested by a Member Country comment: 'In case of suspicion or diagnosis of a disease listed by the OIE, the official Veterinary Services should be notified (see Chapter 1.1. of the *Terrestrial Code*)'.

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Annex XXXV (contd)Annex I**OIE AD HOC GROUP ON ANIMAL WELFARE AND DAIRY CATTLE PRODUCTION SYSTEMS****Paris, 26–28 November 2013**

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Annex XXXV (contd)

Annex II

**OIE AD HOC GROUP ON ANIMAL WELFARE AND DAIRY CATTLE PRODUCTION SYSTEMS**

**Paris, 26–28 November 2013**

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**Agenda**

1. Welcome and introduction –Dr Belton
  2. Consider Member comments on draft Chapter 7.X. ‘Animal welfare and dairy cattle production systems’ and amend text as appropriate.
  3. Draft a report of the *ad hoc* Group meeting.
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Annex III

*[Note: this Annex has been replaced by Annex XXXIV to the report of the meeting of the OIE Terrestrial Animal Health Standards Commission which was held on 11–20 February 2014.]*





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Annex XXXVII

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## REPORT OF THE MEETING OF THE OIE AD HOC GROUP ON PORCINE CYSTICERCOSIS

Paris (France), 4–6 February 2014

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The OIE *ad hoc* Group on Porcine Cysticercosis (the *ad hoc* Group) met at the OIE Headquarters in Paris from 4 to 6 February 2014.

The members of the *ad hoc* Group and other participants are listed at [Annex I](#). The Agenda and Terms of Reference adopted are given at [Annex II](#) and [Annex III](#), respectively.

The *ad hoc* Group drafted a new Chapter X.X. Infection with *Taenia solium* for the *Terrestrial Animal Health Code*. The aim of the chapter is to reduce the risk of infection of humans and animals with *T. solium* and to minimise the international spread of *T. solium*. The *ad hoc* Group highlighted that cysticercosis, although normally clinically inapparent in pigs, is associated with significant economic losses due to carcass condemnation and decreased value of pigs, and causes a major disease burden in humans, especially epilepsy. The chapter provides recommendations for prevention, control and surveillance for infection with *T. solium* in pigs, and recommendations for the importation of pig meat with the aim of reducing the public health and economic impact of the disease.

The *ad hoc* Group proposed that the chapter only addresses infection with *T. solium* because currently there is no evidence that other species infecting pigs e.g. *T. asiatica* and *T. hydatigena* cause human cysticercosis or have a significant animal health impact.

The *ad hoc* Group developed Article X.X.2. on safe commodities based on knowledge of the epidemiology of the parasite.

The *ad hoc* Group recognised that meat and tongue inspection for control and surveillance have very low sensitivity but at the present time these are the only practical and cost effective techniques available. The Veterinary Authority should be aware of these limitations and that many infected pigs will not be detected. However, the *ad hoc* Group wished to emphasise that meat and tongue inspection have value for epidemiological purposes. The *ad hoc* Group recommended that when better diagnostic tests are available the proposed articles should be reviewed.

The *ad hoc* Group emphasised that communication between Veterinary Services and public health authorities is an essential part of a comprehensive and effective system for the prevention and control of *T. solium* in pigs and humans. Infection in pigs is an important indicator of the presence of the infection in humans and plays an important role in food-borne transmission. Treatment of human carriers is also indicated for an optimal prevention and control programme.

Annex XXXVII (contd)

The *ad hoc* Group noted that the recently developed TSOL18 vaccine to prevent *T. solium* infection in pigs has been shown to be highly effective in experimental and field trials. The *ad hoc* Group was informed that large scale commercial production of this vaccine is imminent. The *ad hoc* Group considered that the vaccine, once available, would provide an important tool for the control of *T. solium*.

The *ad hoc* Group developed an Article X.X.6. on ‘Procedures for the inactivation of *T. solium* cysticerci’ based on available literature.

The *ad hoc* Group did not include an article on recommendations for the importation of live pigs on the basis that sound recommendations could not be made in the absence of reliable internationally standardised testing methods.

The *ad hoc* Group noted that very useful information on many aspects of taeniosis/cysticercosis is available in the WHO/FAO/OIE Guidelines for the Surveillance, Prevention and Control of Taeniosis/Cysticercosis (<http://www.oie.int/doc/ged/D11245.PDF>). The *ad hoc* Group recommended these Guidelines as useful references for both Veterinary Services and public health authorities.

**Relevant References**Article X.X.3. 2b) i) and ii)

WHO/FAO/OIE Guidelines for the Surveillance, Prevention and Control of Taeniosis/Cysticercosis (<http://www.oie.int/doc/ged/D11245.PDF>)

Article X.X.6.

Procedures for the inactivation of *T. solium* cysticerci in meat of pigs are in line with the regulatory requirements of the European Food Safety Authority (1), USDA Food Safety and Inspection Service (2), and the Public Health Agency of Canada (3), and the WHO/FAO/OIE Guidelines (4). There is also a general international consensus that the temperature/time inactivation requirements appropriate for *Taenia saginata* cysticerci are also suitable for *T. solium* cysticerci.

1. The EFSA Journal (2004) 142, 1-51, Suitability and details of freezing methods to allow human consumption of meat infected with Trichinella or Cysticercus.
2. FSIS Directive 6100 Post-Mortem Livestock Inspection (9/17/07), Chapter III - Making Dispositions Post-Mortem. III. Cysticercosis. Food Safety and Inspection Service, USDA.
3. Public Health Agency of Canada. Pathogen Safety Data Sheet-Infectious Substances. Section 1.-Infectious Agent: *Taenia solium*. [www.publichealth.gc.ca](http://www.publichealth.gc.ca)
4. WHO/FAO/OIE Guidelines for the Surveillance, Prevention and Control of Taeniosis/Cysticercosis (<http://www.oie.int/doc/ged/D11245.PDF>).

The new Chapter X.X. Infection with *Taenia solium* is presented in Annex IV.

[Note: this Annex has been replaced by Annex XXXVI to the report of the meeting of the OIE Terrestrial Animal Health Standards Commission which was held on 11–20 February 2014.]

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.../Annexes

Annex XXXVII (contd)Annex 1**MEETING OF THE OIE AD HOC GROUP ON PORCINE CYSTICERCOSIS****Paris (France), 4–6 February 2014****List of participants****MEMBERS OF THE AD HOC GROUP****Dr K. Darwin Murrell (Chair)**

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Annex XXXVII (contd)

Annex 1 (contd)

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Annex XXXVII (contd)

Annex 2

**REPORT OF THE MEETING OF THE OIE AD HOC GROUP ON PORCINE CYSTICERCOSIS**

**Paris (France), 4–6 February 2014**

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**Adopted agenda**

Welcome

1. Discussion on the OIE standard setting process, listed diseases, work in animal production food safety.
  2. Develop a new draft Chapter X.X. on porcine cysticercosis dealing with the management of this disease in animals in order to manage risks to human health.
  3. Prepare a report for the Code Commission for consideration at its February 2014 meeting.
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## MEETING OF THE OIE AD HOC GROUP ON PORCINE CYSTICERCOSIS

Paris (France), 4–6 February 2014

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### Terms of Reference

#### Purpose of the meeting

The aim of the meeting of the *ad hoc* Group on Zoonotic Parasites is to develop a new draft Chapter X.X. on porcine cysticercosis for the *Terrestrial Animal Health Code (Terrestrial Code)* dealing with the management of this disease in animals to manage risks to human health.

#### Background

The Third OIE Strategic Plan (2001–2005) recommended that ‘OIE should be more active in the area of public health and consumer protection,’ and noted that this should include ‘zoonoses and diseases transmissible to humans through food, whether or not animals are affected by such diseases’, with the object of improving the safety of the food production to consumption continuum worldwide. In 2002, the Director General of the OIE established a permanent Working Group on Animal Production Food Safety (APFSWG) to coordinate the food safety activities of the OIE.

Since 2008 the OIE *Terrestrial Code* has included a section on Veterinary Public Health, containing animal production food safety standards with a primary focus on measures applicable to food-borne/zoonotic hazards arising at the production level of the food chain.

In an OIE discussion paper ‘Animal production food safety: priority pathogens for standard setting by the OIE’, *Taenia solium*, *T. saginata*, *Echinococcus granulosus* and *Trichinella spiralis* were identified as zoonotic pathogens with a very significant impact on human health, particularly in Africa, South America and the Middle East.

Echinococcosis/hydatidosis, trichinellosis and porcine cysticercosis are OIE listed diseases.

The *Terrestrial Code* chapters for Infection with *Echinococcus granulosus* (Chapter 8.4.), Infection with *Echinococcus multilocularis* (Chapter 8.5.) and Infection with *Trichinella* spp. (Chapter 8.14.) have recently been revised (adopted in May 2013) to include information on appropriate measures at the animal level to avoid human infection with these pathogens.

The *Terrestrial Code* does not currently contain any recommendations on porcine cysticercosis.

In 2005, the WHO/FAO/OIE published guidelines on the control of *Echinococcus*<sup>1</sup>, *Trichinella spiralis*<sup>2</sup> and *Taenia solium*<sup>3</sup>. *The Control of Neglected Zoonotic Diseases*<sup>4</sup> publication also includes some information on cysticercosis.

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1 WHO/OIE, WHO/OIE manual on Echinococcosis in humans and animals: a public health problem of global concern, OIE, 2001. Available at <http://whqlibdoc.who.int/publications/2001/929044522X.pdf>

2 FAO/WHO/OIE, FAO/WHO/OIE guidelines for the surveillance, management, prevention and control of trichinellosis, in: Dupouy-Camet J., Murrell K.D. (Eds.), FAO/WHO/OIE, Paris, 2007. Available at <ftp://ftp.fao.org/docrep/fao/011/a0227e/a0227e.pdf>

3 WHO/FAO/OIE Guidelines for the Surveillance, Prevention and Control of Taeniosis/Cysticercosis, OIE, Paris, 2005. Available at <ftp://ftp.oie.int/imprimeur/OLD%20divers/Guidelines%20Taeniosis%208%20juin%20imprimeur.pdf>

4 *The Control of Neglected Zoonotic Diseases*. A report of a joint WHO/DFID-AHP Meeting with the participation of FAO and OIE 2006. Available at [http://www.who.int/zoonoses/Report\\_Sept06.pdf](http://www.who.int/zoonoses/Report_Sept06.pdf).

Annex XXXVII (contd)Annex 3 (contd)**Relevant considerations**

- The OIE has a mandate to develop international standards for animal production food safety, with a primary focus on measures applicable to zoonotic pathogens, for which measures can most effectively be implemented at the animal production level.
  - Standards for zoonotic pathogens at the animal production level should take into account:
    - feasible and cost effective means of controlling the pathogen at the animal level;
    - feasible and cost effective measures for animals and animal products that are internationally traded;
    - existing Codex standards and guidelines of the WHO and FAO.
  - The *Terrestrial Code* contains general recommendations on veterinary public health and specific recommendations on controlling salmonellosis in poultry.
  - There is no *Terrestrial Code* chapter on porcine cysticercosis.
  - The OIE *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals* (2013) includes recommendations on the diagnosis of porcine cysticercosis (Chapter 2.9.6.) which cross-refers to Chapter 2.9.5. on Cysticercosis.
  - Given that porcine cysticercosis is an OIE listed disease, it is timely for the OIE to develop specific guidance to help OIE Member Countries manage the risks associated with porcine cysticercosis at the production level in order to prevent human illness.
  - The new draft Chapter X.X should complement existing WHO and Codex publications on *Taenia solium* (and cross-refer them, as appropriate).
  - The format of the new Chapter X.X. should follow the style of existing *Terrestrial Code* chapters.
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Annex XXXVII (contd)

Annex 4

*[Note: this Annex has been replaced by Annex XXXVI to the report of the meeting of the OIE Terrestrial Animal Health Standards Commission which was held on 11–20 February 2014.]*





Organisation  
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Animale

World  
Organisation  
for Animal  
Health

Organización  
Mundial  
de Sanidad  
Animal

Annex XXXIX

Original: English

October 2013

## REPORT OF THE MEETING OF THE OIE ANIMAL PRODUCTION FOOD SAFETY WORKING GROUP

Paris, 29–31 October 2013

The OIE Working Group on Animal Production Food Safety (the Working Group) held its thirteenth meeting at the OIE Headquarters from 29 to 31 October 2013.

The members of the Working Group and other participants are listed at [Annex I](#). The adopted agenda is provided at [Annex II](#).

Dr Bernard Vallat met with the Working Group for a discussion during the meeting. Dr Vallat welcomed members and thanked them for their support in this important area of work. He stated that the OIE appreciates the work of the Working Group that is critical to the OIE achieving its objective of reducing risks to human health due to hazards arising from animal products.

Dr Vallat informed the Working Group that all Member Countries are very interested in the work of this Working Group, as it provides a unique forum for the exchange of views and establishing linkages between work programmes from different organisations, namely Codex, FAO, WHO, at the intersection of food safety, human health and animal health. It is also a forum that ensures that relevant standard setting activities cover the whole food production to consumption continuum.

Dr Vallat suggested that the Working Group could also provide advice on how OIE could improve its communication on animal production food safety.

In response to the Working Group's request for clarification regarding possible future OIE work on Shiga-like toxin producing *E. coli* (STEC), Dr Vallat noted that there is a need to raise awareness about this food-borne pathogen, as the OIE received a lot of communications from the human and animal health sectors that have incorrect information about this pathogen, for example not understanding that only a small number of *E. coli* strains are pathogenic.

Dr Vallat highlighted that governance of food safety systems was an issue for governments in implementing a whole food continuum approach. The OIE's role is to promote success stories and lessons learnt and to encourage the food continuum approach, which is one of the reasons why the OIE developed specific text on the role of Veterinary Services in contributing to food safety in the *Terrestrial Animal Health Code (Terrestrial Code)* chapter on Quality of Veterinary Services and the PVS Tool. Dr Vallat encouraged the Working Group to provide advice on how countries should best address this, and how to involve the Veterinary Services.

Regarding the OIE's relationship with other international organisations, Dr Vallat noted that the OIE had sent a letter to Delegates requesting that Veterinary Services nominate their Focal Point in animal production food safety to serve as an INFOSAN contact point to ensure an active role of the Veterinary Services in the INFOSAN network.

Regarding the OIE's relationship with Codex, Dr Vallat welcomed the ongoing work being done by the Codex Committee on General Principles (CCGP) electronic Working Group on OIE/Codex Cooperation to improve the use of cross references and cooperation between OIE and Codex. He noted that the OIE had offered to host the physical Working Group meeting, if needed, in April 2014.

Annex XXXIX (contd)

Dr Vallat informed the Working Group that an international meeting had been convened (September, 2013) to discuss the development of a global database for mapping genomes of selected pathogens using new technology, which was attended by the President of the OIE Biological Standards Commission. Dr Vallat informed the Working Group that the OIE will convene a new *ad hoc* Group to advise him as to how the OIE should be involved in this new area of work. Dr Vallat also noted that the OIE Global Conference of the OIE Reference Centres, to be held in Seoul, Korea (Rep. of), 14–16 October 2014 will provide a unique opportunity for the OIE to discuss how to build a global database of whole genome sequences for pathogens of veterinary importance, in collaboration with other organisations, where possible.

Dr Vallat noted there are a lot of media communications about the possible link between food safety and animal welfare and that, to date, there is very little scientific evidence of a direct link between the two. He suggested that the Working Group keep abreast of any new information on this topic.

**1. Update on CCA / FAO / WHO activities****1.1. Codex Alimentarius Commission (CAC)**

Dr Annamaria Bruno, representing the Codex Secretary, provided an update on the work of CAC. Detailed information is provided in Annex III.

**1.2. World Health Organisation (WHO)**

Dr Kazuaki Miyagishima, representing the WHO, provided an update on the work of WHO. Detailed information is provided in Annex IV.

**1.3. Food and Agriculture Organization of the United Nations (FAO)**

Dr Hendrik Jan Ormel, representing the FAO, provided an update on the work of FAO. Detailed information is provided in Annex V.

The Working Group was very positive about the excellent collaboration that is now in place between the OIE and Codex, FAO and WHO, in the area of animal production food safety. The Working Group recognised the benefits that have resulted from the strong relationships forged between the OIE and Codex, and the relevant units at the FAO and WHO, which will ensure continued close coordination of the relevant work of these organisations.

**2. Cooperation between OIE and CAC****2.1. CCGP electronic Working Group on Codex/OIE Cooperation: Draft Guidance Document for Codex/OIE Cooperation**

Dr Gillian Mylrea informed the Working Group on developments regarding the Draft Guidance Document for Codex/OIE Cooperation being undertaken by the CCGP electronic Working Group on Codex/OIE Cooperation. The draft document had been circulated for three rounds of comments this year and will be presented to the next meeting of the CCGP in April 2014.

The Working Group discussed the draft document and recommended that the following text be proposed for inclusion in the introductory text of the document to emphasise the importance of a risk-based food chain approach to food controls and also the need for flexibility regarding arrangements between the OIE and CAC to achieve this.

*'A risk- based food chain approach to food controls requires robust collaboration and cooperation between the CAC and OIE in the elaboration of international guidance for the pre-and post-harvest sectors. Such guidance should be complementary, based on risk and minimise duplication.*

A high level of trust and communication is now in place, resulting in new and robust standards for zoonoses. These standards collectively provide public health risk managers with essential information needed to make decisions.'

Annex XXXIX (contd)

The Working Group also emphasised the need to ensure that such a document incorporates flexibility at the national level.

The Working Group felt that, in addition to simple cross referencing, the Codex Secretariat and the OIE should explore ways of making more visible links between Codex and OIE standards.

## **2.2. Relationship between OIE and Codex**

The Working Group recognised that there are a lot of activities being undertaken by both organisations to improve communication between OIE and Codex at both the international and regional levels, for example, presentations by OIE and Codex at their respective General Sessions, participation in each other's standard setting, and OIE regional seminars for focal points on animal production food safety (APFS).

The Working Group noted that, although there has been continuous improvement in communication and cooperation between the two organisations, there is still room for improvement at the national level to promote dialogue between relevant national experts in the animal health, public health and trade sectors, to ensure **better co-ordination in relevant standard setting activities of the two organisations**. The Working Group encouraged the OIE to continue to include presentations in the APFS Focal Point seminars on Codex and OIE relationships and to take steps to ensure that OIE Delegates understand the importance of the role of the focal point for APFS in their country, which includes taking into account Codex standards, where relevant, when commenting on OIE standards.

The Working Group recommended that information tools should be promoted through OIE and Codex websites to enable people from both organisations to understand each other's standard setting process.

## **3. OIE and Codex work on zoonotic parasites**

### **3.1. OIE Chapter on Infection with *Trichinella* spp.**

Dr Mylrea informed the Working Group that the revised Chapter 8.14. Infection with *Trichinella* spp. had been adopted at the 81<sup>st</sup> General Session in May, 2013, and is included in the 2013 version of the *Terrestrial Code*. The objective of the chapter is to recommend control measures at the farm level to prevent food-borne illness in humans. The chapter includes provisions for establishing and maintaining a 'negligible risk compartment' in pigs kept under controlled management conditions.

The Working Group were of the view that this is an excellent chapter that incorporates the risk-based approach based on consideration of both pre- and post- harvest control measures. The Working Group noted the active collaboration between the OIE and Codex in the development of this standard, which is a very good example of how the two organisations worked together to produce a robust output.

### **3.2. Codex draft Guidelines for Control of Specific Zoonotic Parasites in Meat: *Trichinella* spp. and *Taenia saginata* (bovine cysticercosis)**

Dr Steve Hathaway informed the Working Group that development of the Codex Proposed Draft Guidelines for Control of Specific Zoonotic Parasites in Meat: *Trichinella* spp. and *Taenia saginata* is currently at Step 3. He noted that Member comments on the latest draft would be considered by the Codex Committee on Food Hygiene (CCFH) at its upcoming meeting (11-15 November, 2013), with the hope of submitting it to the CAC in July 2014 for adoption at step5/8.

Dr Hathaway also reported on the outcomes of the recent Joint FAO/WHO expert meeting on risk-based examples for control of *Trichinella* and *T. saginata* (21-25 October, 2013). The objective was to develop quantitative examples based on different risk management scenarios that illustrated differences in residual risk to consumers. In the case of *Trichinella*, he noted that the expert group also considered the development of scenario examples regarding the question of maintenance of the negligible risk compartment, which is well covered in the OIE chapter.

Dr Hathaway noted that *T. saginata* is not an OIE listed disease, and therefore the OIE has not developed any recommendations for on-farm control measures. Thus the Codex guidelines for risk management are not likely to be based on the maintenance of a negligible risk compartment.

Annex XXXIX (contd)

The Working Group noted that the development of this Codex guideline is another example of the outcomes of excellent cooperation between OIE and Codex and represented a genuine risk-based approach to a global problem.

Ranking parasites

Dr Bruno informed the Working Group on the proposal for new work on the occurrence and control of parasites in food that would be considered by the CCFH at its upcoming meeting. The CCFH will also consider whether the control of parasites should be addressed in a general code of practice or within existing commodity codes and whether additional guidance on criteria for prioritization of parasites for use by governments should be developed. The Working Group noted that three of the top ten food-borne parasites identified by the Joint FAO/WHO expert meeting on multicriteria-based ranking for risk management of food-borne parasites (3-7 September 2012) are OIE listed diseases: *Taenia solium* (pork), *Echinococcus granulosus* (fresh produce) and *Echinococcus multilocularis* (fresh produce). *Toxoplasma gondii* (meat from small ruminants, pork, beef, game meat (red meat and organs)) ranked fourth.

The Working Group noted that work is underway to develop a new chapter for the *Terrestrial Code* on *T.solium*.

The Working Group recommended that the OIE follow closely the outcomes of the CCFH work programme to ensure alignment of the two organisations work regarding relevant food-borne parasites.

**4. Potential standard development in the area of animal production food safety****4.1. Control of *Salmonella* spp. in pigs and cattle**

Dr Bruno informed the Working Group that the upcoming meeting of the CCFH (11-15 November, 2013), will consider a proposal for new work to develop guidelines for the control of non-typhoidal *Salmonella* spp. in beef and pork. The rationale for this proposal is that ‘Salmonellosis is one of the most frequently reported food-borne diseases worldwide - more than 80 million cases of *Salmonella* gastroenteritis are estimated to occur each year – and one of the most complex in its epidemiology and control.’ (Codex document CX/FH 13/45/11). It is proposed that the guidelines would be similar to and serve as a companion guideline to the existing *Guidelines for the Control of Campylobacter and Salmonella in Chicken Meat* (CAC/GL 78-2011).

Dr Stuart Slorach recalled that during the 2012 meeting of the Working Group they had agreed that effective measures could be taken at the farm level to reduce the incidence of *Salmonella* in food-producing animals other than poultry, thereby reducing food-borne illness, but that there was a need for a whole food chain approach to *Salmonella* risk management. Therefore unilateral advancement of this work in OIE alone would be unlikely to significantly reduce the *Salmonella* risk to human health. Rather, the Working Group agreed that should Codex initiate new work on *Salmonella* spp. in food-producing animals other than poultry, then the Working Group would encourage OIE participation to ensure a whole of food chain approach.

The Working Group noted that a) salmonellosis attributed to cattle and pigs is an important cause of illness in humans, b) effective control measures can be implemented at the on-farm level and, c) Codex is considering whether to undertake work in this area. Therefore it recommended that, should the Codex work proceed, the OIE should develop recommendations for the control of non-typhoidal *Salmonella* spp. in pigs and cattle to address pre-harvest management to complement the Codex guidelines and ensure a whole food chain approach.

#### **4.2. Control of Shiga-like toxin producing *E. coli* (STEC) in food-producing animals**

The Working Group wished to note the term used throughout this discussion is Shiga-like toxin producing *E. coli* (STEC) because this is now the generic term that has replaced previous use of verotoxigenic *E. coli* (VTEC).

Dr Slorach recalled that at the 2010 meeting, the Working Group discussed the need for and feasibility of developing OIE advice on the control of VTEC/STEC in food-producing animals with the purpose of reducing food-borne illness. In this regard the APFWSG requested that a review of the scientific literature be undertaken on this pathogen. Dr John Morris Fairbrother, OIE Reference Laboratory for *E. coli* (Canada), was invited to undertake this review.

At the present meeting, the Working Group reviewed the updated document (received October, 2013), which had been revised following a request from the Working Group for more emphasis on the availability and efficacy of applying measures at the farm-level to reduce the incidence of STEC in livestock, and to assess the likely public health outcomes of applying such measures. The Working Group was impressed with the revised paper and requested the OIE International Trade Department to thank the authors for all their work in developing and revising the document. The Working Group also referred to a number of European Food Safety Authority (EFSA) opinions on this topic as well as a number of United States Department of Agriculture (USDA) papers that had been provided by the OIE Delegate for the USA.

Dr Bruno informed the Working Group of the report of the 2011 meeting of the Joint FAO/WHO Expert Meetings on Microbiological Risk Assessment (JEMRA) on enterohaemorrhagic *Escherichia coli* in Raw Beef and Beef Products: Approaches for the Provision of Scientific Advice (Microbiological Risk Assessment Series 18) and that currently there was no Codex document or proposals for new work on this pathogen in meat.

The Working Group recognised that the presence of certain STEC, and their toxins, in some foods gives rise to a significant global burden of food-borne disease. While multiple sources and routes of transmission are now recognised, data based on outbreaks and sporadic infections indicate beef and beef products are an important source of food-borne STEC infection.

The Working Group also recognised that due to the public health importance of STEC, their absence in beef traded internationally is an important certification requirement for some countries. The Working Group noted that different countries apply different port of entry test requirements and have different requirements for assurance in the country of origin. This lack of alignment can lead to problems in international trade and adds considerable costs to certification.

After much discussion on next steps OIE may take on this subject, the Working Group agreed that the ideal situation would be to undertake this work in coordination with Codex because a whole food chain approach to the risk management in cattle would be the most effective. However, although Codex does not currently have STEC on its work plan, the Working Group recommended that the OIE should proceed with some work on this pathogen.

The Working Group recommended that work should be undertaken to identify practical and effective measures that can be implemented at farm level, including transport, to reduce the prevalence and burden of STEC in the digestive tract or on the hide of bovine animals arriving at the slaughterhouse, to lower contamination levels of fresh beef during slaughter and dressing processes. The Working Group recommended that any relevant guidance could then be considered for inclusion in appropriate OIE documents, e.g. FAO/OIE Guide to Good Farming Practices for Animal Production Food Safety, or communication tools.

The Working Group developed terms of reference for this proposed work, presented at Annex VI.

The Working Group also recommended that the OIE should maintain an active dialogue with Codex, through this Working Group and other established mechanisms, concerning potential standard development in this area.

Annex XXXIX (contd)**5. Antimicrobial resistance**

Dr François Diaz (OIE Scientific and Technical Department) joined the meeting for this agenda item and provided an update on current OIE activities relevant to antimicrobial resistance (AMR) and the use of antimicrobial agents in animals.

Dr Diaz informed the Working Group that the revised *Terrestrial Code* Chapters 6.9. on ‘Responsible and prudent use of antimicrobial agents in veterinary medicine’ and the updated version of the OIE List of antimicrobial agents of veterinary importance were adopted at the General Session in May 2013 by the World Assembly of Delegates.

Dr Diaz provided an update on the work done by the *ad hoc* Group on Antimicrobial Resistance. He reported that, since the last meeting of the Working Group, the *ad hoc* Group met twice, from 8 to 10 January 2013 and from 27 to 29 August 2013 at the OIE Headquarters. At the January 2013 meeting, the Group reviewed the technical comments received from OIE Member Countries relating to Chapter 6.10. on ‘Risk assessment for antimicrobial resistance arising from the use of antimicrobials in animals’. The Chapter was revised accordingly. It also finalised the review of the OIE List of antimicrobial agents of veterinary importance. At the August 2013 meeting, the Group reviewed the second round of technical comments received from OIE Member Countries on the proposed updated version of Chapter 6.10. This chapter should be proposed for adoption at the next General Session in May 2014. The Group also reviewed comments received on chapters 6.6. ‘Introduction to the recommendations for controlling antimicrobial resistance’, 6.7. ‘Harmonisation of national antimicrobial resistance surveillance and monitoring programmes’, and 6.9. ‘Responsible and prudent use of antimicrobial agents in veterinary medicine’ following adoption of their updated versions by the World Assembly of Delegates during the OIE General Session in 2012 for the first two chapters and, in 2013, for 6.9. Finally the Group reviewed a few technical comments received on the updated version of the OIE List of antimicrobial agents of veterinary importance adopted at the OIE General Session in May 2013. Follow-up activities from the recommendations of the OIE Global Conference on the Prudent Use of Antimicrobial Agents for Animals were also discussed, in particular the recommendation to set up a database on the use of antimicrobial agents in animals in OIE Member Countries. An *ad hoc* Group will be formed and will meet in 2014. Representatives from the FAO, the WHO, the European Medicines Agency and Collaborating Centres will be invited in addition to experts.”

The Working Group emphasised the importance of antimicrobial resistance for food safety and acknowledged the work of the OIE/WHO/FAO Tripartite in this area.

**6. Other business****6.1. Global Microbial Identifier**

The Working Group noted that whole genome sequencing could be of great value in the investigation of outbreaks of food-borne disease. The undertaking may encompass not only food-borne pathogens, but also other human and animal pathogens. The technology and data analysis methodology was still evolving, while IP issues need to be handled appropriately to ensure benefits for the international community.

The Working Group supported the active participation of the OIE in this area, noting the importance of public access to information in the database.

**6.2. Nanotechnology**

The Working Group noted the report of the ‘FAO/WHO Expert Meeting on the Application of Nanotechnologies in the Food and Agriculture Sectors: Potential Food Safety Implications’ and highlighted that this item is included in the 2014 Work Plan.

**7. Work programme for 2014**

The Working Group reviewed and revised the 2014 work programme. The Working Group re-organised the work programme clarifying what was current work and what were tasks being monitored for advice in relation to animal production food safety. The Working Group also added a new section on communication.

The amended work programme for 2014 is presented at Annex VII.

**8. Next meeting**

To be confirmed.

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.../Annexes

Annex XXXIX (contd)Annex I**MEETING OF THE OIE ANIMAL PRODUCTION FOOD SAFETY WORKING GROUP****Paris, 29–31 October 2013****List of participants****MEMBERS OF THE WORKING GROUP**

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Annex XXXIX (contd)Annex II**MEETING OF THE OIE ANIMAL PRODUCTION FOOD SAFETY WORKING GROUP****Paris, 29–31 October 2013**

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**Adopted agenda**

Welcome from the OIE Director General

Adoption of the agenda

Report of the previous Working Group meeting

1. Update on Codex Alimentarius Commission / FAO / WHO activities
    - 1.1. Codex Alimentarius Commission (CAC)
    - 1.2. World Health Organization (WHO)
    - 1.3. Food and Agriculture Organization of the United Nations (FAO)
  2. Cooperation between OIE and CAC
    - 2.1. CCGP electronic Working Group on Codex/OIE Cooperation: Draft Guidance Document for Codex/OIE Cooperation
    - 2.2. Relationship between OIE and Codex
  3. OIE and Codex work on zoonotic parasites
    - 3.1. OIE Chapter on Infection with *Trichinella* spp.
    - 3.2. Codex draft Guidelines for Control of Specific Zoonotic Parasites in Meat: *Trichinella* spp. and *Taenia saginata* (bovine cysticercosis)
  4. Potential standard development in the area of animal production food safety
    - 4.1. Control of *Salmonella* spp. in pigs and cattle
    - 4.2. Control of Shiga-like toxin producing *E. coli* (STEC) in food-producing animals
  5. Antimicrobial resistance
  6. Other business
    - 6.1. Global Microbial Identifier
    - 6.2. Nanotechnology
  7. Work programme for 2014
  8. Next meeting
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Annex XXXIX (contd)Annex III**INFORMATION ON ACTIVITIES OF THE CODEX ALIMENTARIUS COMMISSION****CODEX SESSIONS SINCE THE LAST MEETING OF THE OIE WORKING GROUP (20-22 NOVEMBER 2012)**

In the period 15 October 2012 - 15 October 2013, 18 sessions of the Code Alimentarius Commission and its subsidiary bodies have been held. Among these sessions, those relevant to the work of the Working Group, are:

- 36<sup>th</sup> Session of the Codex Alimentarius Commission (CAC), Rome, Italy, 1-5 July 2013
- 44<sup>th</sup> Session of the Committee on Food Hygiene (CCFH), New Orleans, United States of America, 12-16 November 2012
- 7<sup>th</sup> Session of the ad hoc International Task Force on Animal Feeding (TFAF), Berne, Switzerland 4-8 February 2013
- 20<sup>th</sup> Session of the Committee on Food Import and Export Inspection and Certification Systems (CCFICS), Chan Mai (Thailand) 18-22 February 2013
- 7<sup>th</sup> Session of the Committee on Contaminants in Foods (CCCF), Moscow, Russian Federation, 8-12 March 2013
- 21<sup>st</sup> Session of the Codex Committee on Residues of Veterinary Drugs in Foods (CCRVDF), Minneapolis, United States of America, 26-30 August 2013

In addition, in the reporting period have been held the sessions of the FAO/WHO Coordinating Committees for Asia (CCASIA18), Tokyo, Japan, 5-9 November 2012; Latin America and the Caribbean (CCLAC18), San José, Costa Rica 19-23 November 2012; Near East (CCNEA7), Beirut, Lebanon 21-25 January 2013 and Africa (CCAFRICA20), Yaoundé, Cameroon, 29 January- 1 February 2013.

In particular, the Working Group may wish to note the following:

**The 36<sup>th</sup> CAC**

The 36<sup>th</sup> Session of the Codex Alimentarius Commission was attended by 126 Member countries, 1 Member Organization (European Union), and 40 international organizations. The Commission adopted some amendments to the Procedural Manual, 25 new or revised Codex standards or related texts or amendments to these texts, and many new or revised provisions for additives and MRLs for residues of pesticides. The Commission also approved 14 new work proposals.

As regards the issues related to the participation of developing countries, the Commission considered the 2012 Annual Report, Progress Report and Monitoring Report of the FAO/WHO Project and Trust Fund for Enhanced Participation in Codex, and noted the timeline for the final project evaluation as the Trust Fund will end in 2015.

The Commission adopted the Codex Strategic Plan 2014-2019<sup>5</sup>, which had been developed by the Executive Committee, considered by the six regional FAO/WHO Coordinating Committees, which were held between September 2012 and February 2013, and circulated for comments prior to the Commission. Similarly with the previous one, the new Strategic Plan includes an objective (1.3) and a specific activity (1.3.1) regarding collaboration in standards development in Codex with the OIE.

<sup>5</sup> [ftp://ftp.fao.org/codex/Publications/StrategicFrame/Strategic\\_plan\\_2014\\_2019\\_EN.pdf](ftp://ftp.fao.org/codex/Publications/StrategicFrame/Strategic_plan_2014_2019_EN.pdf)

Annex XXXIX (contd)Annex III (contd)**Objective 1.3:**

Strengthen coordination and cooperation with other international standards-setting organizations seeking to avoid duplication of efforts and optimize opportunities.

**Activity 1.3.1:** Promote collaboration in standards development in Codex with the World Organization for Animal Health (OIE) and the International Plant Protection Convention (IPPC) on standards that cover the farm to fork continuum and affect Codex and those organizations.

The Commission was informed of the activities of international standard-setting organisations and supported continued cooperation and coordination with international governmental and non- governmental organizations.

**Appendix 1** to this document provides a list of Codex texts and new work proposals relevant to OIE work that were adopted/approved by the 36<sup>th</sup> CAC.

With regard to the sessions of the other committees/task force, the following is an updated on matters particular relevant to the Working Group:

The 44<sup>th</sup> **CCFH** finalised the revision of the *Principles for the Establishment and Application of Microbiological Criteria for Foods* (adopted by the 36<sup>th</sup> CAC). It agreed to proceed with its work on the Guidelines for Control of Specific Zoonotic Parasites in Meat: *Trichinella* spp. and *Cysticercus bovis*. The Committee expressed appreciation to FAO/WHO for the scientific advice provided and put forward new requests. The Committee expressed appreciation to OIE for their contribution to the its work and noted the need for continued collaboration in areas of mutual interest.

Full report: [ftp://ftp.fao.org/codex/REPORTS/Reports\\_2013/REP13\\_FHe.pdf](ftp://ftp.fao.org/codex/REPORTS/Reports_2013/REP13_FHe.pdf)

The 7<sup>th</sup> **TFAF** finalised the Guidelines on Application of Risk Assessment for Feed and the renamed Guidance on Prioritizing Hazards in Feed(adopted by the 36<sup>th</sup> CAC). The Task Force having completed its task was abolished by the 36<sup>th</sup> CAC.

Full report: [ftp://ftp.fao.org/codex/REPORTS/Reports\\_2013/REP13\\_AFe.pdf](ftp://ftp.fao.org/codex/REPORTS/Reports_2013/REP13_AFe.pdf)

The 20<sup>th</sup> **CCFICS** finalised the Principles and Guidelines for National Food Control Systems and the amendments, addressing animal feeding, to the *Principles and Guidelines for the Exchange of Information in Food Safety Emergency Situations* (CAC/GL 19-1995). The Committee agreed to consider at its next Session (13-17 October 2014) proposals for new work on principles and guidelines for the elaboration and management of questionnaires directed at exporting countries; principles and guidelines for monitoring regulatory performance of national food control systems; and the revision of the *Principles and Guidelines for the Exchange of Information in Food Safety Emergency Situations* (CAC/GL 19-1995).

Full report: [ftp://ftp.fao.org/codex/REPORTS/Reports\\_2013/REP13\\_FCe.pdf](ftp://ftp.fao.org/codex/REPORTS/Reports_2013/REP13_FCe.pdf)

The 21<sup>st</sup> **CCRVDF** forwarded for adoption to the 37<sup>th</sup> CAC: (i) Risk Management Recommendations (RMRs) for chloramphenicol, malachite green, carbadox, furazolidone, nitrofurazone, chlorpromazine, stilbenes and olaquinox; (ii) Performance Characteristics for Multi-Residues Methods (MRMs) for Veterinary Drugs (Appendix C of CAC-GL 71-2009); (iii) Provisions on Extrapolation of Maximum Residue Limits (MRLs) of Veterinary Drugs to Additional Species (for inclusion on the Risk Analysis Principles Applied by the CCRVDF); and (iv) provisions of the use of the Concern Form for the CCRVDF (for inclusion on the Risk Analysis Principles Applied by the CCRVDF). The Committee prepared a revised Priority List of Veterinary Drugs Requiring Evaluation or Re-evaluation by JECFA, which includes sisapronil (ADI an MRLs in cattle muscle), ethoxyquin (MRL in shrimp muscle), ivermectin (MRLs in bovine muscle) and the update the toxicological and exposure assessment of chlorpromazine, dimetridazole, ipronidazole, metronidazole and ronidazole.

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With regard to the CCRVDF work on countries need for MRLs (i.e. database on need for MRLs) and in the light of the concern with the lack of progress to move compounds from the database to the priorities list, the Committee agreed to a new approach, proposed by the United States of America, which would help to better frame the need for MRLs and to move compounds from the database to the priorities list.

The Committee supported the proposal and agreed to:

(i) Request FAO and WHO to provide advice on the following questions:

- To identify global animal health needs, i.e. key diseases of concern
- To address each disease of concern identify available veterinary drugs including alternatives
- To report for each of the veterinary drugs on known human health and/or trade concern

(ii) Establish an electronic Working Group, co-chaired by Costa Rica and the United States of America:

- To identify data availability and gaps for the veterinary drugs identified, taking the information contained in the database into account
- To explore alternative ways to fill data gaps, and prioritize veterinary drugs for evaluation by JECFA

The 21<sup>st</sup> CCRVDF recognized the need for Members to actively participate in this work by providing the required information and the importance to involve the OIE as well as other interested organizations.

Full report: <ftp://ftp.fao.org/codex/meetings/CCRVDF/CCRVDF21>

#### **FORTHCOMING CODEX MEETINGS (relevant to the OIE Working Group)**

The **45<sup>th</sup> CCFH**, Ha Noi, Viet Nam, 12 -16 November 2012. Relevant to OIE is the ongoing CCFH work on the Guidelines for Control of Specific Zoonotic Parasites in Meat: *Trichinella* spp and *Cysticercus bovis*, which complements the OIE work on Infection with *Trichinella* spp. (Chapter 8.14.). The CCFH will also consider a discussion paper on the occurrence and control of parasites and the report of the OIE activities.

The provisional agenda is available at: [http://www.codexalimentarius.org/download/report/805/fh45\\_01e.pdf](http://www.codexalimentarius.org/download/report/805/fh45_01e.pdf)

The **8<sup>th</sup> CCCF** will be held in The Hague, The Netherlands, from 31 March to 3 April 2014. The Committee will consider, among others, the report of an electronic Working Group, chaired by Japan and Norway, which was charged to collect data on total mercury and methylmercury in fish species important in international trade in order to review the current GLs; and explore the possibility of revising the GLs or their conversion to MLs and to identify the fish for which the level or levels could apply.

The provisional agenda of the 8<sup>th</sup> CCCF will be posted on the Codex website: [www.codexalimentarius.org](http://www.codexalimentarius.org) as soon as available.

The **28<sup>th</sup> CCGP** will be held in Paris, France, from 7 to 14 April 2014. The Committee will consider, among others, the report of an electronic Working Group<sup>6</sup>, chaired by Canada, which was charged to propose guidance to better take into account relevant work that has been undertaken or is in progress by Codex and OIE and identify means to consistently reference each other's standards and guidance, as appropriate. A physical Working Group with the same mandate would be held prior to the 28<sup>th</sup> CCGP and with the logistical support provided by the OIE.

The provisional agenda of the 28<sup>th</sup> CCGP will be posted on the Codex website: [www.codexalimentarius.org](http://www.codexalimentarius.org) as soon as available.

The **37<sup>th</sup> CAC** will be held in Geneva, Switzerland, from 14 to 18 July 2014. The provisional agenda will be posted on the Codex website: [www.codexalimentarius.org/meetings-report](http://www.codexalimentarius.org/meetings-report).

<sup>6</sup> Invitation to this electronic Working Group was distributed in September with a request to interested Members and Observers to forward the names and contact information of their representatives before 19 October to: [codex\\_canada@hc-sc.gc.ca](mailto:codex_canada@hc-sc.gc.ca).

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**APPENDIX I**

**PART 1 - LISTS OF STANDARDS AND RELATED TEXTS  
ADOPTED BY THE THIRTY-SIXTH SESSION  
OF THE CODEX ALIMENTARIUS COMMISSION RELEVANT TO THE OIE**

**Part 1 – Standards and Related Texts Adopted at Step 8**

Standards and Related Texts	Reference
<b>Committee on Food Hygiene (CCFH)</b>	
Principles and Guidelines for the Establishment and Application of Microbiological Criteria	REP13/FH, Appendix III
<b>Committee on Fish and Fishery Products (CCFFP)</b>	
Standard for Smoked Fish, Smoke-Flavoured Fish and Smoke-Dried Fish	REP13/FFP, Appendix III
Standard for Live Abalone and for Raw Fresh Chilled or Frozen Abalone for Direct Consumption or for Further Processing	REP13/FFP, Appendix IV
Amendment to the Standard for Quick Frozen Fish Sticks	REP13/FFP, Appendix V
Amendments to sections I-6.5, I-8.5 and II-8.7 of the Standard for Live and Raw Bivalve Molluscs (CODEX STAN 292-2008) and Sections 7.1 and 7.2.2.2 to the Code of Practice for Fish and Fishery Products (CAC/RCP52 – 2003)	REP13/FFP, Appendix II
<b>Task Force on Animal Feeding (TFAF)</b>	
Guidelines on Application of Risk Assessment for Feed	REP13/AF, Appendix II
Guidance on Prioritizing Hazards in Feed	REP13/AF, Appendix III
<b>Committee on Food Import and Export Inspection and Certification Systems (CCFICS)</b>	
Principles and Guidelines for National Food Control Systems (Section 1-3)	REP13/FICS, Appendix II
Amendments to <i>Guidelines for the Exchange of Information in Food Safety Emergency Situations</i> (CAC/GL 19-1995)	REP13/FICS, Appendix III

**PART 2 - LIST OF DRAFT STANDARDS AND RELATED TEXTS APPROVED AS NEW WORK BY THE THIRTY-SIXTH SESSION OF THE CODEX ALIMENTARIUS COMMISSION**

Responsible Body	Standard and Related Texts	Reference	Job Code
CCFFP	Code of Practice for Processing of Fish Sauce	REP13/FFP Appendix X	N03-2013

**ACTIVITIES OF THE WORLD HEALTH ORGANISATION (WHO)****Global Foodborne Infections Network (GFN)**

The GFN Steering Committee met in Bogota in September 2013 to:

- Review the 2012-2013 work plan: What went well what are the challenges?
- Identify partners areas of interest and capacity to support GFN in the next year and beyond
- Identify key issues to be taken up at the GFN “ future directions meeting”
- Where possible identify short term work plan for the next 6 months.

Given that key steering committee members were not present at Bogota it was agreed that the future of GFN will be discussed in more detail during an ad-hoc steering committee meeting would be planned for 2<sup>nd</sup> Quarter 2014.

Major areas of consensus reached during the meeting that will set the scene for the ad-hoc meeting include:

**Role of the GFN Steering Committee Members-** A number of steering committee members expressed the need to rethink and revise the roles of responsibility of the GFN Steering Committee and its membership. The work and scope of GFN is evolving, therefore the role of the Steering Committee must be a part of this evolution. For most partners, GFN is something that is done on top of regular day jobs and, in some cases, completely in spare time and weekends. In addition and linked to this, most steering committee partners also have shifting priorities due to both overall institutional strategies and uncertainty in financial allocations.

**Needs-based approaches and closely working with WHO Regional and Country Offices-** It was widely accepted by the steering committee that a bottom-up and needs-based approach should be utilized to guide GFN activities. This approach would ultimately contribute to a more significant impact in countries as resources can be better-targeted to address the identified issues. Assessing the needs also enables GFN participation to better align with partner goals.

**Beyond training and over-all scope-** Breaking free from a habitual training cycle was agreed by all participants and the inclusion of other activities in capacity building efforts, such as focused projects and technical support to countries, was welcomed.

Some activities were identified to take place in the next 6 months and in preparation of the ad-hoc meeting, including exploring a formalized call for pilot projects and updating the governance structure of GFN.

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**Antimicrobial Resistance: Critically Important Antimicrobials for Human Health and WHO Advisory Group on Integrated Surveillance of Antimicrobial Resistance (AGISAR)**

At the AGISAR-5 meeting in Bogota there was a review of the progress achieved so far and a revision of the WHO list of critically important Antimicrobials (CIA).

The topics discussed included:

- Integrated surveillance of antimicrobial resistance
  - Taking stock of the international , regional and national initiatives; FAO, OIE, Tripartite AMR, transatlantic task force on AMR , EMA-EFSA-ECDC joint initiative on Antimicrobial use and AMR data collection.
  - Review of the AGISAR projects in Kenya, Tanzania, Ethiopia, Columbia, Argentina, Venezuela, Cist Rica, Lebanon and Vietnam
- Review of CIA list
- Process for developing the new CIA list:

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- Based on documents shared with the experts before the meeting and a presentation on WHO Guideline development process and role of Guidelines Review Committee (GRC) , the experts charted the way forward for a new Edition of the WHO CIA list as WHO Guidelines. Systematic reviews will be commissioned based on PICO questions currently being drafted as an outcome of Working Group discussions. Depending on funds availability, a new Edition of the CIA list meeting the requirements of GRC could be available between 3 and 5 years.

**WHO Strategic and Technical Advisory Group (STAG) for AMR**

Most recently, the Director-General of WHO convened a strategic and technical advisory group (STAG) for AMR, which held its first meeting in September 2013. At its first meeting the STAG was unanimous in calling for urgent renewal and reinforcement of action to address AMR as a major growing threat to public health. The STAG called for intersectoral engagement and partnering and highlighted the need for WHO to partner with other organizations so that they are empowered and engaged in contributing to the development and implementation of a global action plan for AMR.

\* \* \*

**Joint FAO/WHO Expert Meetings on Microbiological Risk Assessment (JEMRA)**

## 1) Foodborne parasites

Foodborne parasites, especially *Trichinella spp.* and *Cysticercus bovis* , are major public health concern and economic importance in some countries and therefore the Codex Committee on Food Hygiene (CCFH) has been addressing the development of guidelines for control of these parasites. The 44<sup>th</sup> Session of the CCFH held in November 2012 refined its earlier request to FAO/WHO to develop risk-based examples for *Trichinella spp.* and *Cysticercus bovis* to illustrate the level of consumer protection likely to be achieved with different pot-harvest risk management options and requested to focus on the collection and review of existing information and examples and use this to guide further work. According to the request, FAO/WHO issued the call for data in January 2013 to collect relevant information and held a joint expert meeting in Geneva on 22-25 October, 2013 to develop risk-based examples.

WHO and FAO have also conducted peer review of risk profiles of *Trichinella spp.* and *Cysticercus bovis* in response to a request from the 43<sup>rd</sup> Session of the CCFH held in December 2011. The updated risk profiles is made available on the WHO and FAO websites.

## 2) Microbiological criteria

The microbiological safety of foods is managed by the effective implementation of control measures that have been validated, where appropriate, throughout the food chain to minimise contamination and improve food safety. Microbiological criteria (MC) are used not only for determination of acceptance of individual lots of the final product and also for verification of the food safety control systems in the food chain. To facilitate the establishment and implementation of risk-based MC, The Codex has revised the Principles for the Establishment and Application of Microbiological Criteria (CAC/GL 21 – 1997).

The 44<sup>th</sup> Session of the CCFH requested WHO and FAO to provide assistance on development of an statistical and mathematical considerations for elaboration of MC which is an Annex of the Guidelines and to conduct peer review and publication of the practical examples for the establishment and implementation of MC which were developed supported by Codex Trust Fund. Regarding the elaboration of statistical and mathematical aspects on MC, WHO and FAO convened a technical workshop during 8-10 October 2013 in Rome. WHO and FAO are also addressing the peer review process for the examples by publishing them as a special issue of a peer-review journal.

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### **Joint FAO/WHO Expert Committee on Food Additives (JECFA)**

The 21<sup>st</sup> Session of the Codex Committee on Residues of Veterinary Drugs in Foods (CCRVDF) held in August 2013 requested WHO and FAO to provide scientific advice to support developing country requests for veterinary drug MRLs which has been discussed by a CCRVDF working group. WHO and FAO are in the process to better define the scope of the request and will decide what can be done by WHO and FAO, with input from OIE, and report back to the next CCRVDF.

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### **Histamine and other biogenic amines from fish and fishery products**

Scombrototoxin fish poisoning, often called “histamine poisoning,” is caused by ingestion of certain species of marine fish that contain high levels of histamine and possibly other biogenic amines. To review existing criteria for histamine in fish and fishery products developed by the Codex, which were not established by risk-based approach, the 31<sup>st</sup> Session of the Codex Committee on Fish and Fishery Products (CCFFP) held in April 2011 requested WHO and FAO to review and evaluate the public health risk of histamine from fish and fishery products. According to the request, WHO and FAO convened an expert meeting in September 2012 and provided the outcome including the non-observed-adverse-effect level (NOAEL) of histamine for the 32<sup>nd</sup> Session of the CCFFP.

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### **Building capacity to prevent, detect and manage foodborne risks**

WHO is willing to explore opportunities to collaborate with OIE on capacity building activities related to strengthening food safety systems in developing countries.

The exact nature of the capacity building activities would be dependent on the outcome of the country needs assessments but could involve support to develop/strengthen:

- Laws and regulations: enabling legislation and regulations to establish and delegate roles and responsibilities within the food safety system.
- Disease surveillance: covering foodborne diseases (including those caused by chemicals and parasites), and includes supporting laboratory capacity, epidemiological studies, and outbreak investigations.
- Food monitoring and inspection: Monitoring of the food supply for contaminants, covering the procedures and systems and Laboratory capacity to support monitoring.
- Management and policy: food safety policy and risk management activity, and represents the actions that the responsible authorities take. Risk analysis is an underpinning rationale.
- Coordination: mechanisms for information and data sharing, along with analysis, so that well informed decisions can be taken, for both routine risk management and response to outbreaks and emergency events.
- Information and communications, education and training: the provision of food safety information to consumers and industry such as the promotion of food hygiene. It also includes capacity building of the human resources of the food safety system, to characterize existing resources, and mechanisms to increase capacity through training.

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Annex XXXIX (contd)Annex IV (contd)**The Foodborne Disease Burden Epidemiology Reference Group (FERG)****Back ground**

In 2006, WHO established FERG. The members of FERG are a multi-disciplinary group of internationally renowned scientists that are working with WHO to estimate the global burden of foodborne diseases.

The work carried out in the last 7 years includes:

- Epidemiological reviews for mortality, morbidity and disability in each of the major foodborne diseases,
- Identification of models for the estimation of foodborne disease burden where data is lacking,
- Development of source attribution models and expert elicitation methods to estimate the proportion of disease that is foodborne,
- Development of user-friendly tools for burden of foodborne diseases studies and policy situation analysis at country level.

The expected results from FERG will be published in 2014 and will include:

- Burden of disease estimates for all relevant enteric, parasitic and chemically caused Foodborne Diseases published as a WHO report and Atlas
- A Peer-reviewed Paper Series in a high-impact journal
- Foodborne Disease Burden and Policy Situation Analyses for the pilot country studies
- FERG toolkit to support countries in developing national burden of disease estimates

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**Promoting health by decreasing microbial contamination**

WHO promotes as a practical implementation of the One Health approach through education of the rural workers with the new WHO Food safety message, Five Keys to growing safer fruits and vegetables: promoting health by decreasing microbial contamination. Through this new message, based on the successful Five Keys to Safer Food concept, WHO promotes understanding of the links between the health of humans, animals and the environment and how failures in good hygienic practices in one sector can affect the others to improve community health and build sustainable development.

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**The International Food Safety Authorities Network (INFOSAN)**

INFOSAN is a joint FAO/WHO initiative which includes the participation of 181 Member States. The aim of the network is to promote the rapid exchange of information during food safety related events, share information on important food safety related issues of global interest, promote partnership and collaboration between countries, and help countries strengthen their capacity to manage food safety emergencies. To accomplish this, INFOSAN works with a number of partners at the international and regional level. INFOSAN receives information from its members and monitors for food safety related events of potential international concern to alert to its network members. During 2013, the INFOSAN Secretariat has been involved in the coordination of information between network members during more than 50 food safety events with potential international implications. Over the past year, we have continued to focus on expanding membership to INFOSAN by encouraging the designation of additional Focal Points in each Member State. With assistance and encouragement from OIE, the INFOSAN Secretariat has extended INFOSAN membership to include OIE National Focal points for Food Safety in nearly 50 countries in order to further strengthen cross-sectoral coordination and cooperation at national and global levels. More information about INFOSAN can be found at:

[http://www.who.int/foodsafety/fs\\_management/infosan/en/index.html](http://www.who.int/foodsafety/fs_management/infosan/en/index.html)

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Annex V

## **Activities of the Food and Agriculture Organization of the United Nations**

FAO is going through a restructuring process focusing itself through 5 Strategic Objectives to the main goals of the organization. Besides this a decentralisation process is going on and the Members of FAO decreased the general budget.

### **One Health**

FAO cooperates together with WHO and OIE in the Tripartite on issues in the human- animal- environment interface. At the last meeting of the Tripartite in Rome three so-called 'spearheads' were named:

- Antimicrobial Resistance
- Avian Influenza
- Rabies

Food safety aspects may become a topic in future Tripartite meetings.

### **The Syrian crisis**

Besides the human suffering in the Syrian crisis there is also a rise of infectious animal diseases, some of them being a high risk for food safety, like brucellosis. FAO cooperates with WHO and UNHCR and is involved in monitoring and trying to prevent animal disease outbreaks to spread in the region.

### **MERS**

FAO joined a WHO mission to the Kingdom of Saudi Arabia to cooperate with local authorities on the outbreak of Middle East Respiratory Syndrome (MERS). Recently a FAO mission visited the Kingdom of Saudi Arabia to assist local authorities in finding a possible animal source of the disease. Missions to the United Arab Emirates and Qauatar are planned. A possibility that has to be researched is a possible infection route through the food chain.

### **Safe feed**

FAO produced a new manual on safe feed: **Quality assurance for microbiology in feed analysis laboratories** (<http://www.fao.org/docrep/018/i3287e/i3287eoo.htm>)

The manual is also translated in Russian and is also available as e-book.

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Annex XXXIX (contd)Annex VI

## Background and Terms of Reference for proposed work on STEC

### Background

The presence of certain Shiga-like toxin producing *E. coli* (STEC), and their toxins, in some foods gives rise to a significant global burden of food-borne disease. While multiple sources and routes of transmission are now recognized, data based on outbreaks and sporadic infections indicate beef and beef products as an important source of food-borne STEC infection.

Due the public health importance of STEC, their absence in beef traded internationally is an important certification requirement for some countries. Different countries apply different port of entry test requirements and have different requirements for assurance in the country of origin. This lack of alignment can lead to problems in international trade and adds considerable costs to providing assurances.

### Terms of reference

1. Identify practical and effective measures that can be implemented at farm level, including transport, to reduce the prevalence and burden of STEC in the digestive tract or on the hide of bovine animals arriving at the slaughterhouse, to lower contamination levels of fresh beef during slaughter and dressing processes; (It should be noted that different countries use markedly different processes during slaughter and dressing to minimise contamination of fresh meat).
2. Consider inclusion of this guidance in appropriate OIE documents, e.g. FAO/OIE Guide to Good Farming Practices for Animal Production Food Safety, or communication tools.
3. Different cattle production systems and types of slaughter populations should be taken into account, for example, young animals are known to have higher enteric carriage rates than older animals.
4. Sources of information should include the OIE Literature review, recent EFSA scientific opinions, and relevant USDA publications (see list of References below).

### References

1. Scientific Opinion on the public health hazards to be covered by inspection of meat (bovine animals). EFSA Journal 2013;11(6):3266 [261 pp.].
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4. Production Best Practices (PBP) to Aid in the control of Foodborne Pathogens in Groups of Cattle. Beef Industry Food Safety Council Subcommittee on Pre-Harvest: <http://www.bifsc.org/CMDocs/BIFSCO/Best%20Practices/Production%20Best%20Practices.pdf>
5. Shiga Toxin-Producing *Escherichia coli* (STEC) Ecology in Cattle and Management Based Options for Reducing Fecal Shedding. T. R. Callaway, T. S. Edrington, G. H. Loneragan, M. A. Carr, D. J. Nisbet. Agric. Food Anal. Bacteriol. AFABjournal.com Vol 3, Issue 1-2013, pp. 39-69.

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6. Current and near-market intervention strategies for reducing Shiga Toxin-Producing Escherichia coli (STEC) shedding in cattle. T. R. Callaway, T. S. Edrington, G. H. Loneragan, M. A. Carr, D. J. Nisbet. *Agric. Food Anal. Bacteriol. AFABjournal.com* Vol 3, Issue 2-2013, pp. 103-120.
  7. Preslaughter Interventions Could Reduce E. coli in Cattle. GAO-12-257, Mar 9, 2012: <http://www.gao.gov/products/GAO-12-257>
  8. Response to Recommendations from the GAO Food Safety Report on Preslaughter Interventions to Reduce E. coli in Cattle USDA APHIS Veterinary Services Centers for Epidemiology and Animal Health, Fort Collins, Colorado, March 2013.
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Annex XXXIX (contd)Annex VII**WORK PROGRAMME FOR 2014**

The Working Group agreed that its work programme for 2014 would include:

1. Current work

- a) Potential standard development on *Salmonella* in pigs and cattle.
- b) Support potential standard development on *Salmonella* in pork and beef undertaken by Codex (CCFH), by the development of pre-harvest control measures and appropriate cross referencing of existing OIE standards.
- c) Potential development of guidance on STEC in cattle.

2. Monitoring and advice in relation to animal production food safety

- a) *Terrestrial Code* chapter on brucellosis.
- b) OIE and Codex standard development work on *Trichinella (T.saginata)*.
- c) OIE standard development work on porcine cysticercosis.
- d) Generic aspects of control of zoonotic parasites and linkages to potential Codex work (CCFH).
- e) Generic aspects of food safety control systems associated with contamination with enteric pathogens and linkages to Codex work.
- f) Antimicrobial resistance.
- g) Potential food safety implications of biotechnology vaccines.
- h) Developments in nanotechnology.
- i) Veterinary education.
- j) Veterinary legislation.
- k) Zoonoses at the human animal ecosystem interface ('One Health').
- l) Evaluating performance of competent authorities including Veterinary Services.
- m) Modernisation of meat inspection.
- n) Linkage between food safety and animal welfare.

3. Relationship between OIE and Codex

- a) Strengthen and promote continued close collaboration between the Codex Secretariat and the OIE Headquarters.
- b) Promote and encourage enhanced OIE input into Codex texts and vice versa.
- c) Identification of areas of potential collaboration between OIE and Codex on the development of standards.
- d) Follow up on the work of the Codex Committee on General Principles (CCGP) electronic Working Group on Codex/OIE Cooperation.

Annex XXXIX (contd)Annex VII (contd)4. Communication

- a) Support to OIE regarding communication on animal production food safety.
  - b) Review and propose updates for the OIE webpages on animal production food safety.
  - c) Develop a paper to describe advances and new tools in risk based approaches to food safety throughout the food chain.
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