Australian Government

Biosecurity Australia

Generic Import Risk Analysis Report for Chicken Meat

Final Report

Part D

October 2008

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Foreword

This import risk analysis report is issued in four parts:

- Part A contains a brief summary of the import risk analysis (IRA).
- Part B contains background material, an explanation of the method used in the IRA, and a report of the Hazard identification and Hazard refinement steps.
- Part C contains the detail of the assessments for each of the identified hazards, together with the proposed risk management measures, and Health Certification requirements.
- Part D contains appendices with comments received from stakeholders in earlier stages of the risk analysis process, and further explanatory or background material.

This document is Part D

It contains appendices which provide details of comments received from stakeholders in earlier stages of the risk analysis process, as well as further explanatory or background material.

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APPENDIX 1

Stakeholder Responses to the Technical Issues Paper

Australian Chicken Growers' Council Limited

President: G. Sansom
Vice President: C. Jones
Executive Officer: J. Sillince

21 September 2001

Dr David Banks
General Manager Animal Biosecurity
Biosecurity Australia

Dear Sir,

Thank you for this opportunity to comment on the Import Risk Analysis for Uncooked Poultry Meat Issues Paper.

There are a number of comments that ACGC members wish to have on record and these are listed below in the same order as they appear in the document. These comments are attached.

If there are any comments or questions, or if Biosecurity Australia wishes to contact any member of the ACGC please feel free to do so by contacting the Executive Officer.

Yours Faithfully,

(Via E-mail)

Joanne Sillince
Executive Officer

1. General

ACGC notes that the turkey industry is not considered to exist by the paper, yet ostriches, pigeons and quail appear to be granted due consideration.

There appear to be a number of issues not identified in this paper that are critical to a fair analysis of the diseases listed. These include biosecurity issues in the relevant farming industries and government ability to cope with possible outbreaks of disease. In addition the rather unusual structure of these industries in relation to the interface between farming, urban and native species is a singular issue warranting consideration.

2. Scope (page 14)

ACGC believes that quarantine risks may be associated with importation of raw chicken meat including irradiated from many countries.

ACGC notes that the Biosecurity Australia definition of "uncooked chicken meat" includes "the whole or part of the carcass …not subject to processing by heating".

However the application by USA, Denmark, Thailand and New Zealand according to Biosecurity Australia, is only for access of "fresh frozen chicken meat into Australia".

It would appear from this that Biosecurity Australia is being overly generous in its assessment. Under these definitions we noted that dried, pickled, irradiated, salted or otherwise processed carcasses are to be automatically included in this assessment so long as they are not "subject to processing by heating" and apparently regardless of differences in pathogen survival between methods of processing.

ACGC requests that Biosecurity Australia restrict its analysis only to the applications at hand, rather that by loophole allowing additional methods of processing: or alternatively immediately institute analysis of each of these additional possible methods of processing.

3. Technical Working Groups (page 14)

It is noted that the RAP does not include a person with current knowledge of "day to day" chicken farming in Australia, particularly in relation to:

- biosecurity, differences between processors and producers, theoretical versus actual
- day to day animal handling and management (including pick up)
- between batch cleansing
- waste management including bedding, carcasses, protective clothing etc.

These are potentially significant risk areas in relation to spread of disease after incursion, possible spread to wildlife and risks of mutation. ACGC notes that individuals might have intimate knowledge of individual cases, but they are unlikely to

have a good knowledge of the range of practises across the industry. ACGC would be happy to volunteer any one of a number of suitable candidates to a TWG to examine these issues.

ACGC also notes that while a number of the RAP has been "commissioned….to conduct a literature review covering the susceptibility of migratory waterfowl and other native and feral bird species….". This is almost certainly inadequate as an approach. This is because of the relative paucity of published data compared to the significant unpublished data, especially for Australian native wildlife.

ACGC suggests that a TWG of wildlife experts be instituted to examine the available data in the light of their areas of expertise and recommend/discover any additional information sources, as well as suggesting any appropriate areas of research.

ACGC notes that as the poultry industry would probably not find it acceptable to have a wildlife expert review poultry literature and make recommendations, therefore it is no reason to impose the opposite upon wildlife. ACGC would be delighted to recommend suitably qualified experts to assist in this process.

4. Other anticipated assessments (page 14)

It is clear that government estimates between 1994 and 1998 of the "economics" of a Newcastle Disease outbreak in the poultry industry bore no relationship (substantially underestimated) the real costs of this outbreak. This is more disturbing given that this was a relatively small outbreak (in emergency disease terms) in a small and well defined geographic area.

In particular, farming costs and impacts; effects on debt ratios and borrowing (long term economic effects), effects on local businesses (short and long term); contractual issues creating difficulties in recovery, and government assistance were not foreseen or estimated as part of the analysis. On this basis ACGC would request inclusion on any team involved in assessing economic impacts of NDV or vvIBD.

ACGC notes that there is no proposal in this section to examine any future research needs in other areas than vvIBD and would contend that this conclusion is premature and ill-considered. This section does not allow for the possibility that additional assessment areas might arise from analysis of submissions or literature reviews.

In particular ACGC has already identified concerns in relation to possible genetic recombination of NDV exotic and endemic strains. Given that the Australian strains do not appear to behave identically to overseas strains and are clearly genetically prone to mutation; ACGC is still not reassured that recombination is not a reasonable possibility, that current vaccinations would be effective and that any recombinant strain might not be infectious to wildlife.

ACGC formally requests for the second time that Biosecurity Australia consider this matter further.

5. Animal Production (chicken meat industry) structure. (page 21)

This section clearly identifies the main production areas are close to the centres of consumption. However the paper does not identify the issue that arises from this: that is the interface between consumers, producers and wildlife and the likely biosecurity risks that arise therefrom, as well as the close proximity of farms to each other.

This would appear to be an oversight in an issues paper?

In addition there is no mention of the turkey industry in this section. This is not appropriate when other industries such as ostriches and pigeons are covered. Neither is it appropriate to consider turkeys to be chickens, and there are additional issues thrown up by the industry's proximity to chicken production including biosecurity and spread of disease.

6. Contract Growing (page 21)

There is a need for some correction in text:

- there are no "batch to batch" contracts other than for those who are exiting the industry – this is certainly not characteristic. (Second dot point)
- under current laws it is actually unclear whether or not those farmers termed "contract growers" are in fact true contractors or employees – it appears to differ according to which Act is being referenced. It is suggested that this sentence be removed. (second dot point)
- current cost analysis puts the farmer's share of the cost of the chicken at 11% of the wholesale and 6-8% of the retail, not as stated (4th dot point)

7. International Comparisons (page23)

ACGC notes that a significant reason why Australia is apparently uncompetitive in international trade is the costs imposed by government regulation in environmental, labour planning and hygiene areas (Larkin 2001)

Please note that in 2000, the USA provided in excess of A$30M for a poultry meat export enhancement plan.

8. Egg Industry Structure (page24)

Biosecurity issues relating to deregulation, sales "from the door", backyard production and the wide disparity in QA systems should be identified and considered in the analysis.

9. Other potentially affected industries native birds and the environment (page 27)

Perhaps unique in the world, a significant issue arises from the interface between native birds and urban populations; and between native birds and commercial avian industries.

Unlike most other countries where native species are well removed from both the urban population and farming industries, in Australia the presence of urban National Parks, State Forests and refuge areas; and the proximity of poultry farming to the urban environment provides significant risk to the native population. In addition, the sheer variety of native bird life in these zones (again versus other countries) means the risks are increased.

This would appear to be a valid issue for such a paper!

10. Avian Tuberculosis (page 40)

ACGC notes the discussion on this important disease, but notes in passing that multi-drug resistant strains do not appear to have been considered and that the disease is not included in the final list.

We would appreciate confirmation from Biosecurity Australia that this issue has been considered and the published reference that demonstrated that the drug resistance profiles found in Australia are similar or identical to those found elsewhere in the world.

11. Infectious Bursal Disease (page 44)

ACGC notes the discussion on this important disease, but notes in passing that there appears to be no reference to strains that are apparently challenging vaccination. We would appreciate Biosecurity Australia's comment on this important issue.

22 July 2002

Dr Joanne Sillince
Executive Officer
Australian Chicken Growers' Council Limited
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SYDNEY NSW 1041

E-mail: sillincej@nswfarmers.org.au

Dear Dr Sillince

COMMENTS ON UNCOOKED CHICKEN MEAT IMPORT RISK ANALYSIS – ISSUES PAPER

Thank you for your comments on the generic import risk analysis (IRA) for the uncooked chicken meat Issues Paper. The risk analysis panel (RAP) has now considered your comments and responses to the matters raised are set out below.

1. General

The members of the RAP agree that the game, turkey and duck industries should have been included under "other potentially affected industries". This issue is being addressed in the draft Import Risk Analysis document currently in preparation.

Biosecurity issues in the relevant farming industries are being considered in the release, exposure and consequence components of the risk analysis. A draft document outlining the methods of Risk Assessment will shortly be released for Stakeholder comment. This document will outline how biosecurity is taken into consideration in the different sectors of the poultry industry, as well as risks to native and aviary birds and backyard poultry.

2. Scope

This IRA is generic: that is, it deals with the risks of importation of uncooked chicken meat from any country. The scope of the IRA includes meat from the whole or part of the carcass, as it is possible for "fresh frozen chicken meat" to include bones and remnants of other organs, even after evisceration and portioning. Including the entire carcass (other than head, feathers and offal) permits a more thorough assessment of the risks involved in importing uncooked chicken meat. Factors such as resistance to inactivation during further processing, storage and transport will be considered in the risk analysis and risk management section of the draft IRA report. Depending on the outcome of the risk assessment, risk management options may include requiring that only boneless meat may be imported.

3. Technical Working Groups

In July 2000, the Director of Quarantine considered and dismissed the appeals against the composition of the RAP. In reaching the finding that the RAP should be constituted as

proposed, the Director concluded that the panel had an appropriate mix of technical and scientific skills and an appropriate balance of industry and policy experience.

At the time, your Council raised the issue of the arrangements for the technical working groups (TWGs). The Director advised that the composition of TWGs will be decided by the RAP when it meets. It has only been at recent joint meetings of the uncooked chicken meat and egg and egg products panels, that the members considered there are technical issues sufficiently important to require TWGs. As these issues are common to both IRAs, there are efficiencies in drawing on the expertise already represented in TWGs convened by the egg and egg products RAP. We intend to consult stakeholders on the appropriateness of this suggestion in the near future. For your advance information, TWGs already set up by the egg and egg products RAP are as follows:

Salmonella and other bacteria

Julian Cox (chair)	RAP
Tom Humphrey	Microbiologist with expertise in *Salmonella* – UK
Alan Frost	Veterinary microbiologist
Marion Healy	ANZFA
Dianne Davos	*Salmonella* reference laboratory

Newcastle disease

Harvey Westbury (chair)	RAP
Clive Jackson	Poultry disease consultant
Denis Alexander	Virologist with expertise in NDV – UK
Peter Spradbrow	Veterinary virologist with expertise in NDV

Infectious Bursal Disease Virus (IBDV)

Harvey Westbury (chair)	RAP
Thierry van den Berg	Veterinary virologist with expertise in IBDV – Belgium
Tom Grimes	Poultry disease consultant
Jagoda Ignjatovic	Virologist with expertise in IBDV

Animal Biosecurity provides secretarial assistance to these TWGs.

Naturally, the chicken meat RAP reserves the right to appoint additional TWGs to this IRA, and will consult with stakeholders, including the ACGC, as appropriate.

4. Other Anticipated Assessments

The impact of disease outbreaks is considered in the consequence assessment of the IRA. This includes the effects on the poultry industry, as well as direct and indirect effects on animal, plant or human life, health or welfare, the environment, effects on domestic and international trade, changes in consumer demand and effects on other industries, as well as costs of new or modified eradication, control, surveillance/monitoring and compensation strategies. If necessary, TWGs will be consulted for input into this aspect of the IRA.

The RAP has not ruled out the possibility of commissioning research in areas other than IBDV, should the need arise.

5. Animal Production (chicken meat industry) structure

The interaction between consumers, producers and wildlife, and associated biosecurity risks will be dealt with in detail in the exposure and consequence assessments of the IRA. The turkey industry is included as part of an exposure group in the draft IRA document.

6. Contract Growing

The RAP acknowledges the points made by the ACGC on this aspect, and will make relevant corrections in the draft IRA document. We used the descriptive term, 'contract growers', as it is still in common use within the industry. As you point out, their legal status is unclear; however, we note that has little bearing on the assessment of risk associated with possible disease outbreaks.

7. International Comparisons

The RAP acknowledges the points made by the ACGC regarding overseas government subsidies and lower production cost structures for poultry industries. These are important in broader trade policy discussions; however, they are outside the scope of this IRA.

8. Egg Industry Structure

The RAP acknowledges the points made by the ACGC regarding egg industry structure. The likelihood and impact of disease incursion on low-biosecurity poultry industries is considered in the exposure and consequence assessments of the IRA.

9. Other potentially affected industries – native birds and the environment

Wild birds, including native species, are being considered as a major 'at-risk exposure group' in the draft document of the IRA.

10. Avian tuberculosis

In terms of your comments on multi-drug resistant strains, *Mycobacterium avium* (the *Mycobacterium* species most commonly associated with disease in poultry) is notoriously resistant to antimicrobial agents (Tell, Woods, and Cromie 2001). Unlike the genetically-related multiple drug resistance that develops as the result of inadequate treatment of *M. tuberculosis*, drug resistance of *M. avium* is associated with the refractory nature of the cell envelope toward drug penetration, and is therefore universal (Rastogi, Legrand, and Sola 2001; Barrow 2001). Multiple antibiotic resistance in individual birds infected with *M. avium* is sometimes encouraged by inadequate antibiotic treatment, a situation unlikely to occur in commercial poultry flocks, in which the disease is managed by culling of affected birds and environmental control (Tell, Woods, and Cromie 2001; Gill and Blandy 1986).

Human infection with *M. avium* is generally believed to occur from environmental sources, although some epidemiological links have been made with infected pigs

(Rastogi, Legrand, and Sola 2001; Tell, Woods, and Cromie 2001). Poultry are not believed to be a significant source of infection for humans (Rastogi, Legrand, and Sola 2001). Avian tuberculosis is an endemic disease in Australia. *M avium* has been isolated from poultry, feral pigs, soil, water sources, and humans in Australia, and the RAP has decided not to include it as a quarantine risk in the final hazard list, as it does not satisfy the criteria for inclusion.

In addition to complying with quarantine requirements, imported food must comply with the Imported Food Control Act 1992 and the Food Standards Code developed under the Australia New Zealand Food Authority Act 1991. In accordance with this legislation, products intended for human consumption may undergo a separate risk assessment by the Food Standards Australia New Zealand (FSANZ, formerly ANZFA) to determine the public health risks. Any concerns your Council may hold in relation to food safety should be raised with FSANZ.

11. Infectious bursal disease

With regard to IBDV strains that are apparently challenging vaccination, exotic classical, variant and very virulent strains are being included in the risk assessment: this is a very important disease in the draft IRA document.

Thank you, once again, for your comments. As a registered stakeholder, you will shortly receive a draft document outlining the Method of Risk Assessment for the uncooked chicken meat IRA. While this is not a standard procedure in the IRA process, we hope that it will give stakeholders the opportunity to familiarise themselves with the process of IRAs, and to make any comments regarding the proposed methodology, before it is finalised.

Yours sincerely

David Banks
Chair, Risk Analysis Panel

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4. Tell, L. A.; Woods, L., and Cromie, R. L. Mycobacteriosis in birds. Rev. Sci. Tech. Off. Int. Epiz. 2001; 20(1):180-203.

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21 September 2001

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Dear David,

UNCOOKED CHICKEN MEAT IMPORT RISK ANALYSIS ISSUES PAPER COMMENTS

There are three issues that the Federation wishes to comment on. These relate to matters in the Introduction section to the Issues Paper. In summary, these are:

1. Given the apparent importance of the forthcoming publication "National risk Management and the SPS Agreement" to the methodology and approach of the IRA the ACMF believes there is a case for the IRA to be suspended until this key forthcoming publication is made available and an opportunity provided for public review.
2. As the Issues Paper presently stands its economic content is seriously inadequate and misleading. Substantial re-drafting of this section is desirable to provide a proper context for an IRA to proceed.
3. The industry requests that the unacceptable, unsubstantiated and pejorative descriptions of the industry identified under "Environmental Performance of the industry" be removed from the Issues Paper.

Consistency of the IRA with the SPS Agreement

The IRA Issues Paper contains a statement on page 16 to the following effect:

"This IRA provides the basis for consideration of import applications in relation to the importation of uncooked chicken meat. In keeping with the scope of the Quarantine Act, only factors relevant to the evaluation of quarantine risk (i.e. the risk associated with the entry, establishment and spread of unwanted pests and diseases) are considered in the IRA. Questions related to the potential economic consequences of

importation (other that the impact of a pest or disease incursion) are not part of AFFA's process of evaluation in the context of quarantine policy".

ACMF rejects the analysis and implications of this statement. Whilst this statement may or may not be consistent with the Quarantine Act, it is by no means clear that it is consistent with Australia's international obligations under the Sanitary and Phytosanitary (SPS) Agreement of the WTO.

The basis of the inconsistency is that the above statement appears to exclude from consideration economic consequences of importation of chicken meat unless they concern the impact of the disease incursion in a direct and restricted manner. This dictates the extent to which economic factors will be considered in a way that is far narrower than that adopted in the SPS Agreement. Article 5 (3) of the Agreement states:

> "In assessing the risk to animal or plant life or health and in determining the measure to be applied for achieving the appropriate level of sanitary or phytosanitary protection from such risk, Members shall take into account as relevant economic factors the potential damage in terms of loss of production or sales in the event of the entry, establishment or spread of a pest or disease; the costs of control or eradication in the territory of the importing member; and the relative cost effectiveness of alternative approaches to limiting risks".

The SPS Agreement clearly refers to losses in production or sales "in the event of", not "directly due and limited to" the disease as appears to be the interpretation in the IRA.

Furthermore, the SPS Agreement does not say that losses in production should be limited to the losses applying in the industry in which the disease occurs i.e. in the chicken industry alone, or one sub-sector thereof (eg. Chicken growing or processing). There is nothing in the SPS Agreement preventing consideration of losses in other industries or sectors of the economy as long as they take place "in the event" of the disease occurring.

Accordingly, all losses of whatever industry suffers "in the event of" the disease can legitimately and should be considered in the economic analysis.

The clear intent of the SPS Agreement is in contrast to the approach adopted by ABARE in its 1994 *Economic Impact of Newcastle Disease on the Australian Poultry Industry.* There, ABARE's analysis stated, "the effects on the Australian economy beyond the meat sector are assumed to be negligible" (page 33). It only considered the impact of the disease on the poultry industry, stating that "…. the economic impact on the game bird industry, upstream industries such as the feed-grain industry, and the value added processing or downstream industries such as the cooked chicken meat industry are not accounted for in this study (page 44)".

Not only is it inconsistent with the SPS Agreement, but also it is inconsistent with Government Policy perspectives. The Minister for Agriculture, Fisheries and Forestry Mr Truss explicitly recognised the broader impacts of disease incursions on the wider economy, stating that:

> "Should foot and mouth disease be detected in Australia export markets for wool, meat, dairy and live animals worth almost $15 billion a year would be compromised. There would be extensive job losses and business closures across rural and regional Australia (22 May 2001)".

Finally, there can and should be no arbitrary distinction or boundary drawn between the consequences of imports and the consequences of the introduction of the disease. The likelihood of the disease is dependant on the existence and extent of imports. Hence the consideration of economic impacts from imports cannot be separated from the introduction of the disease stemming from those imports.

It is clear that whatever the likelihood of the disease being introduced without imports, e.g. through migratory or smuggled birds, with the imports of poultry products Australia would face a greater risk of disease and hence the impacts of the disease would be multiplied. It should be noted that the IRA is an Import Risk Assessment, not a Disease Risk Assessment.

Accordingly, ACMF submits that all the economic impacts of the introduction of disease and the imports that would allow this event to take place must be considered in the IRA.

This economic impact analysis must be comprehensive and estimate the flow-on effects to related industries. The limited estimation in the ABARE Study cited above and the partial estimates of FMD economic costs referred to in the Ministerial Press Release above are obviously not adequate for the purposes of this IRA. The methodology and input-output linkages of the Australian chicken meat industry are readily available and provided in the economic study cited at item 14 in the Issues Paper bibliography. The ACMF is strongly of the view that a comprehensive economic analysis, by an agreed impartial organisation at arms length from AFFA, such as NIEIR, with full estimation of economic impacts must be undertaken as an integral element of this IRA.

An over-riding concern of ACMF is that the IRA process clearly has to be consistent with the SPS agreement. This is apparently agreed on page 17. However it is also stated on page 18 that:

> "The SPS agreement defines 'appropriate level of sanitary or phytosanitary protection' as the level of protection deemed appropriate by the member country establishing a sanitary or phytosanitary measure to protect human, animal or plant life or health within its territory. This is termed 'appropriate level of protection" (ALOP) in Australia. Further information on Australia's rights and obligations arising from the SPS Agreement may be found in the report "National Risk Management and the SPS Agreement."[6]

The footnote 6 referred to indicates a publication by "Wilson D, and Gascoine D. National Risk Management and the SPS Agreement. In press". Presumably this forthcoming publication reflects the approach of the Issues Paper as to how the SPS Agreement should be interpreted.

Any notion of due process, and proper procedures of government administration, would require that the IRA cannot proceed on the basis of the views contained in such a prospective publication without it actually being published and available to participants in advance of the IRA, and as necessary, being revised in the light of expert analysis and public critique.

Given the apparent importance of the forthcoming publication "National Risk Management and the SPS Agreement" to the methodology and approach of the IRA the ACMF believes there is a case for the IRA to be suspended until this key forthcoming publication is made available and an opportunity provided for public review.

Description of the Industry

The Issues Paper contains a description of the chicken meat industry (page 21ff), which is grossly inadequate, and to some readers perhaps unintentionally demeaning. The Issues Paper presentation in this section appears designed to diminish and degrade the economic significance of the industry and its very substantial economic linkages with other industries in the economy. The substantial published economic work on this issue, including work undertaken with funding by the Department itself has been ignored by the Issues Paper.

Numerous and comprehensive published economic analyses of the industry, including that conducted by NIEIR cited in the Bibliography, have been ignored. These studies show the large upstream and downstream linkages of the industry estimating its turnover at $3.5 billion and employment generation of 120,000 jobs with breakdown by State and comparisons with other meat industries. The sketchy economic material in the Issues Paper is inadequate and misleading as it presently stands.

Particular exception is taken to the statements on page 21 to the effect that:

> "The chicken meat industry is dominated by two large private companies which account for about 65% of chicken meat production and processing. The industry is distinguished by the fact that all growing/processing companies are effectively family-owned."

Firstly the assertion that two companies dominate the industry has connotations relevant to the Trade Practices Act relating to competition in the industry, which are unacceptable. Secondly of what possible relevance is it to the economic status of the industry, or the IRA that they are family owned? Is the Issues Paper trying to suggest that the chicken meat industry is some bucolic cottage industry, which is really not part of mainstream economic activity?

Surely basic publicly available economic information about the industry can be provided in this section of the Issues Paper. Facts such as – chicken meat industry is Australia's most efficient meat industry; that chicken meat production and consumption has grown so successfully that it is now about to become Australia's most popular meat; that the chicken meat industry is next in absolute size to the beef industry; that it has assets of around $6 billion, turnover of $3.5 billion and creates 120,000 jobs; that it is highly vertically integrated with significant linkages to the Australian food industry

and the economy as a whole should be presented in any description of the industry's economic status.

A similar inadequacy in the economic value of Australia's native bird population. On page 27, a cursory analysis of the issue concludes with the statement that it is difficult to measure the economic value of native birds, although it is conceded that they have high "conservation value".

Surely the Issues Paper can do better than this – was the tourism industry for example asked what the economic impacts would be of imported diseases destroying our native bird population? Were the Environmental Department, the CSIRO, or professional environmental economists asked to assess the value of Australia's native bird population?

As the Issues Paper presently stands its economic content is seriously inadequate and misleading. Substantial re-drafting of this section is desirable to provide a proper context for an IRA to proceed.

Environmental Performance of the Industry

The Issues Paper's statements regarding the industry's environmental performance and standing are totally unacceptable. On page 22 it is stated that:

> "A major challenge facing the industry relates to community concerns regarding its environmental performance, particularly in relation to odour levels. Local governments and State and Federal Ministers from time to time receive complaints from citizens living near to poultry farms."

The apparent intention of this is to imply that the industry is not performing to the highest environmental standards. This is entirely inaccurate and ignores the industry's longstanding record of successful development in harmony with the vast majority of its neighbours.

> "From time to time. ……citizens living near poultry farms" does not constitute a *major* challenge. The industry has always addressed and dealt with its environmental responsibilities professionally and it will continue to do so. Its environmental record is consistent with its status as Australia's most efficient meat and livestock industry.

The industry requests that the unacceptable, unsubstantiated and pejorative descriptions of the industry identified under "Environmental Performance of the Industry" be removed from the Issues Paper.

Thank you for the opportunity to comment.

Yours Sincerely

Dr Jeff Fairbrother
Executive Director

5 April 2002

Dr Jeff Fairbrother, Executive Director
Australian Chicken Meat Federation Inc.
PO Box 579
North Sydney
NSW 2059

Dear Jeff

Comments on Uncooked Chicken Meat Import Risk Analysis – Issues Paper

Thank you for your comments on the Generic Import Risk Analysis (IRA) for Uncooked Chicken Meat Issues Paper. The Risk Analysis Panel (RAP) has now considered your comments and responses to the matters raised are set out below.

1. "National Risk Management and the SPS Agreement" by Wilson, D. & Gascoine, D. was a lecture given at a conference called "Globalisation and the Environment" held at the University of Melbourne Business School, February 1999. Proceedings were published in 2001 by Edward Elgar with the editorial by Robertson, D, and Kellow, A. The article has also been available from the Biosecurity Australia web site for the last 12 months. The content of this article has been open for public comment for some time. The RAP does apologize for the poor referencing of this article in the Issues Paper.

The statement on page 16 of the Generic Import Risk Analysis (IRA) for Uncooked Chicken Meat Issues Paper refers to the fact that only the impact of a pest or disease incursion can be considered as a potential economic consequence. This statement is pointing out that any deleterious effects that importation may have on the economics of domestic production, cannot be considered as part of the risk assessment. This is consistent with Australia's rights and obligations as a signatory to the SPS Agreement. Article 5 (3) of the agreement refers to the impact as a result of a disease incursion. In summary, only in the event of a disease outbreak can impacts and consequences be evaluated.

In the consequence assessment of this IRA reference will be made to losses in production and sales in the event of an outbreak of disease under a specific outbreak scenario. The consequence of the different scenarios is cumulative. This will include direct and indirect consequences. As you have correctly pointed out this will encompass all aspects of the industry including the flow on effects. Losses to other relevant industries will also be considered in the consequence analysis.

Under the SPS Agreement and the Quarantine Act a distinction is made between the consequences of imports and the consequences of disease introduction. This IRA is only concerned with the latter. The IRA includes the following steps:

i. Hazard Identification
ii. Risk Assessment (Release assessment, Exposure assessment, Consequence assessment and risk estimation) and

iii. Risk management.

The RAP sees no benefit in engaging a third party to establish an economic assessment. It must be pointed out this is a qualitative assessment in which impacts will be given ratings ranging from 'unlikely to be discernible' to 'highly significant' on local, district, regional or national level relevant to the specific disease outbreak scenario.

2. It was not the intention of the Generic Import Risk Analysis (IRA) for Uncooked Chicken Meat Issues Paper to be in any way demeaning to the chicken meat industry. The RAP is aware of the substantial economic linkages the chicken meat industry has with other industries.

The main purpose of the Issues Paper was to outline potential hazards requiring further assessment. The information given regarding the economic aspects of the chicken meat industry was included as background information only. I would further point out that both ACMF and AEIA were provided with early drafts of the background information being prepared for inclusion in the egg and uncooked chicken meat issues papers. The material included in the issues paper takes account of comments received from the ACMF and the AEIA at that time. The RAP maintains that this information was accurate at the time of preparation. However, any additional information regarding economic aspects of the chicken meat industry would be welcomed and will be included in the draft IRA as appropriate.

The statement on page 21 to which particular exception was taken are factual. They were not intended to imply connotations relevant to the Trade Practices Act nor were they intended to be pejorative to the chicken meat industry.

Whilst the RAP would welcome relevant economic information, the efficiency of the industry, its popularity in relation to other meats and its level of vertical integration are not relevant.

The RAP maintains that it is difficult to quantify the value of native populations of birds. Native birds and the environment will be considered in depth in the consequence assessment component of the IRA. Each disease identified as a hazard will be examined individually in order to ascertain its potential to have adverse effects on wildlife and the environment. Environment Australia is a stakeholder group who will have significant input in this area. Again the RAP would like to point out that there will be adequate consideration given to Australian wildlife and the environment.

Under the Guidelines for Import Risk Analysis, Draft Sept 2001, the indirect effects on the environment include effects on "biodiversity, endangered species, the integrity of ecosystems, reduced tourism, reduced rural and regional economic viability and loss of social amenity, and any 'side effects' of control measures." Whilst this is a draft the underlying principles are not expected to change. The issues regarding indirect effects, which you have raised in your response, are very relevant. They will be included in the IRA process.

3. It is not the intention of the Generic Import Risk Analysis (IRA) for Uncooked Chicken Meat Issues Paper to imply the chicken meat industry is not performing to the

highest environmental standards. The point raised is driven by changing community expectations regarding environmental performance of all intensive industries. Again, I would like to point out that both the ACMF and the AEIA had the opportunity to informally comment on early drafts of the section in question. The Issues Paper, as published, reflects comments received from these organisations at that time.

Thank you, once again for your comments. You will shortly receive a draft document outlining the Method of Risk Assessment for the Uncooked Chicken Meat Import Risk Analysis. While it has not been a standard procedure to distribute the draft methods document to stakeholders, we hope that this will give them the opportunity to familiarise themselves with the process of Import Risk Analysis, and to make any comments regarding the proposed methodology before it is finalised.

Yours Sincerely

David Banks
Chairman, Risk Analysis Panel

Australian Egg Industry Association Inc

Suite 502, 12-14 Ormonde Parade, Hurstville NSW 2220
P.O. Box 569, Hurstville NSW 1481
PH: 02 9570 9222 FAX: 02 9570 9763
Email: enquiries@aeia.org

IO1-406
12 September 2001

Mr Warren Vant
Animal Biosecurity
Agriculture, Fisheries & Forestry Australia
GPO Box 858
Canberra ACT 2601

Mr Warren Vant,

I refer to Animal Biosecurity Policy Memorandum 2001/16 in relation to Uncooked Chicken Meat Import Risk Analysis, Issues Paper.

The Australian Egg Industry Association has reviewed the Technical Issues Paper. We wish to advise that a hazard that has not been fully emphasised is the hazard of introducing vaccine virus strains different to the ones we use in Australia on poultry carcasses. This could lead to the introduction of different strains or organisms into the Australian poultry population.

The manner in which these issues are addressed will be of particular importance to the Australian Egg Industry Association, as it will be the basis of the AQIS approach to egg product importation. Therefore, we would like to be kept informed on the next stage of risk analysis of Uncooked Chicken Meat.

We trust these comments are of assistance.

Yours faithfully,

Nola Komis
EXECUTIVE OFFICER

21 March 2002

Ms Nola Komis, Executive Officer
Australian Egg Industry Association
PO Box 569 Hurstville
NSW 1481

Dear Nola,

Comments on Uncooked Chicken Meat Import Risk Analysis – Issues Paper

Thank you for your comments on the Generic Import Risk Analysis (IRA) for Uncooked Chicken Meat Issues Paper. The Risk Analysis Panel (RAP) has now considered your comments and responses to the matters raised are set out below.

The RAP agrees some vaccines used overseas may contain specific strains, which are exotic or more virulent than endemic strains. The risks posed by the possible importation of such biologicals will be considered in the draft IRA report.

Thank you, once again for your comments. You will shortly receive a draft document outlining the Method of Risk Assessment for the Uncooked Chicken Meat Import Risk Analysis. While it has not been a standard procedure to distribute the draft methods document to stakeholders, we hope that this will give them the opportunity to familiarise themselves with the process of Import Risk Analysis, and to make any comments regarding the proposed methodology before it is finalised.

Yours Sincerely,

David Banks
Chairman, Risk Analysis Panel

Australian Veterinary Association

From: Kevin Doyle (avavet@ava.com.au)
Sent: Thursday, 9 August 2001 11:15
To: David.Banks@aqis.gov.au: David.Buckley@aqis.gov.au
Subject: RE: AFFAAnimal Biosecurity Policy Memorandum No 2001/16

David/David

Following is AVA comment on this memorandum. We have not yet received a response from AVPA.

Page 40 Avian TBthis seems to imply that people can become infected from exposure to infected chickens. So far as I know this is definitely not the case with normal healthy people both chickens and people are infected from environmental sources as Mycobacterium avium complex (MAC) strains of bacteria are ubiquitous environmental organisms.

Most human MAC infections occur in AIDS patients and they are probably also infected from environmental sources but handling raw infected tissues (liver, spleen) or ingestion of undercooked chicken offal may be a risk??

Page 46 Chlamydiosis – I would think that there is some risk of aerosol exposure from handling infected chicken carcasses.

Page 50 S Typhimurium DT 104 is only one of a number of multi-resistant S Typhimurium phage types that have been identified over the past 20 years. This strain is apparently starting to wane slightly so it's highly likely it will be replaced with another multi-resistant phage type. I think we should ensure that we avoid all multi-resistant phage types.

Regards,

Kevin

Dr Kevin Doyle
National Veterinarian
Australian Veterinary Association
PO Box 4257
Kingston, ACT 2604
Australia

Ph: (02) 62738855
Fax: (02) 62738899

21 March 2002

Dr Kevin Doyle
Australian Veterinary Association
PO Box 4257
Kingston ACT 2604

Dear Kevin,

Comments on Uncooked Chicken Meat Import Risk Analysis – Issues Paper

Thank you for your comments on the Generic Import Risk Analysis (IRA) for Uncooked Chicken Meat Issues Paper. The Risk Analysis Panel RAP has now considered your comments and responses to matters raised are set out below.

The RAP accepts your comments regarding TB and Chlamydiophilosis. As both diseases are considered endemic, it is intended that no further assessment will be carried out. The human health aspects associated with the Importation of Uncooked Chicken Meat will be carried out by ANZFA.

It is accepted that there are other multi-resistant strains of S Typhimurium than DT104. The incidence of the different strains worldwide will be examined in the release component of the import risk analysis.

Thank you, once again, for your comments. As a registered stakeholder, you will shortly receive a draft document outlining the Method of Risk Assessment for the uncooked chicken meat IRA. While this is not a standard procedure in the IRA process, we hope that it will give stakeholders the opportunity to familiarise themselves with the process of IRAs, and to make any comments regarding the proposed methodology, before it is finalised.

Yours sincerely

David Banks
Chair, Risk Analysis Panel

Australian Veterinary Poultry Association

Comments on Technical Issues Paper (ABPM 2001/16)

A response by the AVPA [Australian Veterinary Poultry Association] on Imports Risk Analysis Technical Issues Paper – Fresh Chicken Meat

The AVPA appreciate the opportunity to contribute to the Technical Issue paper on Importation of Fresh Chicken meat.

There are several issues that the AVPA felt was important to focus on.

1.The standards of poultry meat processing in various countries

The standards of poultry meat processing in various countries would affect the degree of risk although not necessarily the potential hazards. Some comparative data on different processing methods between Australia and the major poultry meat exporters could be useful.The AVPA assumes that a detailed risk analysis based on probabilities, practices in various countries and sound epidemiological data, particularly in the context of the resistance of different pathogens to chemical and physical inactivation as would be encountered in the processing plant is planned.

The AVPA document does not intend to address diseases where table 2 is indicating 'retainment for further risk assessment' unless significant information in the issue paper is lacking or there is a need to focus attention on some general elements.

2. Potentially affected Australian Animal Industries

Secondary Industries

The omission of the game industry, turkeys, ducks, and geese from the list of 'other potentially affected Industries' is puzzling. While these industries may have been considered it does not appear so. At least some of the diseases listed under Potential Hazards can infect the above and cause a significant problem in these industries. For example, ND and HPAI are 2 diseases with the potential for a significant impact on some of these industries.

In addition to the above, significant diseases that can particularly affect these industries have not been listed under potential hazards eg, Erysipelas. Anthrax was listed a significant disease for ratite in the Technical Issues Paper on the Importation of Fresh Eggs. The disease is not mentioned in relation to ratites in the Fresh Meat Technical Issues Paper. The risk from fresh poultry meat should be regarded as a more significant than the risk from eggs.

3. Other Diseases

Other diseases that can be transmitted in chicken meat and with potential impact on poultry (including chickens) have not been mentioned. These are:

Big Liver Spleen
Rotavirus
Avian Intestinal Spirochaetosis

4. Current Quarantine Policy Domestic Arrangements

The information provided in relation to the National NDV survey is correct but additional information has emerged since the completion of the National Survey. The isolation of a precursor Peats Ridge virus and a virus with a Peats Ridge like sequence from 4 farms in Sydney in April/May 2001 reported at the NSW PHLG meeting should be considered and for the sake of international credibility and transparency be included in future drafts. The isolation of Peats Ridge and Peats Ridge like sequence in 2000 in NSW was also reported in international scientific publications recently (Gould et al 2001). The finding of precursor viruses in the context of future control of the disease is significant in line with Westbury (2001) where the presence of virulent virus in some stock of the Peats Ridge virus has been demonstrated. While the presence of precursors ND virus in the Australian situation needs to be transparent it also provides a sound background to question risk associated with the importation of fresh chicken meat from countries where low virulence ND virus exists or low virulence NDV vaccines are used. The Quasispecies phenomena may lead to the importation of chicken meat contaminated with v NDV type not present in Australia although no outbreak has been reported or suspected in the exporting country.

The extrapolation of the Quasispecies phenomena to Avian influenza may focus some attention on the concept of restricting the perceived risk from the importation of fresh chicken meat to highly pathogenic avian influenza (HPAI). The presence of non-HPAI may indicate only the dominancy of the consensus sequence at a given time in the population but does not exclude the presence of a minority sub-population of HPAI at the same time. (Eigen, 1993)

5. Assessment criteria

The AVPA supports the criteria (but not necessarily the interpretation of these criteria) used for refinement of the potential list.

The emphasis in the criteria on the word **may** in “the pathogenic agent may be present in the exporting countries” is important and should be considered in the context of the quasi species phenomena.

Additionally the AVPA would like to suggest that **biologicals** used in the exporting country should be identified as agents that may have harmful effects on animals, plants or the environment. The potential hazard from live vaccines used overseas should be recognised, as many of the overseas live vaccines contain agents that may in some cases be more pathogenic than the Australian field strains. ND and IBD vaccines provide one example.

It should also be recognised in the context of risk assessment that some of the vaccines present in Australia would not effectively protect against some of the antigenic types present overseas. Hence, the scope for quarantine assessment of agents of concern should extend beyond pathogenicity alone.

Additionally the AVPA believes that the use of medications not allowed in Australia like for example Baytril**,** should be considered in the context of importation of fresh chicken meat from countries where the usage pattern of poultry medication is different from the Australian scene. US banned the imports of animals treated with Furazolidone in the early 1990's. The potential for development of drug resistance in humans through the introduction of fresh chicken meat should be considered.

6. List of diseases and their assessment

The AVPA does not agree with the assessments for several of the diseases listed under "Potential for transmission or occurrence in Australia" in table 2.

F Pox

It is not clear why the issue paper has not recognised the potential for transmission in poultry via uncooked chicken meat. The virus can be present in the skin as well as the diphtheritic form. The latter may be a source of introduction through uncooked chicken meat. The virus may possess the ability to survive the processing plant environment particularly since the Issue Paper does not specify conditions for processing. Mechanical transmission of F Pox by individuals handling imported fresh meat should be considered.

While F. Pox is present in Australia, some recently isolated variant strains in the USA had little or no immunological relationship to strains of F Pox used for production of vaccines. The risk from such variant strains should be considered.

Salmonella enteritidis

The Issues Paper acknowledged the occurrence of SE in a back yard layer flock in Victoria, investigations in Tasmania and anecdotal reports of SE infection in table eggs in North Queensland in the early 90's.

There are reports from the Australian Salmonella Reference centre indicating the isolation of SE from chicken meat in NSW (1995 annual report) from egg white in QLD (1996 annual report), from chicken layers in QLD (1994 annual report).

Therefore, to indicate in table 2 that SE is not present in Australia[3] or if present is subject to notification or/and official control or eradication program is not accurate for all of Australia.

SE is not listed under the diseases covered by Government-Industry compensation arrangements, nor is it notifiable in all States; neither can one state that it is not present in Australia without a current widespread active Surveillance Program.

The AVPA believes that regardless of what is at stake, data on the occurrence of diseases or infectious organisms in Poultry in Australia should be accurate and

comprehensive in order not to jeopardise the international creditability of the risk assessment.

Never the less, the disease should remain on the refined list because the highly pathogenic UK/USA Phage types 4 and 8 have not been isolated from Australian Poultry.

Avian Spirochaetosis

"Spirochaetosis can be transmitted virtually by any means whereby blood, excreta, or tissue from an infected live or recently dead bird comes in contact with an infected bird" (Barnes page 319 in Diseases of Poultry 10th Ed).

It is not clear why the word "No" was inserted in table 2 in the column 'potential for transmission in chicken meat via uncooked chicken meat' since the necessity for arthropod vector is not indisputable. This point may not change the final outcome in the refined list but it is important to be scientifically on sound ground.

Infectious Bronchitis

Table 2 does not regard chicken as a potential source of transmission. The rationale is not clear in view of the following:

1. The virus can be present in caecal tonsils and intestines (hence a potential for carcass contamination).
2. The recognition that the virus can spread on equipment and personnel.
3. The ability of the virus to survive outdoors for up to 56 days.

Disregarding fresh chicken meat as a potential source is particularly perplexing when Quail Bronchitis, another respiratory pathogen with a similar mode of transmission, is ticked as "Yes" under the same column.

F Cholera

Fowl Cholera should be retained for further risk assessment. While FC occurs in Australia, FC strains more virulent that the strains identified in chickens in Australia have been reported in South East Asia. (Frost, AVPA Scientific Meeting, QLD, 1999). The control of the disease in Australia relies largely on autogenous vaccines, which may not be available in time to counter more virulent FC strains.

Riemerella anatipestifer

The AVPA acknowledged the inability to produce the disease by the oral route. However inability to produce disease does not necessarily mean inability to infect or survive in the environment. Thus, infection through contaminated imported chicken meat may eventually result in contamination of the environment and subsequent penetration of serotypes not present in Australia through laceration etc.

The potential for transmission through chicken meat is not restricted to the immediate production of disease following oral ingestion of the organism. Its presence in the

environment where R anatipestifer was reported to be able to survive in litter up to 27 days, could result in secondary infection through skin laceration etc.

The acceptance of the ability of organisms to produce infection without disease and the potential survival in the environment with subsequent production of disease when gaining entry via a different route should lead to re-evaluation of the potential of other pathogens to spread via imported fresh chicken meat.

Mycoplasma iowae

Mycoplasma iowae is not present in Australia. It has been isolated in chickens in other countries. It is associated with both respiratory pathology as well as synovitis.

Therefore it is important to evaluate table 2 with regard to this disease carefully. Is the spread of the organism restricted to direct contact with live birds?

The organism can survive up to 6 days on several materials and it has a predilection for the digestive tract. (Thus, the potential for contamination of the carcass). Infection has been reported following hand contact.

The statement in page 58 "spread of the organism appears to be restricted to direct contact" (presumably with live birds) can be challenged. Kleven (page 231 in Calnek 10th Edition) acknowledged fomites as a mode of transmission into clean flocks.

Fresh chicken meat should be considered as a potential source of introduction into Australia.

Avian Chlamydiophilosis

While the organism may depend on the host cells for energy, it is capable of survival outside the host. Inactivation of the organism at temperature of 4ºC may take up to 50 days (page Avian Diseases 3, 67-79).

Additionally the following points can support the argument that Chlamydiophilosis may be able to survive and remain infectious in poultry **carcass** for considerable length of time.

- Personnel who worked in turkey meat **further** processing "have also become infected" (Andersen et al in Calnek 10th Ed page 333)
- Cooks in kitchens were reported to become infected (Steele JH, 1980 in CRC Handbook series in Zoonosis, CRC Press)
- The USADA prohibits inter and intra state movements of the poultry carcasses and offal in which Chlamydophilosis has been confirmed (Steele JH, 1980 in CRC Handbook series in Zoonosis, CRC Press)
- The isolation of Chlamydophilosis from arthropods that are considered mechanical vectors (Steele JH, 1980 in CRC Handbook series in Zoonosis, CRC Press)

Thus the AVPA does not believe that the importation of fresh chicken meat poses no risk of transmitting Chlamydophilosis to susceptible Australian birds and people.

The infection is common in Australia **but** is not associated in Australian poultry with the same severity as reported in other countries (Andersen et al in Calnek 10th Ed, page 333, Arzey et al AVJ 67, 1990). The Egg Technical Issue paper acknowledged that some strains and serotypes are exotic and that differences in virulence between serotypes have been reported. The isolation of multi-antibiotic resistance Chlamydia psittaci strain JSD in ducks in the UK (The Veterinary Record Feb 26, 1983) should be considered along the same line as the multi-resistant strains of S typhimurium for example. The disease should be retained for further risk assessment.

EDS

The resistance of 3 different genotypes of EDS76 should be recognised. The Australian isolate forms the 3rd group. The 2 genotypes isolated from European chickens or ducks in the UK have not been found in Australia.

Reovirus

The strains in Australia are generally regarded as low virulence (Meanger et al Aust Vet J Vol 75 no 6, page 430), whereas those in the USA and Europe are considered of sufficient concern to justify widespread vaccination of breeders and sometimes broilers.

An introduction of some of the overseas species may cause significant health problems and the lack of local vaccine would tend to exacerbate the problem.

Thank you for the opportunity to comment,

AVPA Importation and Exotic Diseases Sub-Committee

21 March 2002

Dr George G. Arzey, Convenor
AVPA Importation and Exotic Disease Sub-Committee
C/ Bartter Enterprises
PMB 8 CAMDEN
NSW 2570

Dear Dr Arzey,

Comments on Uncooked Chicken Meat Import Risk Analysis – Issues Paper

Thank you for your comments on the Generic Import Risk Analysis (IRA) for Uncooked Chicken Meat: Issues Paper. The Risk Analysis Panel (RAP) has now considered your comments and responses to matters raised are set out below.

1. The standards of poultry meat processing in various countries

The scope of the IRA, as defined in the issues paper, requires countries wishing to export uncooked chicken meat into Australia to have abattoir and processing standards at least equivalent to those contained in the "Australian Standard for Hygienic Production of Poultry Meat for Human Consumption". Factors such as resistance to inactivation will be considered in the risk analysis and risk management section of the draft IRA report.

2. Potentially affected Australian Animal Industries:

The members of the RAP agree that the game industry and poultry other than chickens should have been included under 'Other potentially affected industries'. All diseases such as ND and HPAI, which affect chickens and other species, will be considered. The impact of these diseases on industries other than the chicken meat and egg industry will be considered in the consequence component of the IRA. On the inclusion of additional diseases, Erysipelas is considered endemic and subsequently does not meet the criteria for inclusion as a hazard. On the other hand, while Anthrax is endemic it is a notifiable disease subject to control programs, and so fulfils the criteria for inclusion as a hazard. However chickens are highly resistant to infection with B. anthracis and disease occurs rarely in birds in endemic areas. It was decided by the RAP not to include Anthrax as a potential hazard for these reasons.

3. Other diseases

Big Liver Spleen Syndrome and Avian Intestinal Spirochaetosis are considered endemic and there is no published evidence of significantly greater pathogenicity in exotic strains. Consequently the diseases do not satisfy the criteria for inclusion in the list of hazards retained for further assessment. Rotavirus has not been reported in Australia but based on clinical evidence most likely occurs. The RAP does not consider rotavirus as a hazard requiring further risk assessment.

4. Current Quarantine Policy – Domestic Arrangements

The RAP noted your points made in regard to Newcastle Disease (ND) and Highly Pathogenic Avian Influenza (HPAI). Both diseases have been included as potential hazards. The points you have raised will be considered in the release, exposure and consequence components of the risk assessment analysis.

5. Assessment Criteria

The RAP agrees that some vaccines used overseas may contain specific strains, which are exotic or more virulent than endemic strains. Biologicals used in the exporting country will be considered. The RAP is aware that in the event of exotic strains of some diseases becoming endemic, currently used vaccines may prove ineffective. The impact this has on the domestic industry will be investigated in the consequence assessment component of the IRA. The potential for development of drug resistance through the importation of uncooked chicken meat, while it is a significant issue, is outside the scope of the Quarantine Act 1908. Antibiotic residues in meat pose a potential food safety risk and therefore fall under the responsibility of ANZFA.

6. List of diseases and their assessment:

Fowl Pox: The RAP acknowledges that the presence of Fowl Pox on the skin ultimately means it is present on the chicken. From an epidemiological perspective the imported uncooked chicken meat would require mechanical contact with injured or lacerated skin of an Australian chicken. The RAP considers the likelihood of this occurring to be negligible and subsequently Fowl Pox will not be included in the list of potential hazards.

Salmonella* Enteritidis*: The RAP acknowledges that stating that *Salmonella* Enteritidis is not present in Australia is misleading. However, there have been no reported isolations of *Salmonella* Enteritidis from commercial meat chicken flocks in Australia. Introduction of these pathogens, more pathogenic exotic strains of this serovar or exotic antibiotic resistant strains would have a significant impact on the Australian poultry industry through their effect on public health. These bacteria are significant pathogens requiring further assessment.

Avian Spirochaetosis: The RAP acknowledges the potential for transmission of Avian Spirochaetosis through infected live birds and will amend further documentation. Avian Spirochaetosis is considered endemic and will not be considered for further assessment in the IRA of uncooked chicken meat.

Infectious Bronchitis: The RAP considers that chicken meat, per se, does not pose a risk in the transmission of Infectious Bronchitis. However, it is accepted that parts of the kidney or reproductive tract could remain attached to the carcass following evisceration. For this reason it has been decided to include Infectious Bronchitis as a disease requiring further assessment.

Fowl Cholera: There is some controversy regarding the existence of overseas strains more virulent than those found in Australia. After consideration of opinions provided by independent consultants (Dr P Blackall and Dr A Frost), the RAP concluded that there is insufficient evidence that overseas strains of fowl cholera are more virulent

than Australian strains. The RAP has, therefore decided to exclude fowl cholera from further risk assessment.

Riemerella anatipestifer: The RAP accepts the points made in regards to possible transmission of disease. It is acknowledged that infection does not mean disease and that contamination of the environment can lead to subsequent spread of a disease agent. While *Riemerella anatipestifer* can be experimentally inoculated into chickens to cause disease, naturally occurring disease of chickens is uncommon. However, concurrent infection of an Australian flock with *Riemerella anatipestifer* and infectious bronchitis virus has been reported. *Riemerella anatipestifer* is present in Australia, and while some serotypes may be exotic, this disease was not considered by the RAP to be a potential hazard associated with the importation of chicken meat.

Mycoplasma iowae: The RAP considers the points made regarding *Mycoplasma iowae* to be prudent. As *Mycoplasma iowae* is exotic and can infect chickens it will be included as a disease requiring further assessment.

Avian Chlamydiophilosis: The RAP acknowledges the human health aspects of Avian Chlamydiophilosis. No difference in pathogenicity between endemic and exotic strains has been reported. Multi-resistant strains have been found in ducks. However, as this IRA will be considering only the importation of uncooked chicken meat, these strains were not considered to be relevant to this IRA. Consequently Avian Chlamydiophilosis is not considered as a disease requiring further assessment.

Egg Drop Syndrome (EDS76): The RAP acknowledges the points made regarding Egg Drop Syndrome genotypes. However, there is no evidence that overseas genotypes are more pathogenic for chickens than the Australian genotype, and therefore EDS has not been included for further assessment.

Reovirus: The RAP acknowledges the points made regarding strains of reovirus and vaccination practices overseas. Reovirus will, therefore be addressed in more detail in the next phase of the risk assessment.

Thank you, once again, for your comments. You will shortly receive a draft document outlining the Method of Risk Assessment for the Uncooked Chicken Meat Import Risk Analysis. While it has not been a standard procedure to distribute the draft methods document to stakeholders, we hope that this will give them the opportunity to familiarise themselves with the process of Import Risk Analysis, and to make any comments regarding the proposed methodology, before it is finalised.

Yours Sincerely,

David Banks
Chairman, Risk Analysis Panel
Cc: Dr Kevin Doyle
Australian Veterinary Association
PO Box 4257
Kingston ACT 2604

Department of Business, Industry & Resource Development, Northern Territory

Reference ABPM 2001/16

From: Jill.Millan@nt.gov.au
Sent: Tuesday, 18 September 2001
To: warren.vant@affa.gov.au
Cc: Brian.Radunz@nt.gov.au
Subject: ABPM 2001/16 NT comment

Warren
The Northern Territory has considered the Issues Paper for the uncooked chicken meat import risk analysis and found the paper to be technically comprehensive and well presented. The NT has no technical comments on the paper and the disease agents identified, as hazards requiring risk assessment are appropriate.

In addition, DPIF consulted with the NT poultry industries and is confident that all interested parties have received the Issues Paper, or would have it brought to their attention, through the current stakeholder register. They will provide comment, if any, independently.

Jill Millan
For
Brian Radunz
Chief Veterinary Officer
Northern Territory

21 March 2002

Dr Brian Radunz
Chief Veterinary Officer, Northern Territory
Director of Animal Health
DBIRD GPO Box 990
Darwin
Northern Territory 0801

Dear Brian

Comments on Uncooked Chicken Meat Import Risk Analysis – Issues Paper

Thank you for your positive comments on the Generic Import Risk Analysis (IRA) for Uncooked Chicken Meat Issues Paper.

You will shortly receive a draft document outlining the Method Risk Analysis Assessment for the Uncooked Chicken Meat Import Risk Analysis. While it has not been a standard procedure to distribute the draft methods document to stakeholders, we hope that it will give stakeholders the opportunity to familiarise themselves with the process of Import Risk Analysis, and to make any comments regarding the proposed methodology, before it is finalised.

Yours Sincerely,

David Banks
Chairman, Risk Analysis Panel

Primary Industries and Resources, South Australia

From: Barnett, Tony (PIRSA): Barnett.Tony@saugov.sa.gov.au
Sent: Friday 27 July 2001 13:04
To: Warren Vant – MAB
Subject: ABPM 2001/16 Uncooked Chicken Meat

SA supports this issue paper. There are some minor errors in it. These are as follows:

On page 47 under infectious coryza the paper refers to "Introduction of the virus". This should be "bacterium" or "agent" or "organism" but not "virus".

On page 53 it is stated that haemorrhagic enteritis of turkeys has been known in Australia for approximately 20 years. The disease has been known for about 30 years so it is suggested either change 20 to 30 or change "approximately" to "over".

There is a typo on page 20. In the 6th last line "effected" should be "affected".

Regards,

Anthony L Barnett
Principal Veterinary Officer
(Emergency Animal Diseases**)**

21 March 2002

Dr Anthony L Barnett
Principal Veterinary Officer
PIRSA
GPO Box 1671,
Adelaide
SOUTH AUSTRALIA 5001

Dear Anthony,

Comments on Uncooked Chicken Meat Import Risk Analysis – Issues Paper

Thank you for your comments on the Generic Import Risk Analysis (IRA) for Uncooked Chicken Meat Issues Paper.

The Risk Analysis Panel (RAP) accepts the typographical errors you have pointed out and will correct them.

Thank you, once again for your comments. You will shortly receive a draft document outlining the Method of Risk Assessment for the Uncooked Chicken Meat Import Risk Analysis. While it has not been a standard procedure to distribute the draft methods document to stakeholders, we hope that this will give them the opportunity to familiarise themselves with the process of Import Risk Analysis, and to make any comments regarding the proposed methodology before it is finalised.

Yours Sincerely,

David Banks
Chairman, Risk Analysis Panel

Department of Primary Industries, Queensland

Queensland Government
Department of Primary Industries
Animal and Plant Health Service

8 October 2001

David Banks
General Manager, Animal Biosecurity
Biosecurity Australia
AFFA
GPO Box 858
CANBERRA ACT 2601

Dear Dr Banks,

Comments on Uncooked Chicken Meat Import Risk Analysis

You letter of 28th September 2001 brought to my attention our lack of response to your prior request, on the topic. I apologise for this oversight and would compliment the IRA authors on a well-researched document. One relatively minor suggestion is to include Mycoplasma Iowae on the list of diseases for follow up work. My reasons for this are that the evidence for lack of transmissibility in chicken meat is minimal, the agent is difficult to work with and appears to be a significant pathogen of turkeys.

Yours Sincerely,

K.J Dunn
Executive Director
Animal and Plant Health Service

21 March 2002

K.J Dunn, Executive Director
Animal and Plant Health Service
Queensland Department of Primary Industries
GPO Box 46
Brisbane
QUEENSLAND 4001

Dear Kevin,

Thank you for your comments on the Generic Import Risk Analysis – Issues Paper

Your comments regarding *Mycoplasma iowae* have been noted. It has been decided by the Risk Analysis Panel (RAP) to include *Mycoplasma iowae* as a disease requiring further assessment.

Thank you, once again, for your comments. As a registered stakeholder, you will shortly receive a draft document outlining the Method of Risk Assessment for the uncooked chicken meat IRA. While this is not a standard procedure in the IRA process, we hope that it will give stakeholders the opportunity to familiarise themselves with the process of IRAs, and to make any comments regarding the proposed methodology, before it is finalised.

Yours sincerely

David Banks
Chair, Risk Analysis Panel

Department of Primary Industries, Water and Environment, Tasmania

Department *of*
Primary Industries,
Water *and* Environment

FOOD, AGRICULTURE & FISHERIES
Inquiries: Rod Andrewartha
Phone: (03) 62336836
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Email: Rod.Andrewartha@dpiwe.tas.gov.au

OFFICE OF THE CHIEF VETERINARY OFFICER

15 October 2001

Mr Warren Vant
Biosecurity Australia
Department of Agriculture Fisheries ForestryAustralia
GPO Box 858
CANBERRA ACT 2601

Dear Warren

COMMENTS ON UNCOOKED CHICKEN MEAT IMPORT RISK ANALYSIS IN RESPONSE TO ABPM 2001/16

This Department does not have great expertise in the areas necessary to provide a detailed technical assessment of the IRA.

I have no comment on the IRA or any issues to raise in relation to it.

Yours Sincerely,

Rod Andrewartha
Chief Veterinary Officer

Department of Natural Resources and Environment, Victoria

Department of Natural Resources and Environment

475 Mickleham Road Attwood

Victoria 3049 Australia

Telephone: 03 9217 4246

Facsimile: 03 9217 4322

DX 211278

Reference: AQPM 2001/16
21 September 2001

Dr David Banks
Acting Assistant Director
Animal Biosecurity
AFFA
GPO Box 858
CANBERRA ACT 2601

Dear Dr Banks,

Animal Biosecurity Policy Memorandum 2001/01

UNCOOKED CHICKEN MEAT IMPORT RISK ANALYSIS ISSUES PAPER

I refer to the above memorandum seeking comment on the above issues paper.

The Issues Paper provides a straightforward and structured approach that I believe comprehensively identifies the important hazards for consideration. I trust that issues of food safety will be addressed in parallel by ANZFA.

I trust these comments will receive your serious consideration.

Yours sincerely

Andrew Cameron
Acting Chief Veterinary Officer, Victoria.

21 March 2002

Dr Andrew Cameron
Department of Natural Resources and Environment
475 Mickleham Road
Attwood, VICTORIA 3049

Dear Andrew,

Comments on Uncooked Chicken Meat Import Risk Analysis – Issues Paper

Thank you for your comments on the Generic Import Risk Analysis (IRA) for Uncooked Chicken Meat Issues Paper.

Animal Biosecurity is ensuring that ANZFA are informed of progress with this IRA, so that they can address those issues that fall within their area of responsibility.

Thank you, once again, for your comments. As a registered stakeholder, you will shortly receive a draft document outlining the Method of Risk Assessment for the uncooked chicken meat IRA. While this is not a standard procedure in the IRA process, we hope that it will give stakeholders the opportunity to familiarise themselves with the process of IRAs, and to make any comments regarding the proposed methodology, before it is finalised.

Yours sincerely

David Banks
Chair, Risk Analysis Panel

APPENDIX 2

Stakeholder Responses to the Methods Paper

Australian Chicken Meat Federation Inc.

Level 7, 122 Walker Street

North Sydney NSW 2060

PO Box 579

North Sydney NSW 2059

Telephone: 02 9955 3224

Facsimile 02 9925 0627

Email: acmf@chicken.org.au

17 January 2003

Dr David Banks
General Manager
Animal Biosecurity
AFFA
GPO Box 858
Canberra ACT 2601

Dear David,

I spoke with David Buckley on 6 January 2003, prior to receiving a copy of ABPM 2003/01. He explained briefly aspects of the Draft Method Paper that relate to the quantitative risk assessment. David advised that the Draft Method Paper was not an official part of the IRA process.

The fact that the Method Paper is basic to the development of the risk analysis makes the former document one of great importance. I am surprised therefore that we have been invited to comment as soon as possible but with no indication of a final response date.

The Method Paper is a long and complex document (as indicated at the start of the summary) and as such needs considerable time and expertise to be properly evaluated. To this end it will be necessary for the Federation to seek expert advice on a number of issues raised. This will obviously take a considerable amount of time.

As an initial brief comment, there appears to be a number of crucial political and commercial value judgements made. These will need to be subject of discussions:

- The volume of imports is a key assumption in the Method paper, which will drive the IRA results because the volume of imports directly affects the likelihood of a disease outbreak.

Biosecurity Australia's assumed extremely low of annual imports as a percentage of total Australian production from 0.02% to a high 25% have no scientific or empirical basis. Recent empirical evidence of published material points to import penetration of 20% at least, with a high of 40% or more.

- Why does the Method Paper settle on "very low" as sufficient to satisfy Australia's conservative attitude to quarantine risk?
- Further processing is alluded to in "risk management options" where does this leave the Cooked Chicken Meat Protocol?
- All countries in the world are assumed to operate at least to Australian standards, but only veterinary services will be considered later. So, are all processing plant operations going to be evaluated or are they considered equal?
- The Method Paper ignores the economic and social costs of the introduction of product containing disease organisms. (Article 5 of the WTO SPS Agreement).

The above very brief comments relate to economic and trade perspectives. The major part of the Method Paper will need to be referred for expert advice. Given the difficulties that Biosecurity Australia had in the preparation of the Method Paper it seems reasonable that the industry be given time to have the paper considered thoroughly.

From reading ABPM 2003/01 it appears that, even though comment is sought on the Draft Method Paper, the draft IRA report is being prepared regardless. It is apparent that this document is more than simply a discussion document on methods. It reports substantive conclusions and a judgement made, based on this methodology, but does not offer all the draft conclusions. Where exactly does this document stand?

Is the chicken meat industry being asked to comment on the methods or on the judgements and conclusions, which affect the industry so drastically?

The question of public health issues (except zoonoses) is mentioned in the Method Paper as being the responsibility of Food Standards Australia New Zealand. There is no indication as to when or how these issues will be addressed by FSANZ nor how the IRA will incorporate any information provided into Biosecurity Australia's IRA. It is anticipated that there will be two stand-alone IRAs?

The Federation expects that

- given the complexity of the Draft Method Paper, and
- there is an obvious need for the Federation to seek expert advice on a number of issues, and
- as the method Paper was distributed at a time when many key industry people are still on leave and therefore cannot comment, and
- this document is basic to the development of the IRA

It be given until May 2003 to provide detailed, expert comment on the Draft Method Paper.

At the final Method Paper is basic to the completion of the IRA, no further work should be continued on the IRA until the proposed period for comment has closed and Biosecurity Australia has fully evaluated all comments received. In this way all parties can be assured that natural justice has been served.

I look forward to receiving your reply by the end of the month.

With Best Regards

Dr Jeff Fairbrother
Executive Director
Australian Chicken Meat Federation

24 January 2003

Dr Jeff Fairbrother
Executive Director
Australian Chicken Meat Federation
PO Box 579
North Sydney NSW 2059

Dear Jeff

Thank you for your letter of 17 January 2003 concerning the draft methods paper for uncooked chicken meat (IRA), released under cover of Animal Biosecurity Policy Memorandum 2003/01 of 6 January 2003.

I note your concerns and take this opportunity to respond to the issues you have raised.

As you are aware, the next formal step in the IRA consultation process is the draft IRA report. As the uncooked chicken meat IRA will cover many complex issues and is likely to be one of the first to be released under the current guidelines, we thought it was worthwhile as a interim step to provide a 'work-in-progress' advice to stakeholders on the approach to the methodology. While the IRA Handbook does not require such consultation, we considered that stakeholder would appreciate receiving this information now, rather than later when the draft IRA report is released.

The methodology paper is an important element of the draft IRA report and fine-tuning can be made to the methodology at any time. Therefore, the risk analysis panel continues to work on the draft IRA report, collecting and interpreting technical data that is independent of the methodology used. The panel will make adjustments to the methodology, if required, in light of stakeholder comments and as data is collected and applied to the model. It is essential the methodology accurately reflects the actual processes involved and for this reason we would appreciate constructive comments on the draft methods paper.

On other points you raised:

- Volume of imports: It is possible to model a range of likely import penetration scenarios. Further details of published material you mentioned pointing to the higher penetration would be appreciated.
- "Very low" is the level chosen to reflect Australia's conservative approach to quarantine risk. It is described in further detail in our IRA documents, including the uncooked chicken meat technical issues paper, and the WTO/SPS process.
- The IRA may affect the current cooked chicken meat protocolthe impact will depend primarily on the IRA's outcome in relation to infectious bursal disease virus. Thermal processing is a possible risk management option, and could be used as a risk reduction measure, if required.
- If importation is approved, we would expect all products to be processed at least to equivalent Australian standards. This system is already applied to imports of red meat. Each application is assessed taking into consideration the country's animal health status, standards of meat inspection services and production facilities, confidence in certification and any other criteria considered relevant by the Director of Quarantine.

- The economic and social costs (consequences), as a result of introduction of disease, are taken into consideration as part of the consequence assessment. This is discussed under that section's heading of the methods paper. Some data was used (eg, on distribution of product and waste) to present readers with a reasonable picture of the distribution pathways – it was not the intention to draw and present conclusions.

On the question of public health issues, these are the responsibility of Food Standards Australia and New Zealand (FSANZ) under their own legislation. Biosecurity Australia will consult with FSANZ as part of the IRA process. However, FSANZ can be expected to apply their own assessment process and requirements to imported product.

We look forward to receiving expert comments from the Australian Chicken Meat Federation on the draft methodology as soon as convenient to facilitate these being taken into consideration in the ongoing development of the IRA.

Yours Sincerely

David Banks
General Manager
Animal Biosecurity

Victorian Farmers Federation, Chicken Meat Group

Email: jclark@vff.org.au

Ph: 61 3 9207 5576
Fax: 61 3 92075572

14 January 2002

Mr David Banks
General Manger Animal Biosecurity
Department of Agriculture, Fisheries
& Forestry Australia
GPO Box 858
CANBERRA ACT 2601

Dear Mr Banks

ANIMAL BIOSECURITY POLICY MEMORANDUM 2003/01

UNCOOKED CHICKEN MEAT IMPORT RISK ANALYSIS
RELEASE OF DRAFT METHODS PAPER

Thank you for keeping us informed on the progress of this Import Risk Analysis. The prospect of importation of raw chicken meat either fresh or frozen poses a considerable risk to the Victorian farmers we represent as it does to the whole poultry industry in Australia. We are therefore vitally concerned that the whole process is not only transparent but is consistent with the governments stated objective of maintaining a very conservative low risk Appropriate Level of Protection.

Our initial concern is that the draft methods paper makes a number of highly subjective assumptions and then derives complex mathematical and statistical formula that could deliver almost any outcome depending upon the input data and accuracy of the assumptions. We believe the process proposed can be manipulated to achieve any desired or politically correct outcome. To allay our concerns and to allow us to better appreciate and or test the method outlined, we require the input data proposed for each exporting country and the resulting range of outcomes relative to the indicated risk estimation matrix (Table 14).

We also have very serious concerns that AFFA has decided that food poisoning issues are beyond the scope of the IRA and fall within the responsibility of FSANZ. We consider it inappropriate to have different government agencies separate the import risks in this manner and believe that a holistic approach is more transparent and should be adopted. This is consistent with the SPS Agreement that requires *consideration to be given to protect human or animal life or health within the territory of the member from risks arising from additives, contaminants, toxins or disease causing organisms in foods, beverages or feedstuffs.*

The VVF Chicken Meat Group, together with each other state based chicken farmer groups is a member of the Australian Chicken Growers Council Ltd. Due to the complexity of the methods

paper and the risk assessment the ACGC will be coordinating a detailed submission on our behalf which may require the engagement of expert consultants in epidemiology and statistics.

We trust that you are able to provide the input data requested and allow sufficient time for this to be analysed and for ACGC to submit a detailed response.

Yours Faithfully,

John Clarke
Manager VFF CMG

30 January 2003

Mr John Clarke
Manager, Victorian Farmers Federation Chicken Meat Group
Farrer House
24-28 Collins Street
Melbourne Victoria 3000

Dear Mr Clarke

Thank you for your letter of 14 January 2003 concerning the draft methods paper for the uncooked chicken meat import risk analysis (IRA), released under cover of Animal Biosecurity Policy Memorandum 2003/01 of 6 January 2003.

I note your concerns and take this opportunity to respond to the issues you have raised.

As you are aware, the next formal step in the IRA consultation process in the draft IRA report. As the uncooked chicken meat IRA will cover many complex issues and is likely to be one of the first to be released under the current guidelines, we thought it worthwhile as an interim step to provide a 'work-in-progress' advice to stakeholders on the approach to the methodology. While the IRA Handbook does not require such a consultation, we considered that stakeholders would appreciate receiving this information now, rather than later when the draft IRA report is released.

The risk analysis panel (RAP) continues to work on the draft IRA report, collecting and interpreting technical data, much of which is pathogen-specific and independent of the methodology used. The panel will make adjustments to the methodology, if required, in light of stakeholder comments and as data is collected and applied to the model. Some data was used in the methodology paper (e.g. on distribution of product and waste), in order to present readers with a reasonable picture of the distribution pathways. It was not the intention of the draft methods paper to draw and present conclusions. However, if there are particular assumptions made in the draft methods paper for which you have alternative data, we would be pleased to consider them in your next submission.

The input data you request is currently being collated for entry into the mathematical model. This data, and all related assumptions used in the model, will be detailed in the draft IRA report. At that time, there will be further opportunity for stakeholders to comment on the methodology, the technical data and assumptions used in the model, and to engage experts to conduct their own analyses on the input data. Meanwhile, you may be assured that many of the assumptions used in the model have been based on information provided by industry sources, and that technical inputs pertaining to specific disease agents are being sourced from the most current scientific data available to us.

On the question of public health issues, these are the responsibility of Food Standards Australia and New Zealand (FSANZ) under their own legislation, as detailed in the draft methodology paper. Biosecurity Australia will consult with FSANZ as part of the IRA process. However, under Commonwealth legislation, FSANZ can be expected to apply their own assessment process and requirements to imported product. More information on the role of FSANZ with respect to imported foods can be found at their website:
http://www.anzfa.gov.au/recallssurveillance/importedfoodsprogram.cfm

We look forward to receiving any additional comments from the Victorian Farmers Federation and The Australian Chicken Growers Council Ltd on the draft methodology and the draft IRA report when it is released.

Yours Sincerely

David Banks
General Manger
Animal Biosecurity

South Australian Farmers Federation

22 January 2003

Mr David Banks
General Manager Animal Biosecurity
Department of Agriculture, Fisheries and Forestry Australia
GPO Box 858
CANBERRA ACT 2601

Dear Mr Banks,

ANIMAL BIOSECURITY POLICY MEMORANDUM 2003/01
UNCOOKED CHICKEN MEAT IMPORT RISK ANALYSIS
RELEASE OF DRAFT METHODS PAPER

We believe that the prospect of importation of raw chicken meat either fresh or frozen poses a considerable risk to the South Australian farmers we represent and to the whole poultry industry in Australia.

The draft methods paper makes a number of highly subjective assumptions and then derives complex mathematical and statistical formula that could deliver almost any outcome depending upon the input data and accuracy of assumptions. We believe the process proposed can be manipulated to achieve any desired or politically correct outcome. We would ask to see the input data proposed for each exporting country and the resulting range of outcomes relative to the indicated risk estimation matrix (Table 14).

We also have very serious concerns that AFFA has decided that food poisoning issues are beyond the scope of the IRA and fall within the responsibility of FSANZ. We consider it inappropriate to have different agencies separate the import risks in this manner and believe that a holistic approach is more transparent and should be adopted. This is consistent with the SPS Agreement that requires *consideration to be given to protect human or animal life or health within the territory of the member from risks arising from additives, contaminants, toxins or disease causing organisms in foods, beverages or feedstuffs.*

The SAFF Chicken Meat Group, together with each other state based chicken farmer groups is a member of the Australian Chicken Growers Council Ltd. Due to the complexity of the methods paper and the risk assessment the ACGC will be coordinating a detailed submission on our behalf, which may require the engagement of expert consultants in epidemiology and statistics.

We trust that you are able to provide the input data requested and allow sufficient time for this to be analysed and for ACGC to submit a detailed response.

Sincerely,

Laura Fell
Chairman

Chicken Meat Committee

30 January 2003

Ms Laura Fell
Chairman, Chicken Meat Committee,
South Australian Farmers Federation
PO Box 6014
Halifax Street
Adelaide SA 5000

Dear Ms Fell

Thank you for your letter of 22 January 2003 concerning the draft methods paper for the uncooked chicken meat import risk analysis (IRA), released under cover of Animal Biosecurity Policy Memorandum 2003/01 of 6 January 2003.

I note your concerns and take this opportunity to respond to the issues you have raised.

As you are aware, the next formal step in the IRA consultation process is the draft IRA report. As the uncooked chicken meat IRA will cover many complex issues and is likely to be one of the first released under the current guidelines, we thought it worthwhile as an interim step to provide a 'work-in-progress' advice to stakeholders on the approach to the methodology. While the IRA handbook does not require such a consultation, we considered that stakeholders would appreciate receiving this information now, rather than later when the draft IRA report is released.

The risk analysis panel (RAP) continues to work on the draft IRA report, collecting and interpreting technical data, much of which is pathogen-specific and independent of the methodology used. The panel will make adjustments to the methodology, if required, in light of stakeholder comments and as data is collected and applied to the model. Some data was used in the methodology paper (e.g. on distribution of product and waste), in order to present readers with a reasonable picture of the distribution pathways. It was not the intention of the draft methods paper to draw and present conclusions. However, if there are particular assumptions made in the draft methods paper for which you have alternative data, we would be pleased to consider them in your next submission.

The input data you request is currently being collated for entry into the mathematical model. This data, and all related assumptions used in the model, will be detailed in the draft IRA report. At that time, there will be further opportunity for stakeholders to comment on the methodology, the technical data and assumptions used in the model, and to engage experts to conduct their own analyses on the input data. Meanwhile, you may be assured that many of the assumptions used in the model have been based on information provided by industry sources, and that technical inputs pertaining to specific disease agents are being sourced from the most current scientific data available to us.

On question of public health issues, these are the responsibility of Food Standards Australia and New Zealand (FSANZ) under their own legislation, as detailed in the draft methodology paper. Biosecurity Australia will consult with FSANZ as part of the IRA process. However, under Commonwealth legislation, FSANZ can be expected to apply their own assessment process and requirements to imported product. More information on the role of FSANZ with respect to imported foods can be found at their website:
http://www.anzfa.gov.au/recallssurveillance/importedfoodsprogram.cfm

We look forward to receiving any additional comments from the Victorian Farmers Federation and The Australian Chicken Growers Council Ltd on the draft methodology paper and the draft IRA report when it is released.

Yours sincerely

David Banks
General Manager
Animal Biosecurity

Australian Chicken Growers' Council Limited

Australian Chicken Growers' Council Limited

ABN 31 837 493 703

PO Box 176 Pymble NSW 2073
Phone: 0412 609 151
Email: skeldale@hotkey.net.au

President: Mr Len Brajkovich AOM JP

Vice President: Mr Chris Jones

Comments on the Generic draft import risk analysis (IRA) for uncooked chicken meat

Draft Method for Risk Assessment

Preamble.

The Australian Chicken Growers Council has significant concerns about large sections of this document, finding that the draft:

- does not necessarily reflect the reality of industry behaviour.
- seeks by extensive use of assumption the qualitative into quantitative assessment and then uses rigid but off points to potentially provide a "black:white result" which is not appropriate to the use of those assumptions
- uses assumptions that are frequently questionable
- uses complex statistics even in simple situations
- does not even appear to properly consider many basic veterinary premises such as mechanical vectors, non-ingestion forms of infection, false negatives, or the interdependency of individuals in a flock
- analyses the risks only at the individual level when this is not the form in which the importation will occur.

The overall effect of these and other issues below is that there could appear to be a bias in favour of the importing country.

In addition the Australian Chicken Growers Council is seriously concerned that this document is clearly not a draft. ACGC has been informed that it is already being used, in spite of requests for comment and regardless of any deficiencies.

The Australian Chicken Growers Council has many more questions on the draft report than are listed in this submission and seeks a meeting with AFFA as soon as possible to clarify and respond to all the issues springing from the report.

1.0 EXPOSURE ASSESSMENT SUMMARY.

ACGC disagrees most strongly with the assertion that human and food poisoning issues are beyond the scope of the generic draft IRA.

ACGC has on a number of occasions raised the issue of human health and food poisoning issues and on each occasion Biosecurity Australia has sought to avoid the issue.

The SPS agreement clearly states that the risk to humans should also be considered.

Page 9 of the SPS handbook published by AFFA specifically states that member countries have the right to take SPS measures to the extent necessary to protect human animal or plant life or health. (article 2:1 of the SPS agreement). This quite clearly includes the assessment of food safety in respect to food poisoning issues. BA has been reminded of this on a number of occasions, but still chooses to ignore it.

Note also that annexure A of the SPS agreement itself declares that:

"*1) Sanitary or phytosanitary measure – any measure applied…*
(b) to protect human or animal life or health within the territory of the member from risks arising from additives, contaminants, toxins or disease causing organisms in foods, beverages or feedstuffs."

ACGC also notes that while AFFA considers this critical issue to be beyond the scope of *this* review, there is no mention is any of the documentation to date as to how and when AFFA intends to make good this section of the SPS agreement.

By not coordinating a review between BA and the FSANZ, the BA might well be in breaching SPS agreement requirements to the detriment of all Australian primary industries, since consistency holds great sway in WTO challenges.

It is noted that liver will be a permissible import in the proposed IRA for raw chicken meat. Liver is a prime endpoint organ for pharmacological and pesticide products and for contaminants such as heavy metals. It is noted that there is still no commitment from AFFA that this will be considered in the assessment, even though the extract from the SPS agreement above clearly identifies this as the responsibility of the assessing country.

2.0 THE ROLE OF VECTORS

There appears to be no analysis of the role of humans as a transport vector, even though this was thought to be the key form of transmission of the Mangrove Mountain Newcastle Disease (NSW Government debriefing document); and even though this is a well established form of transmission of NDV and vvIBD.

There appears to be no analysis of transport accident as a potential exposure risk, even though there is a well documented accident in the importation of pork where a truck overturned on a bridge in a high risk area of northern NSW, spilling imported material into a river.

3.0 THE ROLE OF WILD BIRDS:

ACGC views with concern the consistent references in the document to wild birds "eating" "ingesting", "having sufficient ingestion" etc.

ACGC notes a single brief reference to wild birds as transport vectors for disease, but also notes that this possibility does not appear to have been explored elsewhere in the submission, even in reference to the highly successful scavenger, the seagull. At what stage will this risk be examined?

The document also notes that :

> *"Wild birds are most likely to gain access to contaminated imported chicken meat through scavenging meat scraps at refuse dumps"*

ACGC notes that there are other equally likely exposures. The most significant of these would be "illegal" dumps of meat, from discarded illegal importation not detected by AFFA, or discarded importation's discarded by manufacturer at site (prior to collection).

The other very significant exposure will be from discarded stock in backyards (which was not ruled out as the point source of the last major ND outbreak)

4.0 THE ROLE OF AVIARY BIRDS

The report suggests that aviary birds are "lower risk" as they are less likely to be exposed to scraps of chicken meat, however the report does not appear to consider the enhanced role of aviary birds in multiplication and transmission of the disease due to less understanding of surveillance issues and increasing reluctance to report, as well as significant transport of aviary and fancy birds long distances to shows and exhibitions.

5.0 THE ROLE OF "BACKYARD POULTRY"

The report is completely deficient in that it refers to backyard poultry only in the context of "the household chook" and completely ignores the substantial commercial and semi commercial "organic" and "free range" sectors.

"Organic" and "Free range" (meat and egg) sectors are very high risk in that:

- they have a wide variance in local biosecurity arrangements and the average is poor.
- they are frequently in close proximity to significant wild bird populations
- they are frequently operated by persons with little knowledge of disease and some suspicion of routine surveillance techniques
- they interact frequently and significantly with other bird managers via markets etc
- they are frequently grown on multi-culture farms where the relative risk of exposure to meat scraps is disproportionately higher.

On this basis the document should include this type of "backyard" poultry as significant and conduct further analyses accordingly.

6.0 THE ROLE OF THE EGG INDUSTRY

The role of the egg industry as a potential risk area does not appear to have been considered in the report. Given that part of this industry overlaps with "backyard" as above, there is clearly a need for this to be included in analysis.

7.0 THE ROLE OF NON-AVIAN SPECIES

There are a number of issues here.

7.1. Rodents do not appear to be included in the analysis in other than a very simplistic form. The ability of rodents to travel surprisingly large distances; the ability of rodents to "hitch" on transport including feed; and the ability of rodents to feel equally at home in landfills and chicken sheds needs to be considered.

7.2. There is more than one reference in the report to "ingestion" and "multiplication" as the only methods by which non-avian species are a risk. This is clearly simplistic, the most likely method of transmission of an infectious agent by non-avian species will be as a transport vector. Similarly in dumping areas, leachate from discarded material contaminating wild birds (thus producing transport vectors) may also have to be considered for some hardy infectious agents (eg vvIBD)

7.3. There is repeated reference in the document to non-avian species having to be "infected". Again this is simplistic and significantly understates the risk, given the role of non-avian species as transport vectors.

8.0 EPIDEMIOLOGICAL ISSUES

There is repeated reference throughput the document to "sufficient quantity of meat scraps eaten" "enough meat eaten" " sufficient imported meat eaten to cause disease" etc.

This might be considered less than accurate. In most cases the issue is not the quantity of meat, but the quantity of infectious agent present in any meat.

Thus calculating the quantity of meat eaten is less significant than examining the range of conditions under which an infectious dose might survive in any quantity of meat. Indeed, theoretical calculations of quantity of meat eaten may well be outright misleading under these circumstances.

It is also worth noting that infectious dose will vary markedly by strain of infectious agent and the species that is eating that dose. There does appear to have been at least some published work on the relative susceptibility of different bird species for many of the major infectious agents with which we are dealing here.

Clearly the document should clearly identify that it is infectious dose, not quantity of meat eaten which is the issue.

Equally clearly, the document should clearly identify that the relative susceptibility of "at risk" species must be taken into account in developing risk analysis.

A further epidemiological issue is that only ingestion is considered. Very clearly for agents like vvIBD, mere contact with the infectious agent is sufficient to create a transport vector. Disease

transfer due to contact with infectious agent (as opposed to ingestion) and the risk of that vector acting as a transport host should be included in the document.

Further the document and the proposed analysis refers only to pathogenic agents *IN* chicken meat, but does not appear to consider the role of agents *ON* chicken meat as a result of contact between infected and uninfected carcasses during transport.

Note also that there is repeated reference to "prevalence of infection" within a flock. However this does not consider the cross contamination from birds that are not yet infected but have contacted the agent and may act as vectors for the disease. If there is *any* infection in the flock, then the whole flock should be considered to be acting as mechanical transport vectors (contaminated with infectious agent) and should not be used for export.

9.0 SINGLE BIRDS OR SHIPMENTS?

The entire report only analyses the significance of the possibilities that any given single bird may be infected with a pathogenic (exotic) agent at the time of shipment to Australia. However this is simplistic.

In fact, it is not individual raw chicken carcasses that arrive into Australia, but SHIPMENTS of thousands of these carcasses, containing thousands of birds, each with a likelihood of being infected with an exotic agent at the time of shipment.

Moreover, these birds invariably come from more than one farm (given the nature of chicken processing) thus increasing that chances that an infected farm will be represented in the shipment.

Still further, the high numbers of carcasses in each shipment mean that the chances of a "false negative" bird or a "false negative" farm (that is, incubating the disease caused by the infectious agent, but not yet showing signs of the disease and possibly not yet even detectable on diagnostic tests) will be included in the shipment.

The report seems not to have considered the possibility of birds/flocks either incubating the disease or having the disease without recognisable clinical signs. Thus in the "release pathways" table, removing in infected chicken does NOT reduce the risk to zero, because where there is one infected chicken there others in the flock who are either incubating the disease. There is clearly interdependency within the flock.

Similarly in the same table it is suggested that a disease agent can be destroyed during handling without any consideration of cross contamination by the humans in the processing plant – again too simplistic and again consistently understating the real risk.

Thus, basing the whole risk analysis on single birds is simplistic and possibly misleading, unless the analysis intends to go the further step and add the relative probabilities for each bird in the shipment. Not only should this issue be discussed in the document, but the analysis should be broadened to include shipments as well as individual birds.

10.0 DEMOGRAPHICS AND CLIMATE

Nowhere in the document is there any analysis of the demographics of the users of the product versus the demographics of the industries and wild birds that are likely to be affected. This is of

significance given that this differs markedly between industries, and that consistency of approach must be applied to all IRA's.

Clearly an analysis of demographic issues must be considered in the document.

In the case of the poultry industry, farms and processing plants coexist in the same geographic areas in very close proximity. Food Service plants co-exist in the same rural/urban interface areas as poultry farms.

In the case of wild birds, the most successful scavengers in this country – seagulls, crows, magpies, currawongs rodents and feral pigs – coexist in close proximity to poultry farms, processing plants and backyards and landfills that are likely to be exposed to imported raw chicken meat.

Further, these locales are the areas of mildest climate on the continent – the most favourable climatic conditions for survival of the infectious agents.

Finally, these areas have significant populations of wild birdlife that could be affected by these infectious agents.

None of these quite significant agents has been canvassed in the document. Clearly these issues should be included as part of the analysis for the IRA.

11.0 STORAGE AND TRANSPORT

The report assumes that storage and transport periods for imported raw chicken meat "will be at least 2-3 days for fresh product". In fact this is not necessarily the case – current technology means that deep chilled produce may be stored for as long as 5-7 days, or as little as 12 hours if brought by air (given the nature of the industry is "just in time").

Similarly frozen product may be in storage for up to 3 months. More than one scenario should be examined in this context.

12.0 ANALYSIS OF LIKELY MARKETS

There is no consideration in the document of any analysis of the likely markets into which the imported raw chicken meat will enter – and this is very significant to the outcomes.

Evidence from Australia (European Pork) and around the world (particularly UK poultry) suggests strongly that imported product on entry to a market for the first time goes primarily to the food service sector. This is significant in terms of risk analysis in that:

- much higher quantities are imported than are generally forecast, significantly increasing the risk of entry of an infectious agent.
- much higher quantities of imported meat are dumped
- continuous cost cutting by companies increases the risk that product may be dumped illegally, increasing exposure to infectious agent.

Further there is an assumption in the document that current processors of chicken meat will not be involved in handling imported raw chicken meat. If the UK is a reasonable example, this has been

shown to be a fallacy, with the poultry processors the primary trading agencies for imported chicken meat.

Thus we would have the likely situation where primary processors would be handling live birds and imported meat at the same site and possibly in the same facility. This likely option should be considered in the analysis.

13.0 AUSTRALIAN COMPETENCIES

Nowhere in the document is there any proposed analysis of Australian competency in managing the result of disease incursions. Clearly this should be included in the assessment.

For example, the demonstrably declining ability of state governments to carry out active surveillance tasks on a routine basis, and rapidly declining ability of state governments to utilise passive surveillance due to charging policies are critical to the analysis of "post entry"/"post exposure" risk.

The ability to deal with particular diseases should also be analysed, and is not included in the document. For example, after considerable analysis and research, the working group on vvIBD essentially concluded that unless an outbreak was very minor and in a geographically isolated area, a disease incursion of vvIBD into Australia would be impossible to stop.

The document as written does not even hint that these critical issues will be considered as part of the overall analysis.

Moreover, the document states that [because of biosecurity] the risk of disease being transferred to another poultry shed on the same farm is remote.

In fact this is patently untrue. Note the transmission of Newcastle Disease from shed to shed at Mangrove Mountain and at a high security facility in northern NSW. Note also the transmission of ND from farm to farm (traceable) in the first ND outbreak in Sydney. Finally, note the known characteristics of vvIBD spread from shed to shed and farm to farm and the recent RIRDC research on spread of Campylobacter spp after first pickup. Clearly the person who wrote this document does not have current knowledge of pickup practices!

14.0 STATISTICAL ISSUES

Please note that ACGC does not currently employ a statistician, and is intending to seek the services of a consultant to assist in this statistical area and comment further on this issue.

Similarly, AFFA appears to proscribe a uniform probability distribution to the prevalence of disease, whereas this in fact might be inappropriate (for example, a Poisson distribution or even a random distribution in some cases might be more appropriate). This may also vary according to the pathogenic agent and if so, "locking" analysis into a uniform distribution may well be inappropriate.

However even at a "layman's" level there are concerns that semi-quantitative and qualitative assessments (eg "Low") are suddenly being transformed into quantums on which critical decisions are being taken.

Turning a qualitative estimate into a semi quantitative one is disturbing in that it tends to induce a false sense of security which is rarely deserved.

An additional concern with these nomenclature issues is that the results might be so able to be challenged as to be problematic in the event of appeal against AFFA decisions.

ACGC seeks AFFA's assistance in halting further work on the IRA until such time as informed statistical comment is received, submitted to AFFA and the discussed with AFFA.

15.0 WHO IS "THE COMMUNITY"?

The following words appear in the report:

"*When assessing the local, district, regional and national consequences, the frame of reference was the impact of each disease on the community as a whole. This often differed markedly from the effect of the disease on the local, district, regional or national population of directly affected parties*."

Thus the report states clearly that individual losses are acceptable provided there is overall benefit to the community as a whole at a larger (perhaps) national level.

Notably however there is no discussion on how such a benefit might be calculated, what weightings are provided to various elements, or even which elements are to be considered in the "frame of reference". Therefore it is appropriate to take as comprehensive frame of reference as possible into consideration.

Implicit therefore is the possibility that a native species (the directly affected party) might be eliminated from a region or even a state as a result of a new infectious agent, provided the "community" is not affected at a national level.

Implicit therefore is the possibility that it would be OK to have occasional local multiresistant food poisoning outbreaks in humans (the directly affected party) as a result of imported raw chicken meat, provided the community as a whole was not impacted.

Implicit therefore is the possibility that it is OK to have an imported infectious agent demolish an entire industry, provided the community overall was "not affected".

One can only hope that this is not the intention of this paragraph, but this is the logical explanation from the report as written. Perhaps this issue needs to be addressed further?

16.0 MODELLING ISSUES

ACGC notes that 4 scenarios were analysed: 100,000; 1 million, 10 million and 100 million carcasses annually.

Note that Australia's annual production is around 400 Million carcasses annually, and that 20% import replacement within the first 2 years is a very conservative figure (ie 80 million carcasses) .

Thus in the first instance only the 100 million carcasses provides any relevant analysis.

Better scenarios would be 40 million, 80 million, 100 million, 200 million. Yet again the proposed scenarios tend to underestimate the risks.

17.0 EXPECTED CONSEQUENCES OF ENTRY AND EXPOSURE

This table is widely touted in the document. Note that ACGC has previously expressed significant concerns with this table in relation to underweighting real risk, and further notes that it applies only to individual carcasses.

In addition the use of the matrix is based on assumptions which are based on assumptions – thus the margin of error in this matrix is huge, particularly given the obvious errors already noted above.

The use of this matrix needs further consultation with all industries, lest a theoretical, assumptive model finds itself becoming a self fulfilling “fact”.

18.0 OTHER ISSUES.

ACGC notes significant additional issues *in minutiae* in the document that are not well suited to discussion in this submission. ACGC requests that the existence of these additional issues is noted by AFFA. ACGC further requests that a meeting be held as soon as possible with the author of this document and suitable other AFFA staff to clarify the many points as yet unmentioned and hopefully to resolve them successfully.

8 April 2003

Ms Joanne Sillince
Executive Officer
Australian Chicken Growers Council Ltd
P O Box 176 Pymble
NSW 2073

Dear Ms Sillince

Re: Draft Methodology Paper for Uncooked Chicken Meat Import Risk Analysis

Thank you for your letter of 28 February 2003, regarding your organization's concerns with this paper. In that letter, you requested the opportunity for members of the ACGC to meet representatives of the Department of Agriculture, Fisheries and Forestry to discuss your concerns. During a conversation of 19th March, Dr David Buckley confirmed the Department's willingness to participate in such a meeting, and agreed to set a date for meeting following your discussions with ACGC on 20 March.

On 20 March, Dr Buckley attended a meeting with representatives of the Australian poultry industry, in the office of The Hon Warren Truss MP, Minister for Agriculture, Fisheries and Forestry. At that meeting, issues of general concern to the poultry industry, arising from the release of the Methods paper, were discussed. It was agreed that the Department would consider issues of concern raised by the poultry industry, and that a further meeting would be organized at a mutually convenient date to discuss those matters. Mr. Garry Sansom was present at the meeting in the Minister's office, and he advised Dr Buckley later that he felt that there was no need for a specific meeting between the Department and ACGC, in the light of the agreement for on-going consultation with the poultry industry generally.

Would you please confirm that your organization is happy to continue as part of on-going consultation between the Department of Agriculture, Fisheries and Forestry and the poultry industry generally, and that a separate meeting to discuss ACGC issues will not be necessary at present.

Yours Sincerely,

Peter Beers
Acting General Manager
Animal Biosecurity

Notes of meeting with Chicken Meat Industry representatives (16th May 2003)
MAB Conference Room
Edmund Barton Building
Canberra

Attendees:

Jeff Fairbrother
Liam Morrisoe
Margaret McKenzie
Kevin Radich
Garry Sansom
Joanne Sillince
Mary Harwood
David Banks
David Buckley

Mary Harwood provided a brief update on progress and current status of the WTO action by the EU in relation to Australia's quarantine regime, in general and as applied.

David Banks made introductory remarks concerning the reasons for the release of the draft Method Paper.

It was agreed to discuss matters raised in the ACGC letter to David Banks (by email dated 28 February 2003), and then to discuss matters raised in the ACMF letter of 17th January which had not already been covered.

The text of the ACGC letter has been copied below and notes of the discussion will be inserted.

Preamble.
The Australian Chicken Growers Council has significant concerns about large sections of this document, finding that the draft:

- *does not necessarily reflect the reality of industry behaviour.*

David Banks pointed out that the document was a draft, provided for consultation purposes. The meeting provided an opportunity for the industry to provide more accurate information, where this was available.

- *seeks by extensive use of assumption* (to turn) *the qualitative* (assessment) *into quantitative assessment and then uses rigid cut off points to potentially provide a "black:white result" which is not appropriate to the use of those assumptions*

David Buckley pointed out that the model had been produced in accordance with the generic description that had been discussed with various industry groups at a number of meetings, both formal and informal, over a long period. The reasons for the choice of a semi-quantitative approach had been discussed, (in particular to allow consideration of the volume of trade) and it was felt that the approach used was capable of providing a reasonable estimate of risk, subject to the degree of uncertainty in the data.

- *uses assumptions that are frequently questionable*

The method paper contains few assumptions, all of which were open to discussion. The lack of assumptions in the method paper was a deliberate attempt to force concentration on the method rather than the numbers. The actual value of the estimates for the model parameters will be contained within the draft IRA report, and will be subject to comment, (as will all other aspects of the draft)

- *uses complex statistics even in simple situations*

AFFA believes that the method relied on probability theory to the extent necessary to provide a defensible basis for the quantitative calculations described in the method. To the extent that statistics were discussed, this arose from the need to explain the operation of the @Risk simulation engine, which was used to construct the model.

- *does not even appear to properly consider many basic veterinary premises such as mechanical vectors, non-ingestion forms of infection, false negatives, or the interdependency of individuals in a flock*

The method paper describes in detail the release and exposure pathways, which are believed to represent the most likely pathways of introduction and spread of disease. Other forms of spread, such as mechanical vectors, and non-ingestion forms of infection, are implicitly considered in the estimation of likelihoods of establishment and spread (termed PLES in the model) and are assessed qualitatively by the RAP on the basis of the literature available and expert opinion. It was agreed that the way in which these aspects are taken into account will be made more explicit in the writing up of the draft IRA report.

- *analyses the risks only at the individual level when this is not the form in which the importation will occur.*

This was refuted – the risk assessment model explicitly takes account of the volume of trade. There was also some discussion of the "lumpiness" of infection. It was pointed out that modelling work undertaken by others (Cannon & Roe) had indicated that the likelihood of an outbreak did not change much depending on the "lumpiness" of infection, although the magnitude of the outbreak may be influenced to some extent. Again this matter was addressed implicitly in the discussion of PLES values. Some further discussion would be included in the draft IRA report.

The overall effect of these and other issues below is that there could appear to be a bias in favour of the importing country.

It was pointed out that the overall effect of any bias in the system was probably conservative.

In addition the Australian Chicken Growers Council is seriously concerned that this document is clearly not a draft. ACGC has been informed that it is already being used, in spite of requests for comment and regardless of any deficiencies.

Work on the development of the draft IRA report was/is continuing. Significant issues raised will be addressed.

The Australian Chicken Growers Council has many more questions on the draft report than are listed in this submission and seeks a meeting with AFFA as soon as possible to clarify and respond to all the issues springing from the report.

1.0 EXPOSURE ASSESSMENT - SUMMARY.
ACGC disagrees most strongly with the assertion that human and food poisoning issues are beyond the scope of the generic draft IRA.

ACGC has on a number of occasions raised the issue of human health and food poisoning issues and on each occasion Biosecurity Australia has sought to avoid the issue.

The SPS agreement clearly states that the risk to humans should also be considered.
Page 9 of the SPS handbook published by AFFA specifically states that member countries have the right to take SPS measures to the extent necessary to protect human animal or plant life or health. (Article 2:1 of the SPS agreement). This quite clearly includes the assessment of food safety in respect to food poisoning issues. BA has been reminded of this on a number of occasions, but still chooses to ignore it.
Note also that annexure A of the SPS agreement itself declares that:

"1) Sanitary or phytosanitary measure – any measure applied…
(b) to protect human or animal life or health within the territory of the member from risks arising from additives, contaminants, toxins or disease causing organisms in foods, beverages or feedstuffs."

ACGC also notes that while AFFA considers this critical issue to be beyond the scope of this review, there is no mention is any of the documentation to date as to how and when AFFA intends to make good this section of the SPS agreement.
By not coordinating a review between BA and the FSANZ, the BA might well be in breaching SPS agreement requirements to the detriment of all Australian primary industries, since consistency holds great sway in WTO challenges.

It is noted that liver will be a permissible import in the proposed IRA for raw chicken meat. Liver is a prime endpoint organ for pharmacological and pesticide products and for contaminants such as heavy metals. It is noted that there is still no commitment from AFFA that this will be considered in the assessment, even though the extract from the SPS agreement above clearly identifies this as the responsibility of the assessing country.

BA recognises that human health is an issue that can be considered in the context of the SPS agreement, but it is outside AFFA's legislative responsibility. Under Australian legislative and administrative arrangements, food safety issues fall within the responsibility of FSANZ, and other human health matters fall within the responsibility of the Department of Health. BA outlined arrangements for the integration of the views of FSANZ and Health into the IRA process.

2.0 THE ROLE OF VECTORS
There appears to be no analysis of the role of humans as a transport vector, even though this was thought to be the key form of transmission of the Mangrove Mountain Newcastle Disease (NSW Government debriefing document); and even though this is a well established form of transmission of NDV and vvIBD.

BA pointed out their strong belief that the pathways of release and exposure as described were by far the most likely, and that the role of humans as transport vectors was considered to be more important in the spread of disease, once it had been introduced to flocks in this country. Therefore, the role of humans (and other vectors) was taken into account in the estimation of the partial likelihood of establishment and spread (PLES). It was agreed that this was not made explicit in the Method paper and that this should be better explained in the draft IRA report.

There appears to be no analysis of transport accident as a potential exposure risk, even though there is a well documented accident in the importation of pork where a truck overturned on a bridge in a high risk area of northern NSW, spilling imported material into a river.

While BA accepts the possibility of transport accident as a possible means of introduction of disease, it is considered that the likelihood of this was relatively low in comparison with the pathways described in the method paper. It was further believed that measures that were taken to control the risk of introduction of disease (especially of this involved off-shore processing) would be sufficient to mitigate the comparatively small risk of transport accident, and that this could therefore be disregarded for the purposes of risk assessment.

3.0 THE ROLE OF WILD BIRDS:
ACGC views with concern the consistent references in the document to wild birds "eating" "ingesting" , "having sufficient ingestion" etc.
ACGC notes a single brief reference to wild birds as transport vectors for disease, but also notes that this possibility does not appear to have been explored elsewhere in the submission, even in reference to the highly successful scavenger, the seagull. At what stage will this risk be examined?

Once again, BA believes that the most likely pathway for infection of wild birds is via ingestion of contaminated meat scraps, and this is what is being addressed in the discussion referred to. The role of scavenging birds as vectors of disease is taken into account in the estimation of the PLES as described above.

The document also notes that :
"Wild birds are most likely to gain access to contaminated imported chicken meat through scavenging meat scraps at refuse dumps"

ACGC notes that there are other equally likely exposures. The most significant of these would be "illegal" dumps of meat, from discarded illegal importation not detected by AFFA, or discarded importation's discarded by manufacturer at site (prior to collection).

BA believes that the major pathway by which wild birds will gain access to meat scraps is via discarded meat at "dumps". The calculation covers the quantity of meat discarded, and the proportion of that meat believed to be accessible to wild birds. The actual value assigned to the estimate can be discussed, but BA believes that the majority of discarded meat will eventually be disposed of at "dumps" and that the one estimate can adequately account for all discarded meat.

The other very significant exposure will be from discarded stock in backyards (which was not ruled out as the point source of the last major ND outbreak)

Discarded stock in backyards will largely be accessed by backyard poultry. For that portion accessed by wild birds, the explanation above is believed to hold good.

4.0 THE ROLE OF AVIARY BIRDS

The report suggests that aviary birds are "lower risk" as they are less likely to be exposed to scraps of chicken meat, however the report does not appear to consider the enhanced role of aviary birds in multiplication and transmission of the disease due to less understanding of surveillance issues and increasing reluctance to report, as well as significant transport of aviary and fancy birds long distances to shows and exhibitions.

As discussed above, the role of aviary birds in transmission of the disease is taken into account in the estimation of PLES values for the various exposure groups.

5.0 THE ROLE OF "BACKYARD POULTRY"

The report is completely deficient in that it refers to backyard poultry only in the context of "the household chook" and completely ignores the substantial commercial and semi commercial "organic" and "free range" sectors.

"Organic" and "Free range" (meat and egg) sectors are very high risk in that:
- they have a wide variance in local biosecurity arrangements and the average is poor.
- they are frequently in close proximity to significant wild bird populations
- they are frequently operated by persons with little knowledge of disease and some suspicion of routine surveillance techniques
- they interact frequently and significantly with other bird managers via markets etc
- they are frequently grown on multi-culture farms where the relative risk of exposure to meat scraps is disproportionately higher.
On this basis the document should include this type of "backyard" poultry as significant and conduct further analyses accordingly.

BA advised that free range and organic poultry were included in Exposure Group 2, or low biosecurity poultry species. BA also agreed that the changing nature of the free-range and organic industry could change the epidemiology of disease outbreaks in these flocks, especially in relation to diseases where there was an age-related disease susceptibility. The increased number of free range birds, and particularly free range broilers, would lead to a lower average age than would apply to "backyard chooks" alone. Again, these differences would be taken into account in assessing the PLES for the various exposure scenarios, and could also affect the likelihood that a "backyard bird" would have access to a sufficient dose of disease agent to cause infection.

6.0 THE ROLE OF THE EGG INDUSTRY

The role of the egg industry as a potential risk area does not appear to have been considered in the report. Given that part of this industry overlaps with "backyard" as above, there is clearly a need for this to be included in analysis.

BA believes that the egg industry is taken into account when estimating PLES values and when estimating impacts of disease outbreaks.

7.0 THE ROLE OF NON AVAN SPECIES

There are a number of issues here.
7.1. Rodents do not appear to be included in the analysis in other than a very simplistic form. The ability of rodents to travel surprisingly large distances; the ability of rodents to "hitch" on

transport including feed; and the ability of rodents to feel equally at home in landfills and chicken sheds needs to be considered.

7.2. There is more than one reference in the report to "ingestion" and "multiplication" as the only methods by which non-avian species are a risk. This is clearly simplistic, the most likely method of transmission of an infectious agent by non-avian species will be as a transport vector. Similarly in dumping areas, leachate from discarded material contaminating wild birds (thus producing transport vectors) may also have to be considered for some hardy infectious agents (eg vvIBD)

While it is accepted that rodents could serve as mechanical vectors it is considered that this pathway is much less likely as a source of initial infection than as a source of spread of disease once an infection has been initiated by one of the other pathways. Therefore, this mechanism is accounted for in the estimation of PLES values for the various exposure scenarios.

In considering the likelihood that leachate could serve as a source of infection, it would be necessary to consider the total quantity of leachate produced from all the discarded material on the dump, and the total quantity of leachate produced from discarded, imported chicken meat. The dilution factor would have to be taken into account, as would any effects on survival of the virus due to any other components of the leachate material. It would then be necessary to consider the likelihood that a bird, rodent or other vector would be able to be contaminated with a sufficient quantity of leachate to cause an infection in a susceptible species, and the likelihood that all of that infectious dose would be transported, without any diminution of titre, to a site where susceptible animals were present. The likelihood that all of the contamination would subsequently be transferred mechanically to one susceptible animal would also have to be taken into account. Given all of the above it is considered that the likelihood of this pathway is insignificant compared with the more likely pathways chosen for more formal evaluation.

7.3. There is repeated reference in the document to non-avian species having to be "infected". Again this is simplistic and significantly understates the risk, given the role of non-avian species as transport vectors.

See comments on likelihood above.

8.0 EPIDEMIOLOGICAL ISSUES

There is repeated reference throughput the document to " sufficient quantity of meat scraps eaten" "enough meat eaten" " sufficient imported meat eaten to cause disease" etc.
This might be considered less than accurate. In most cases the issue is not the quantity of meat, but the quantity of infectious agent present in any meat.

Thus calculating the quantity of meat eaten is less significant than examining the range of conditions under which an infectious dose might survive in any quantity of meat. Indeed, theoretical calculations of quantity of meat eaten may well be outright misleading under these circumstances.
It is also worth noting that infectious dose will vary markedly by strain of infectious agent and the species that is eating that dose. There does appear to have been at least some published work on the relative susceptibility of different bird species for many of the major infectious agents with which we are dealing here.
Clearly the document should clearly identify that it is infectious dose, not quantity of meat eaten which is the issue.

Equally clearly, the document should clearly identify that the relative susceptibility of "at risk" species must be taken into account in developing risk analysis.

BA pointed out that the estimate of the model parameter referred to in the Method paper as $BP_{infectivedose}$ is defined as "The likelihood that an amount of chicken waste, which could be realistically eaten by a backyard bird, contains a sufficient dose to initiate infection in a susceptible species". This definition implicitly includes an assessment of the titre of infectious agent in the meat, the quantity of meat eaten, the pathogenicity of the disease agent, and the susceptibility of the particular species to the agent of interest. This approach was adopted because for many of the diseases of quarantine concern, there is a paucity of hard data to more accurately quantify this likelihood. This approach allowed the use of expert opinion, for the calculation of initial unrestricted risk estimates, while allowing for a more detailed consideration in cases where further data were available.

A further epidemiological issue is that only ingestion is considered. Very clearly for agents like vvIBD, mere contact with the infectious agent is sufficient to create a transport vector. Disease transfer due to contact with infectious agent (as opposed to ingestion) and the risk of that vector acting as a transport host should be included in the document.

As discussed above, it is accepted that rodents could serve as mechanical vectors. However, it is considered that this pathway is much less likely as a source of initial infection than as a source of spread of disease once an infection has been initiated by one of the other pathways. Therefore, this mechanism is accounted for in the estimation of PLES values for the various exposure scenarios.

Further the document and the proposed analysis refers only to pathogenic agents IN chicken meat, but does not appear to consider the role of agents ON chicken meat as a result of contact between infected and uninfected carcasses during transport.
Note also that there is repeated reference to "prevalence of infection" within a flock. However this does not consider the cross contamination from birds that are not yet infected but have contacted the agent and may act as vectors for the disease. If there is any infection in the flock, then the whole flock should be considered to be acting as mechanical transport vectors (contaminated with infectious agent) and should not be used for export.

The model does account for cross contamination of carcasses during processing. In the Method paper as released in January 2003, the model parameters were described as R_4 and R_5. Due to the discovery of an error in calculations, these have since been re-defined as R_{4a} and R_{5a}. Rationale for the change is explained in the revised Method document and will be released as part of the draft IRA report.

9.0 SINGLE BIRDS OR SHIPMENTS?
The entire report only analyses the significance of the possibilities that any given single bird may be infected with a pathogenic (exotic) agent at the time of shipment to Australia. However this is simplistic.
In fact, it is not individual raw chicken carcasses that arrive into Australia, but SHIPMENTS of thousands of these carcasses, containing thousands of birds, each with a likelihood of being infected with an exotic agent at the time of shipment.
Moreover, these birds invariably come from more than one farm (given the nature of chicken processing) thus increasing that chances that an infected farm will be represented in the shipment.

Still further, the high numbers of carcasses in each shipment mean that the chances of a "false negative" bird or a "false negative" farm (that is, incubating the disease caused by the infectious agent, but not yet showing signs of the disease and possibly not yet even detectable on diagnostic tests) will be included in the shipment.
The report seems not to have considered the possibility of birds/flocks either incubating the disease or having the disease without recognisable clinical signs. Thus in the "release pathways" table, removing in infected chicken does NOT reduce the risk to zero, because where there is one infected chicken there others in the flock who are either incubating the disease. There is clearly interdependency within the flock.
Similarly in the same table it is suggested that a disease agent can be destroyed during handling without any consideration of cross contamination by the humans in the processing plant – again too simplistic and again consistently understating the real risk.
Thus, basing the whole risk analysis on single birds is simplistic and possibly misleading, unless the analysis intends to go the further step and add the relative probabilities for each bird in the shipment. Not only should this issue be discussed in the document, but the analysis should be broadened to include shipments as well as individual birds.

BA pointed out that there is explicit consideration within the method, of the number of individual carcases imported. This was taken into account in the calculation of partial annual likelihood of entry and exposure. The volume of trade has a great influence on the overall likelihood of entry.

10.0 DEMOGRAPHICS AND CLIMATE
Nowhere in the document is there any analysis of the demographics of the users of the product versus the demographics of the industries and wild birds that are likely to be affected. This is of significance given that this differs markedly between industries, and that consistency of approach must be applied to all IRA's.
Clearly an analysis of demographic issues must be considered in the document.
In the case of the poultry industry, farms and processing plants coexist in the same geographic areas in very close proximity. Food Service plants co-exist in the same rural/urban interface areas as poultry farms.
In the case of wild birds, the most successful scavengers in this country – seagulls, crows, magpies, currawongs rodents and feral pigs - coexist in close proximity to poultry farms, processing plants and backyards and landfills that are likely to be exposed to imported raw chicken meat.

Further, these locales are the areas of mildest climate on the continent – the most favourable climatic conditions for survival of the infectious agents.

Finally, these areas have significant populations of wild birdlife that could be affected by these infectious agents.

None of these quite significant agents has been canvassed in the document. Clearly these issues should be included as part of the analysis for the IRA.

BA considers that these issues are taken into account in the estimation of PLES for the individual exposure scenarios.

11.0 STORAGE AND TRANSPORT
The report assumes that storage and transport periods for imported raw chicken meat " will be at least 2-3 days for fresh product". In fact this is not necessarily the case – current technology means

that deep chilled produce may be stored for as long as 5-7 days, or as little as 12 hours if brought by air (given the nature of the industry is "just in time").
Similarly frozen product may be in storage for up to 3 months. More than one scenario should be examined in this context.

These matters can be taken into account when considering the risk management measures acvppicable to certain types of product. If the nature of the product is such that it affects the level of risk, this can be accommodated. The assumptions made in the Method paper were to serve as a basis for discussion.

12.0 ANALYSIS OF LIKELY MARKETS
There is no consideration in the document of any analysis of the likely markets into which the imported raw chicken meat will enter – and this is very significant to the outcomes.

Evidence from Australia (European Pork) and around the world (particularly UK poultry) suggests strongly that imported product on entry to a market for the first time goes primarily to the food service sector. This is significant in terms of risk analysis in that:

- *much higher quantities are imported than are generally forecast, significantly increasing the risk of entry of an infectious agent.*

BA pointed out that the model could easily be modified to take account of higher volumes of trade, and that acting on advice provided by the industry, a decision had already been taken to increase this to 40% of current market level.

- *much higher quantities of imported meat are dumped*

The quantity of meat discarded by food service sector is entered separately in the model and can be easily amended if data to indicate that volumes of waste produced are significantly different to current estimates.

- *continuous cost cutting by companies increases the risk that product may be dumped illegally, increasing exposure to infectious agent.*

BA/AQIS have no evidence of illegal dumping of imported meat. Any evidence of this should be provided, and can be taken into account. However, where risk management measures are required, it was possible to mitigate the problem of illegal dumping by the use of off-shore risk management.

Further there is an assumption in the document that current processors of chicken meat will not be involved in handling imported raw chicken meat. If the UK s a reasonable example, this has been shown to be a fallacy, with the poultry processors the primary trading agencies for imported chicken meat.

Thus we would have the likely situation where primary processors would be handling live birds and imported meat at the same site and possibly in the same facility. This likely option should be considered in the analysis.

BA does not agree that this is a true statement. The Method document clearly identifies that product will be processed in Australia. Live birds in a processing plant should not be expected to

stay that way long, and so the likelihood of a live bird in a plant contracting disease as a result of contamination with imported material and surviving long enough to become ill, multiply the agent, and spread the infection widely before becoming chicken meat itself, must be vanishingly small.

13.0 AUSTRALIAN COMPETENCIES

Nowhere in the document is there any proposed analysis of Australian competency in managing the result of disease incursions. Clearly this should be included in the assessment.

For example, the demonstrably declining ability of state governments to carry out active surveillance tasks on a routine basis, and rapidly declining ability of state governments to utilise passive surveillance due to charging policies are critical to the analysis of "post entry"/"post exposure" risk.

The ability to deal with particular diseases should also be analysed, and is not included in the document. For example, after considerable analysis and research, the working group on vvIBD essentially concluded that unless an outbreak was very minor and in a geographically isolated area, a disease incursion of vvIBD into Australia would be impossible to stop.

The document as written does not even hint that these critical issues will be considered as part of the overall analysis.

BA advised that the likely response to various disease incursions is taken into account in the estimation of PLES of the various outbreak scenarios. These matters can be made more explicit in the write up of the individual diseases in the draft IRA report.

Moreover, the document states that [because of biosecurity] the risk of disease being transferred to another poultry shed on the same farm is remote.

In fact this is patently untrue. Note the transmission of Newcastle Disease from shed to shed at Mangrove Mountain and at a high security facility in northern NSW. Note also the transmission of ND from farm to farm (traceable) in the first ND outbreak in Sydney. Finally, note the known characteristics of vvIBD spread from shed to shed and farm to farm and the recent RIRDC research on spread of Campylobacter spp after first pickup. Clearly the person who wrote this document does not have current knowledge of pickup practices!

BA does not believe that this statement appears in the method paper. It was never intended to be interpreted in this way. Clearly the outbreak scenarios do allow for spread from exposure group to exposure group, and from local to district and national geographic levels.

14.0 STATISTICAL ISSUES

Please note that ACGC does not currently employ a statistician, and is intending to seek the services of a consultant to assist in this statistical area and comment further on this issue.

Similarly, AFFA appears to proscribe a uniform probability distribution to the prevalence of disease, whereas this in fact might be inappropriate (for example, a Poisson distribution or even a random distribution in some cases might be more appropriate). This may also vary according to the pathogenic agent and if so, "locking" analysis into a uniform distribution may well be inappropriate.

However even at a "layman's" level there are concerns that semi-quantitative and qualitative assessments (eg "Low) are suddenly being transformed into quantums on which critical decisions are being taken.
Turning a qualitative estimate into a semi quantitative one is disturbing in that it tends to induce a false sense of security which is rarely deserved.

An additional concern with these nomenclature issues is that he results might be so able to be challenged as to be problematic in the event of appeal against AFFA decisions.

BA accepts ACGC's right to have a statistician comment on the paper and will accept comments either now or in response to the draft IRA report when it is produced. However, BA has had the Method paper reviewed by a highly qualified external risk assessor, who has made extensive comment on the paper before it was released for general consideration. The choice of uniform distributions was supported for the purposes of unrestricted risk estimation. Where more applicable data are available in relation to specific diseases in specific countries these can be used when performing country specific risk analyses if required.

ACGC seeks AFFA's assistance in halting further work on the IRA until such time as informed statistical comment is received, submitted to AFFA and the discussed with AFFA.

It was explained that this was not possible. Work on development of the draft IRA report wpould continue. ACGC would have another opportunity to comment once the draft IRA report was released.

15.0 WHO IS "THE COMMUNITY"?
The following words appear in the report:
"When assessing the local, district, regional and national consequences, the frame of reference was the impact of each disease on the community as a whole. This often differed markedly from the effect of the disease on the local, district, regional or national population of directly affected parties."
Thus the report states clearly that individual losses are acceptable provided there is overall benefit to the community as a whole at a larger (perhaps) national level.

Notably however there is no discussion on how such a benefit might be calculated, what weightings are provided to various elements, or even which elements are to be considered in the "frame of reference". Therefore it is appropriate to take as comprehensive frame of reference as possible into consideration.
Implicit therefore is the possibility that a native species (the directly affected party) might be eliminated from a region or even a state as a result of a new infectious agent, provided the "community" is not affected at a national level.
Implicit therefore is the possibility that it would be OK to have occasional local multiresistant food poisoning outbreaks in humans (the directly affected party) as a result of imported raw chicken meat, provided the community as a whole was not impacted.
Implicit therefore is the possibility that it is OK to have an imported infectious agent demolish an entire industry, provided the community overall was "not affected".
One can only hope that this is not the intention of this paragraph, but this is the logical explanation from the report as written. Perhaps this issue needs to be addressed further?

BA pointed out that the IRA process did not consider the benefits of trade, but only the costs, or potential harm arising from the import of the commodity. However, the harm that occurred did not have to be recognisable at the national level to be considered. Impacts are assessed at local, district, regional and national levels. National levels impacts are weighted more heavily than local level impacts. This weighting scheme can be seen from the description of the process used for consequence assessment, and the tables of rules for assessing cumulative impact.

16.0 MODELLING ISSUES

ACGC notes that 4 scenarios were analysed: 100,000; 1 million, 10 million and 100 million carcasses annually.

Note that Australia's annual production is around 400 Million carcasses annually, and that 20% import replacement within the first 2 years is a very conservative figure (ie 80 million carcasses) .

Thus in the first instance only the 100 million carcasses provides any relevant analysis.

Better scenarios would be 40 million, 80 million, 100 million, 200 million. Yet again the proposed scenarios tend to underestimate the risks.

As stated above, BA has already agreed to calculate the volume of trade as being approximately 40% of current domestic consumption. This figure was chosen on the basis of information provided to BA by the ACMF.

17.0 EXPECTED CONSEQUENCES OF ENTRY AND EXPOSURE

This table is widely touted in the document. Note that ACGC has previously expressed significant concerns with this table in relation to underweighting real risk , and further notes that it applies only to individual carcasses.

In addition the use of the matrix is based on assumptions which are based on assumptions – thus the margin of error in this matrix is huge, particularly given the obvious errors already noted above.

The use of this matrix needs further consultation with all industries, lest a theoretical, assumptive model finds itself becoming a self fulfilling "fact".

As previously advised, BA has had the model assessed by a competent external risk analyst, who has not raised any problems with the matrix method used for "calculating" expected consequences. BA would be happy to evaluate further detailed arguments of how the matrix approach underweights "real risk", and to consider alternative methods for assessing expected consequence.

18.0 OTHER ISSUES.

ACGC notes significant additional issues in minutiae in the document that are not well suited to discussion in this submission. ACGC requests that the existence of these additional issues is noted by AFFA. ACGC further requests that a meeting be held as soon as possible with the author of this document and suitable other AFFA staff to clarify the many points as yet unmentioned and hopefully to resolve them successfully.

BA believes that the meeting provided an opportunity for further issues to be raised. The matters raised in discussion largely related to clarification of the issues mentioned in the ACGC submission, and have been dealt with in the summary of discussions above.

There was also discussion during the meeting of the assertion in the Method paper that high biosecurity poultry could be discounted as a direct exposure group. Because it was felt to be unlikely that these birds would be fed on poultry feed containing material of poultry origin. Industry representatives advised that this was not the case, and that high biosecurity birds could be fed poultry based material. However, after considering the likelihood of exposure of commercial poultry (medium biosecurity poultry as defined in the Method paper) by the feed pathway, which was shown to be negligible (4.17×10^{-11} for IBD, one of the most resistant pathogens of concern) it was believed that his pathway could be ignored for all practical purposes. Any risk management measures taken to control the risk of introduction of exotic pathogens via the more likely pathways, (such as feeding of wastes to backyard poultry) would be sufficient to address this particularly low level risk. The impacts of an outbreak of disease in this exposure group is still accounted fro in the establishment and spread scenarios; - it is just that they are not considered to be a significant direct exposure pathway.

The ACGC also raised concerns about the likely impact of exotic disease on native Australian species, and suggested that research was needed on the effects of exotic strains of Newcastle disease on native birds in Australia. BA Agreed to consider this. Although not mentioned at the meeting, BA is also currently conducting an IRA on psittacine birds, and the effects of disease on native species is being considered by the RAP for that IRA. Results and conclusions of the psittacine IRA will be relevant to the current chicken meat IRA as well

After completion of the above discussion on the ACGC submission, David Banks asked whether the ACMF had any further issues to rise. Jeff Fairbrother replied that he believed that the issues had been covered in the preceding discussion.

United States Department of Agriculture

Natural Resources Research Centre
Bldg.B
Mail Stop 2W3
2150 Centre Avenue
Fort Collins, CO
80526-8117

April 2, 2003

Dr David Banks
General Manager, Animal Biosecurity
Department of Agriculture, Fisheries and Forestry
Edmund Barton Building, Barton ACT
GPO Box 858,
Canberra ACT 2601

Dear Dr Banks:

Thank you for allowing us to review and comment on the document "Generic Import Risk Analysis (IRA) for Uncooked Chicken Meat: Draft Method for Import Risk Analysis," December 2002. We very much appreciate the opportunity to provide comments while the document is still in draft form.

Decrease dependence on assumptions: In our review, we have identified some areas where the method described needs to be improved and strengthened. Specifically, we believe the document should more accurately represent qualitative and quantitative risk analysis approaches. We believe that scientific evidence and data should be used wherever available to support actual input value estimates as indicated in the World Trade Organisation Sanitary Phytosanitary Agreement (WTO-SPS) Article 5.1, 5.2 and 5.7. Instead, the proposed approach seems to promote the use of conservative, categorical assumptions from the Risk Assessment Panel (RAP). We believe that this may lead to an overestimation of the probabilities of release and exposure. By addressing this concern, the proposed method will constitute a more accurate tool for decision making and facilitate trade, while at the same time, achieving Australia's appropriate level of protection. In addition, addressing this concern will bring the proposed method in closer alignment with SPS Articles 5.1, 5.2, 5.7 and the Article 5.4 requirement that *"Members…take into account the objective of minimising negative trade effects"*.

Promote incorporation of actual data: There are many model input values discussed in the documents for which data are collected routinely and are available from many countries, including the United States. An example is the model value R1 (described on page 16) which represents the prevalence of infected flocks. On page 12, the document discounts the use of actual data and states " *if a disease is present in a country, it would be present at the highest sustainable flock-level prevalence. This assumption was based on the premise that prevalence; (a) would be dictated by epidemiological characteristics of the disease, and (b) is, by nature, dynamic and thus unlikely to remain at the level cited by a particular assessment was carried out"*.

This approach appears to advocate the use of overly conservative estimates verses actual information generated in accordance with OIE guidelines by the surveillance systems of many countries. Country specific factors such as environment, husbandry, veterinary services, animal density, reservoirs of infection, and immunisation status contribute to flock level and within flock level prevalence in addition to specific characteristics of the disease. Disregarding actual data presented by potential trading partners in favour of conservative categorical values in the potential importing country would appear to be inconsistent with the requirements of the WTO-SPS Agreement. The SPS Agreement requires that Members take into account *"…available scientific evidence; relevant processes and production methods; relevant inspection, sampling and testing methods; prevalence of specific diseases or pests…"* (Article 5.2).

The document indicates that risk estimates are to be defined as categorical assumptions with a justification as follows: *"This ensured that each of the likelihoods contributing to an assessment was not expressed in unrealistically precise terms. Simulating these likelihoods as Uniform variables subsequently enabled the variance within each to be incorporated directly into the overcome"* (page 14, paragraph 3).
We believe that carefully collected data combined with expert judgement is not overly precise and that the uncertainty present in data is more appropriately described by a probability distribution that represents the data set. We are concerned that the categorical estimates implied with the Uniform distribution and the conservative handling of the estimated data may result in unnecessary restriction of trade and do not "*…take to account risk assessment techniques developed by the relevant international organisations."* (WTO-SPS Agreements 5.1) For example, see OIE code Article 1.3.2).

Regarding the qualitative analysis approach described on page 13, we have suggestions on the a priori definition of likelihood values and their descriptors. The likelihood boundaries described on page 13 are categorised from high to negligible. The RAP is asked to describe the likelihood of an event in words using these value-laden descriptors.

These words are then translated into numerical likelihood estimates using the category boundaries described in table 1. These numerical estimates could be viewed as purely arbitrary assignments. Instead, why not use data if available and a statistically appropriate probability distribution, or if data is not available, why not use the Pert distribution to take full advantage of scientific evidence and expert opinion? In this way the panel could provide their opinion regarding the most accurate numerical estimates for an input value rather than forcing numerical assignments arbitrarily.

Address use of experts in more detail: Only in the case of input values for which data for quantitative modelling are not available and expert judgement must be used as a final recourse, is the use of an expert panel reasonable. The description of the Risk Assessment Panel (RAP) approach in the document could be enhanced by including some detailed discussion of how the makeup of the panel would be determined, the credentials needed for expert risk estimations, and the method by which the panel would arrive at estimates for the risk parameters.

Technical discussions: We hope that you find our comments on the draft document useful and again we appreciate the opportunity to review it. Given the detailed, complex, and highly technical nature of this document, we would welcome an opportunity for a technical level dialogue on its content. Perhaps an opportunity can be developed for risk analysts from both countries to review the approach together and discuss further ideas for overcoming some of the limitations we've identified above. We believe that this would be beneficial for our analysts as well.

Sincerely,

Thomas E Walton
Director
Centres for Epidemiology and
Animal Health.

Cc:
G. Cosgrove, VS, Riverdale, MD
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14 May 2003

Dr Thomas E Walton
Director
Centers for Epidemiology and Animal Health
USDA
WASHINGTON DC 20250

Dear Dr Walton

Thank you for your letter of 2 April 2003 and your comments on the Methods Paper for the uncooked chicken meat import risk analysis (IRA).

Your comments have been passed to the risk analysis panel for their consideration.

The panel is making good progress on the draft IRA report and is meeting this Friday. We also have additional resources within Biosecurity Australia working on the IRA and drafting material for the panel to consider. At our regular bilateral SPS discussions there has been talk of the USDA providing comment on the uncooked chicken meat technical issues paper. If you intend to provide comments we would appreciate receiving these as soon as possible so that they can be considered in the preparation of the draft IRA report.

As mentioned in your letter and in your earlier letter of 6 December 2002 on the pig meat methods paper we would certainly be interested in technical level discussions. Import risk analysis is an evolving science and an exchange between our two groups would be beneficial. If we have relevant officers travelling to the US we would be happy for them to spend extra time meeting your specialists and we would be delighted to meet with any of your officers visiting Australia.

Thank you again for your comments. Your contributions to our IRAs are appreciated.

Yours sincerely

DAVID BANKS
General Manager
Animal Biosecurity

cc: Mr Bobby Acord, APHIS Administrator, USDA
Dr Sara Kaman, Regional Coordinator, National Center for Import and Export, USDA
Mr Dennis Hannapel, Area Director, Oceania, USDA-APHIS International Services
Dr Philip Corrigan, Veterinary Counsellor, Washington
Ms Mary Harwood, Executive Manager,) Biosecurity Australia

APPENDIX 3

Inspections and analyses required under the Imported Food Control Act

Excerpts relevant to chicken meat from Imported Food Notice 03/08

The complete text of IFN 03/08 (issued 7 August 2008) is at:
http://www.daff.gov.au/__data/assets/pdf_file/0005/762908/ifn-03-08.pdf

SUBJECT: Tests applied to Risk Category foods

Purpose
The purpose of this notice is to advise what foods are considered risk foods under the *Imported Food Control Order 2001* and that from 11 August 2008 risk category food will be inspected and analysed in accordance with this notice. Entries in AIMS created from 11 August 2008 will have the tests applied as per this notice.

Food Standards Australia New Zealand (FSANZ) categorises food as 'risk' if it has the potential to pose a medium to high risk to public health. The Australian Customs Service refers 100% of risk category foods to AQIS for inspection and testing against a published list of potential hazards determined by FSANZ.

Amendments to previous Imported Food Notice 09/07

- *Salmonella* and Coagulase positive staphylococci testing removed from cooked pig meat
- Section on "Information you need to know" added information on referral rate, NZ cheese exempt, updated references.
- Reworded definition of canned product to address ambient stable sealed packages
- Updated references to standards and other documents
- Clarified food category classifications for coconut, sesame seeds and prawns
- Clarified food category classifications for bivalve molluscs
- Relocated product definitions to relevant pages
- Added microbiological standard for Coagulase positive staphylococci in chicken to Attachment 1
- Removed Babybel cheese from Attachment 2
- Referenced tariff codes not previously noted for nuts and sesame seeds.

Information you need to know

Referral rate
The Australian Customs Service refers 100% of risk category foods to AQIS for inspection and testing against a published list of potential hazards determined by FSANZ.

Risk category foods are initially inspected and tested at a rate of 100%. Once five consecutive consignments have passed inspection, the rate is reduced to 25%; after a further 20 consecutive passes, the rate is further reduced to 5%. Regardless of the manufacturer's history of compliance, any consignments that fail will increase the rate of inspection and testing until a history of compliance is re-established.

When are risk foods released by AQIS Imported Food

Risk food must be held until the result of the laboratory tests are assessed by AQIS Imported Food, this situation is called a 'Test and Hold' direction. A fax will be sent to the owner to advise that the food has been inspected and passed and may be moved or distributed by the owner.

Application of random tests to risk foods

While this Import Food Notice (IFN) details the tests to be applied to risk category foods, there may be other tests that are applied to these foods at the random rate. For details regarding what random tests may also apply to a risk food, please refer to the IFN *'Tests applied to random surveillance category foods*'.

Where a risk food has been referred for random tests only, the product is to be sampled under a 'Test and Release' direction. This means that the food is inspected by AQIS Imported Food and samples taken if required. The Imported Food Inspection Report which is completed at the time of the inspection will state whether the food is to be held or may be moved or distributed by the owner.

An owner who chooses to move or distribute random foods that are later found to fail upon receipt of test results will be responsible for any action required on that food including recall and other costs.

If there are risk tests being applied in addition to the random tests, then the product is to be sampled under a 'Test and Hold' direction.

Risk food from New Zealand

All risk cheeses produced in NZ are now exempt from inspection and testing, following a determination that New Zealand's production systems for the manufacture of dairy products are equivalent to that of Australia's.

These products are now subject to the Trans Tasman Mutual Recognition Arrangement and are therefore exempt from the *Imported Food Control Act 1992*.

All other risk foods made or produced in New Zealand remain subject to the requirements of the *Imported Food Control Act 1992*.

Application of additional or alternate tests

Where an authorised officer has reasonable grounds to believe that a food may not comply with the requirements of the Australia New Zealand Food Standards Code (FSC) or may pose a risk to human health, additional tests may be applied after consultation with the Regional AQIS Food Safety Manager or on advice from the Imported Food Program, Canberra.

Application of required tests when auditing certified entries

Where a risk category food is accompanied by government to government certification recognised by the AQIS Imported Food Inspection Scheme (IFIS) and the food is referred for an audit inspection, all tests applicable to that food in the risk and/or random list will be applied. An exception exists for risk food from New Zealand where only risk tests are applied (no random tests are applied).

Visual inspection and label assessment.

All products referred to the IFIS will have a visual inspection and label assessment whether analytical tests are required or not.

Test codes have been incorporated into the following tables

Test codes are a code which the nominated laboratory is required to quote when reporting test results to AQIS Imported Food using the electronic eResults system. These are now incorporated under the `Analytical tests required' column and will appear between ( ). These have been taken from the `eResults Messaging Service External Code Requirements' booklet maintained by AIMS for the laboratories.

Bovine Spongiform Encephalopathy (BSE)

Where the BSE certification complies with requirements the food must then be inspected and analysed according to the food's categorisation. Additional tests may be applied at the risk and/or random rate as appropriate.

Where the BSE certification does not comply with requirements the food must be failed and no further testing is conducted. Refer to IFN '*BSE Certification Requirements'* (http://www.daffa.gov.au/aqis/import/food/notices). Official certificates may be accepted if issued retrospectively by the Competent National Government Authority providing they comply with the stated criteria in the Imported Food Notice.

Owners are responsible for nominating a laboratory of their choice from the list of analysts appointed under the *Imported Food Control Act 1992*.

When an owner is nominating a laboratory, authorised officers will;

- ensure that the laboratory is appointed by AQIS as an analyst under the *Imported Food Control Act 1992*,
- ensure the laboratory has the required testing capabilities as detailed in the Appointed Analysts Testing Capability Matrices which are available from the AQIS website http://www.daffa.gov.au/aqis/import/food/testing-labs
- ensure that the importer understands that they will be required to discuss arrangements with each individual laboratory used, to be aware of their particular requirements for transportation of the sample(s) from the AQIS collection point.

Tables referencing various Tariff Code Chapters

The following tables make reference to a 'Chapter' and then give a brief title for that chapter. These are references to the various tariff code chapters as listed on the Australian Customs web site http://www.customs.gov.au/site/page.cfm?u=4273

Ambient stable sealed packages:

The following processed food that falls within these statements below would be exempt from microbiological testing:

"Ambient stable sealed packages" refers to food that meets **all 3** of the following criteria

1. hermetically sealed containers (such as metal cans, glass jars or bottles, flexible pouches or rigid containers) and
2. stable (not perishable) over a long shelf life when stored at ambient (room) temperature and
3. refrigeration prior to opening is not required.

These attributes indicate that the food has undergone a heat treatment to render the food commercially sterile and has been packaged to maintain the stability of the food.
Note: dried foods are not included

Abbreviations used in the following food tables

FSC = Food Standards Code
ND = Nil Detect
IFN = Import Food Notice
IFIR = Imported Food Inspection Report
IFIS = Imported Food Inspection Scheme

Chapter 2 – Meat and edible meat offal
Chapter 16 - Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates

Tariff Code	Food Category	Food Category Clarification	Analytical tests required	Permitted Analysis Results	Notes
0201 0202	Beef, beef products and food containing beef or beef products as an ingredient	Countries supplying beef products have been categorised. Refer to the AQIS website Import Food Notices for latest information on BSE. http://www.daffa.gov.au/aqis/import/food/notices	BSE Certification check (BSECERT)		Refer to IFN '*BSE Certification Requirements'*
0207 1602	Chicken meat - cooked (chilled or frozen)	Cooked and chilled or cooked and frozen chicken meat, with or without other ingredients. ***Note:*** physical processing may have occurred (e.g. cutting, slicing, and dicing). **Excludes:** §Ambient stable sealed packages and mixed foods containing chicken meat as an ingredient. eg. TV dinners, *processed chicken meat, *processed chicken meat products, ** chicken pates and chicken livers.	*Coagulase positive Staph* (STAPH) *E. coli* (ECOLI) *Listeria monocytogenes* (LIST) *Salmonella* (SALM)	Attachment 1 Table 1 Attachment 1 Table 1 ND / 25g ND / 25g	'*' products are risk food included in 'Meat - cooked and processed / manufactured meat'. '**' products are risk food included in 'Poultry pates and poultry livers – cooked (chilled or frozen)'.
0207 1602	Poultry pates and poultry livers – cooked (chilled or frozen)	Poultry pates (including poultry pastes) and poultry livers **Includes:** all poultry meats. eg. chicken, duck, geese, turkey. **Excludes:** §Ambient stable sealed packages	*Listeria monocytogenes* (LIST) *Salmonella* (SALM)	FSC Standard 1.6.1 FSC Standard 1.6.1	

§**Ambient stable sealed packages**: Refer to Description on Page 4

Attachment 1 Tables of microbiological standards for risk foods

Microbiological limits where:

n = the minimum number of sample units which must be examined from a lot of food.
c = the maximum allowable number of defective sample units i.e. that have counts between 'm' and 'M'.
m = the acceptable microbiological level in a sample unit.
M = the level which when exceeded (ie; the level is greater than M) in one or more samples, would cause the lot to be rejected.

Table 1: Chicken meat (cooked and chilled or frozen)

Test	n	c	m	M
Escherichia coli /g	5	1	3	9
Coagulase positive staphylococci /g	5	1	10^2	10^3

Table 2: Meat - cooked and processed/manufactured meat

Test	n	c	m	M
Escherichia coli /g	5	1	3.6	9.2
SPC /g	5	1	10^6	10^7

Table 3: Bivalve Molluscs

Test	n	c	m	M
SPC /g	5	1	10^5	5×10^5
Escherichia coli /g	5	1	2.3	7

Table 4: Pig meat (cooked and chilled) and Pig meat (cooked and frozen)

Test	n	c	m	M
Escherichia coli /g	5	1	3	9

APPENDIX 4

Environmental Issues

SUMMARY OF DISEASE AGENTS IDENTIFIED AS HAZARDS IN UNCOOKED CHICKEN MEAT AND POTENTIAL EFFECTS ON NATIVE AUSTRALIAN WILDLIFE SPECIES

Appendix 4 was provided at the request of The Department of Environment and Water Resources (formerly the Department of Environment and Heritage) and is intended as a guide for that Department in assessing whether they would require further risk assessment over and above that proposed by BA for animal production reasons. The Appendix summarises the hosts which are known to be susceptible to the disease agent, the possible clinical effects in native wildlife, and whether or not the IRA is proposing risk management for this disease agent.

Disease/disease agent	Hosts susceptible to infection	Possible clinical effects in native wildlife if infection occurs	Risk management recommended?
Notifiable avian influenza virus (H5 and H7 subtypes)	Birds, especially poultry; some highly pathogenic strains affect wild birds, humans and other species (e.g. mammals consuming infected poultry)	Respiratory signs, swelling of the head, diarrhoea, sudden death in affected birds	Yes
Newcastle disease virus	Birds of all species are considered susceptible; infection has been reported in reptiles (snakes, lizards)	Respiratory, gastrointestinal or nervous signs; death of affected birds; clinical disease not reported in reptiles	Yes
Avian infectious bronchitis virus	Chickens and pheasants are the only known hosts; strains of the virus are present in Australian poultry	There is no evidence that endemic strains have affected Australian native birds	No
Infectious bursal disease virus	Chickens; strains of the virus are present in Australian poultry	Clinical signs unlikely in native species	Yes
Salmonella Gallinarum/ Pullorum	Chickens, pheasants, turkeys; other birds can be colonized	Clinical signs unlikely in native species	Yes

Salmonella Enteritidis/ multi-drug resistant *S.* Typhimurium	Humans, livestock, poultry and other bird species, reptiles	Gastrointestinal signs may be seen in young birds; clinical signs unlikely in adult birds	Yes
Salmonella Arizonae	Turkeys, chickens, ducks, wild birds and reptiles; some strains present in Australian birds and reptiles	Gastrointestinal and nervous signs may be seen in some young birds; reptiles unlikely to be affected by avian strains of *S*. Arizonae. Low likelihood of transmission from chicken meat to native birds	No
Haemophilus paragallinarum (Infectious coryza)	Chickens; strains of the organism are present in Australia	Clinical signs unlikely in native species	No
Group 1 Fowl Adenovirus serotype 1 (Quail bronchitis virus)	Quail	Respiratory distress and death in quail. Very low likelihood of transmission in chicken meat	No
Group 1 Fowl Adenovirus serotype 4 (Hydropericardium syndrome; Angara disease)	Chickens	Clinical signs unlikely in native species	No
Group 2 Avian adenovirus (Avian adenovirus splenomegaly disease)	Chickens; related viruses affect turkeys and pheasants; turkey strain is present in Australia	Clinical signs unlikely in native species	No
Mycoplasma iowae	Turkeys, chickens	Clinical signs unlikely in native species	No
Mycoplasma synoviae	Chickens, turkeys, guinea fowl	Clinical signs unlikely in native species	No
Ornithobacterium rhinotracheale	Chickens, turkeys; has been isolated from several species of wild birds	No reports of clinical disease in wild birds	No

Avian reovirus (Viral arthritis/ tenosynovitis)	Avian reoviruses have been isolated from many species of birds; poultry reoviruses may be different strains from those affecting other bird species	Disease syndromes vary with species, including arthritis and ill-thrift in poultry; diarrhoea in pigeons and liver disease in parrots. Poultry strains unlikely to affect native birds; some poultry strains already present in Australia	No
Avian metapneumovirus (Turkey rhinotracheitis)	Turkeys and chickens; has been isolated from ducks and wild birds	Clinical disease not reported in birds other than turkeys and chickens	No
Avian paramyxovirus type 2	Chickens, turkeys, passerine and psittacine birds	No reports of clinical disease in wild birds	No
Avian paramyxovirus type 3	Turkeys, chickens, passerine and psittacine birds	No reports of clinical disease in wild birds	No

APPENDIX 5

Animal Quarantine Policy Memorandum 1999/41 Guidelines for the Approval of Countries to Export Animals (including Fish) and their Products to Australia

1. INTRODUCTION

Where generic conditions for the importation of animals or animal products are developed as a result of a generic risk analysis, it will generally be appropriate to specify as part of the conditions that permits will only be issued for importations from countries that have been specifically approved by AQIS. Approval would normally be based on an assessment of the ability of the certifying authority of the country to provide informed and reliable certification that Australia's quarantine requirements have been met. The 'approved country' approach provides a mechanism for rapid introduction of new controls on importations from a particular country in the event of a change in the animal health status of that country or where AQIS detects breaches of quarantine requirements, such as fraudulent certification.

AQIS takes into account the following criteria when considering the approval of countries to export animals/products to Australia:

. the effectiveness of veterinary services and other relevant certifying authorities,
. the animal health status of the country,
. legislative controls over animal health, including quarantine policies and practices,
. the standard of reporting to the Office International des Epizooties (OIE) of major contagious disease outbreaks,
. effectiveness of veterinary laboratory services, including compliance with relevant international standards,
. effectiveness of systems for control over certification/documentation of products

intended for export to Australia.

The import conditions will identify the key risk management issues that should be considered in the approval of countries.

This paper provides a framework, based on guidelines as specified in section 1.4.3 of the OIE International Health Code for the assessment of a country for approval to export to Australia. Although some countries may be able to provide quantitative data, in most cases AQIS's assessment will be based on qualitative information.

Where import requirements include pre-export processing as part of the risk management measures, AQIS may restrict the issue of permits to product prepared in plants that have been formally approved by the exporting country authority and/or AQIS. Guidelines for the approval of plants for the processing of animal products for export to Australia are also included in this paper.

These guidelines refer to terrestrial, aquatic and avian species and their products.

2. CRITERIA FOR THE APPROVAL OF EXPORTING COUNTRIES

AQIS considers that exporting countries are responsible for the sanitary standard of goods exported to Australia. Where product is sourced in one country and exported from another, AQIS holds the exporting country responsible for the health certification that accompanies those goods. In this context, it is the exporting country and its official certifying authority that must be approved.

In some exporting countries, AQIS may assess several competent authorities, including the relevant authority for animal health, fish health and human health. These authorities may operate at a Federal, State or provincial level.

2.1 Countries with an established export trade in animals/products to Australia.

This section deals with countries that regularly export to Australia items such as live animals, genetic material and animal products in commercial volume. It does not include countries that export items such as laboratory specimens, artefacts and samples for evaluation, ie non-commercial exports or countries that export products that are exempt from quarantine control.

AQIS would normally approve without formal assessment those countries that have a history of exporting animals/products in compliance with Australia's sanitary requirements. All approvals remain under review and can be suspended on an emergency basis at any time. Such action may be taken, for example, if AQIS were to detect serious non-compliance, such as the provision of false certification by a regulatory authority.

AQIS monitors the performance of approved countries in reporting OIE listed diseases, and notifying Australia of changes in disease status, including any incursions of disease that might affect bilateral trade in animals/products. On the basis of formal bilateral agreement, exporting countries may undertake to directly notify Australia of changes in status for diseases other than those listed by the OIE.

AQIS will monitor the performance of approved countries via routine collection of intelligence on disease, including from scientific literature and internet postings, through the conduct of visits and inspections and by liaison with other veterinary authorities (including chief veterinary officers of Australian states/territories). If AQIS becomes aware that unreported serious disease is present in the country of export, approval may be suspended pending clarification of the situation.

2.2 Countries with no established export trade in animals/ products to Australia

AQIS's formal assessment of a country for approval to export to Australia, may include:

. examination of information supplied by the country,
. consideration of the results of an assessment by Australia's major trading partners to the country as an exporter of like commodities (such assessment will take into account the extent to which the regulatory requirements of trading partners are consistent with those of Australia)
. formal evaluation of the country's veterinary services and/or certifying authority (this may involve country visits by AQIS or AQIS authorised officers).

a) An effective veterinary/fish health service

An approved country should have national veterinary and fish health authorities, which are responsible for animal health, quarantine, export certification and international reporting of the country's animal disease status.

. Where non-government veterinarians provide export services, they should be Official Veterinarians as defined in the OIE Code. The national veterinary authority must be responsible for the overall system of control of the export-related activities of private veterinarians, including arrangements for training, auditing and compliance.

. The performance of the certifying authority should be subject to independent audit and a satisfactory level of competency must be maintained.

b) Animal health status of the country of origin/export

The country should be free from or have effective zoning of diseases as appropriate to AQIS's quarantine requirements. This should be supported by legislative controls such as mandatory notification of disease outbreaks and official control programs.

c) Quarantine measures

AQIS will consider the disease status of neighbouring countries and the effectiveness of border measures and buffer zones in preventing disease incursions in assessing countries for approval to export to Australia.

d) Animal health controls

An approved country should be able to demonstrate mechanisms for official notification and control or eradication of diseases identified in the import risk analysis as important in relation to the animal species/product in question. Animal health controls should include arrangements for animal health surveillance, regulatory controls

for specified diseases and a formal system of response to animal disease events. AQIS will take into account the country's policies with respect to outbreaks of diseases of concern.

Border controls should be effective in preventing the entry and establishment of significant exotic disease agents relevant to the animal species/product in question.

There should be legislative provisions covering movement controls and inspection procedures in relation to the prevention, control and eradication of disease.

e) Performance in reporting disease

AQIS will take into account the performance of approved countries in reporting OIE listed diseases and significant new or emerging diseases and of notification to Australia of incursions of disease relevant to the bilateral trade in animals/products. If AQIS becomes aware that serious disease is present, unreported, in the country of export, the country's approved status may be suspended, pending clarification, or withdrawn.

f) Access to laboratories that can conduct recognised diagnostic tests to an international standard of competence.

It is accepted that not all countries are able to perform all the necessary tests to definitively diagnose all diseases. Countries should, however, have access to laboratories that meet the OIE Standard for the diagnosis of diseases that AQIS identifies (in an import risk analysis) as being of concern. They should also have competence in the collection, preservation and transport of specimens to these laboratories.

g) Appropriate arrangements for certification/documentation.

Countries should be able to demonstrate:

. legislative controls over the process of export of animals and animal products, to provide for enforcement of Australia's import requirements. This includes supervision by the official veterinary (or other competent) authority of the export certification process;

. legislative arrangements that provide for the approval/registration of export premises and provide powers to deny or withdraw registration for premises or certification for commodities as the case may be;

. arrangements to ensure that certifying officers performing official duties have no conflict of interest;

. a system of control that provides for reliable correlation of the results of inspections with the documentation provided for export consignments and

. a system of audit and review of official and private certifying procedures.

3. CRITERIA FOR APPROVAL OF EXPORTING FACILITIES

Where there is an appropriate Australian standard (for example, relating to inspection requirements) the exporting country would be expected to follow a standard that would provide an equivalent outcome to that provided by the Australian standard.

Where the certifying and/or veterinary services in the exporting country have previously been assessed and approved, AQIS will normally base approval of processing plants on advice from the certifying authority that the plant meets AQIS's requirements.

In cases where the certifying authority in the exporting country has not previously been assessed, AQIS may conduct an on-site assessment of a plant.

The processing plant will normally be required to demonstrate, as appropriate:

. suitable separation of raw and processed product;
. reliable compliance with minimum processing requirements for the product;
. auditable records of information required by AQIS, for example on the source of raw materials and ingredients, processing records and test results;
. controls to prevent post-processing contamination; and
. standards of hygienic construction and operation that provide equivalent public health safeguards to those provided by relevant Australian standards.

CONSULTATION

The Chief Veterinary Officer of State/Territory Departments of Agriculture in Australia, the Commonwealth Chief Veterinary Officer and his counterparts in New Zealand, Canada and the United States of America have been consulted in the preparation of this Memorandum. Comment should be provided to the contact officer whose details appear below by 9 July 1999.

Confidentiality

Respondents are advised that, subject to the *Freedom of Information Act 1982* and the *Privacy Act 1982*, all submissions received in response to Animal Quarantine Policy Memoranda will be publicly available and may be listed or referred to in any papers or reports prepared on the subject matter of the Memoranda.

The Commonwealth reserves the right to reveal the identity of a respondent unless a request for anonymity accompanies the submission. Where a request for anonymity does not accompany the submission the respondent will be taken to have consented to the disclosure of his or her identity for the purposes of Information Privacy Principle 11 of the Privacy Act.

The contents of the submission will not be treated as confidential unless they are marked 'confidential' and they are capable of being classified as such in accordance with the Freedom of Information Act.

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APPENDIX 6

Principles of Zoning and Compartmentalisation

Zoning and compartmentalisation are procedures implemented by a country under the provisions of the OIE Terrestrial Animal Health Code Chapters 4.3 and 4.4, 'with a view to defining subpopulations of different animal health status' within national boundaries… 'for the purpose of disease control and/or international trade'. These subpopulations may be separated by natural or artificial geographic barriers (***zoning***), or by the application of appropriate management systems, including biosecurity management (***compartmentalisation***) (World Organisation for Animal Health (OIE) 2006). A diagrammatic representation of an example of the geographic basis for zoning is shown at Figure 1, and an example of the management system basis for compartmentalisation is at Figure 2 (Wilson 2006).

Figure 1. Geographic basis for zoning

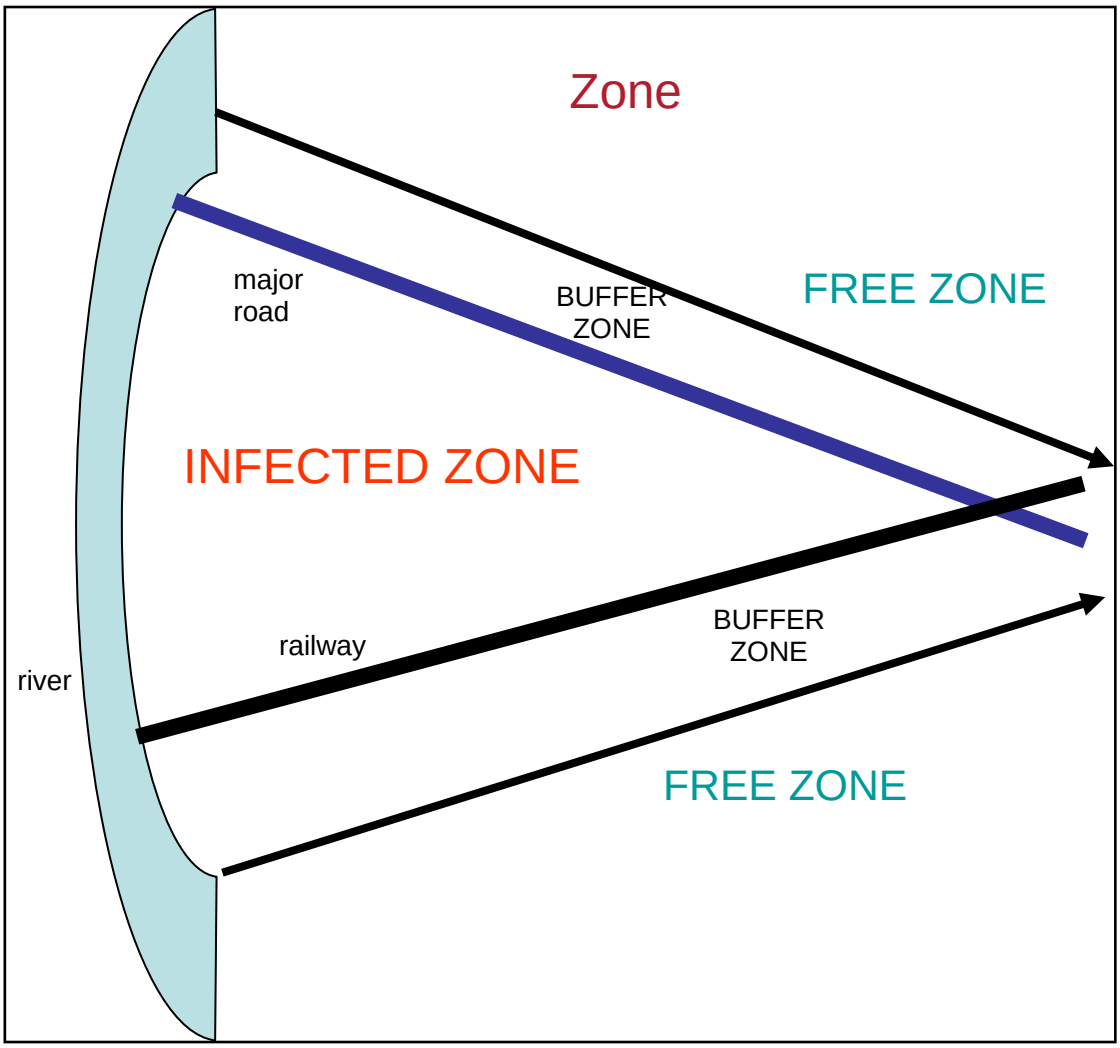
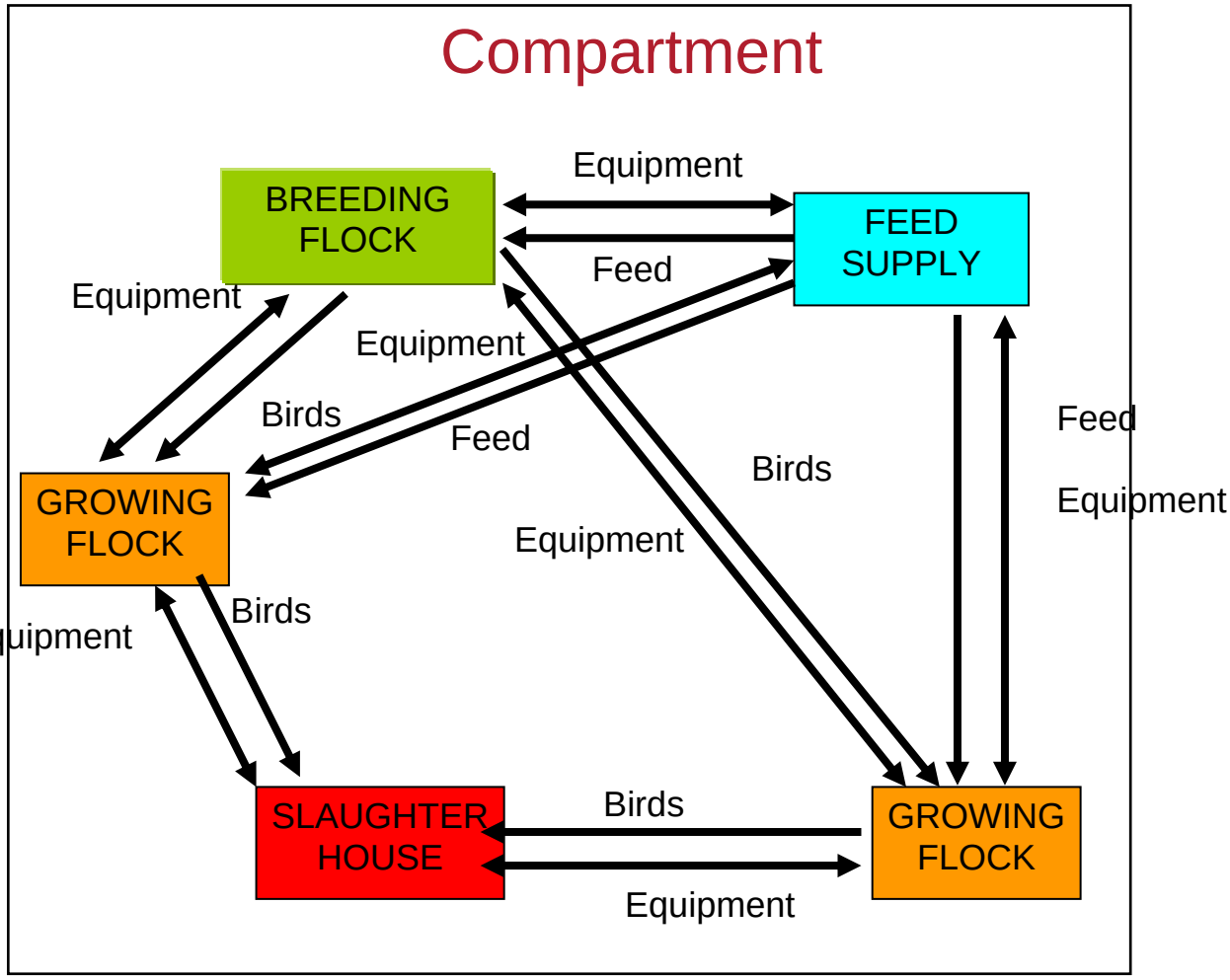


Figure 2. Management basis for compartmentalisation



The OIE Code Chapter on the principles of zoning and compartmentalisation is reproduced below.

OIE Terrestrial Animal Health Code Chapter 4.3.

ZONING AND COMPARTMENTALISATION

Article 4.3.1.

Introduction

For the purposes of this Terrestrial Code, 'zoning' and 'regionalisation' have the same meaning.

Given the difficulty of establishing and maintaining a disease free status for an entire country, especially for diseases the entry of which is difficult to control through measures at national

boundaries, there may be benefits to a Member in establishing and maintaining a subpopulation with a distinct health status within its territory. Subpopulations may be separated by natural or artificial geographical barriers or, in certain situations, by the application of appropriate management practices.

Zoning and compartmentalisation are procedures implemented by a country under the provisions of this chapter with a view to defining subpopulations of distinct health status within its territory for the purpose of disease control and/or international trade. While zoning applies to an animal subpopulation defined primarily on a geographical basis (using natural, artificial or legal boundaries), compartmentalisation applies to an animal subpopulation defined primarily by management and husbandry practices related to biosecurity. In practice, spatial considerations and good management play important roles in the application of both concepts. A particular application of the concept of zoning is the establishment of a containment zone. In the event of a limited outbreak of a specified disease within an otherwise free country or zone, a single containment zone, which includes all cases, can be established for the purpose of minimizing the impact on the entire country or zone.

This chapter is to assist OIE Members wishing to establish and maintain different subpopulations within their territory using the principles of compartmentalisation and zoning. These principles should be applied in accordance with the measures recommended in the relevant disease Chapter(s). This Chapter also outlines a process through which trading partners may recognise such subpopulation. This process is best implemented by trading partners through establishing parameters and gaining agreement on the necessary measures prior to disease outbreaks.

Before trade in animals or their products may occur, an importing country needs to be satisfied that its animal health status will be appropriately protected. In most cases, the import regulations developed will rely in part on judgements made about the effectiveness of sanitary procedures undertaken by the exporting country, both at its borders and within its territory.

As well as contributing to the safety of international trade, zoning and compartmentalisation may assist disease control or eradication within a Member’s territory. Zoning may encourage the more efficient use of resources within certain parts of a country and compartmentalisation may allow the functional separation of a subpopulation from other domestic or wild animals through biosecurity measures, which a zone (through geographical separation) would not achieve. Following a disease outbreak, the use of compartmentalisation may allow a Member to take advantage of epidemiological links among subpopulations or common practices relating to biosecurity, despite diverse geographical locations, to facilitate disease control and/or the continuation of trade.

Zoning and compartmentalisation cannot be applied to all diseases but separate requirements will be developed for each disease for which the application of zoning or compartmentalisation is considered appropriate.

To regain free status following a disease outbreak in a zone or compartment, Members should follow the recommendations in the relevant disease Chapter in the Terrestrial Code.

Article 4.3.2.

General considerations

The Veterinary Services of an exporting country which is establishing a zone or compartment within its territory for international trade purposes should clearly define the subpopulation in accordance with the recommendations in the relevant chapters in the Terrestrial Code, including those on surveillance, and the identification and traceability of live animals. The Veterinary Services of an exporting country should be able to explain to the Veterinary Services of an importing country the basis for its claim of a distinct animal health status for the zone or compartment in such terms.

The procedures used to establish and maintain the distinct animal health status of a zone or compartment should be appropriate to the particular circumstances, and will depend on the epidemiology of the disease, environmental factors and applicable biosecurity measures.

The authority, organisation and infrastructure of the Veterinary Services, including laboratories, must be clearly documented in accordance with the Chapter on the evaluation of Veterinary Services of the Terrestrial Code, to provide confidence in the integrity of the zone or compartment. The final authority of the zone or compartment, for the purposes of domestic and international trade, lies with the Veterinary Authority.

In the context of maintaining the health status of a population, references to ‘import’, ‘importation’ and ‘imported animals/products’ found in the Terrestrial Code apply both to importation into a country and to the movement of animals and their products into zones and compartments. Such movements should be the subject of appropriate measures to preserve the animal health status of the zone/compartment.

The exporting country should be able to demonstrate, through detailed documentation provided to the importing country, that it has implemented the recommendations in the Terrestrial Code for establishing and maintaining such a zone or compartment.

An importing country should recognise the existence of this zone or compartment when the appropriate measures recommended in the Terrestrial Code are applied and the Veterinary Authority of the exporting country certifies that this is the case.

The exporting country should conduct an assessment of the resources needed and available to establish and maintain a zone or compartment for international trade purposes. These include the human and financial resources, and the technical capability of the Veterinary Services (and of the relevant industry, in the case of a compartment) including disease surveillance and diagnosis.

Biosecurity and surveillance are essential components of zoning and compartmentalisation, and the arrangements should be developed through cooperation of industry and Veterinary Services.

Industry’s responsibilities include the application of biosecurity measures, quality assurance schemes, monitoring the efficacy of the measures, documenting corrective actions, conducting surveillance, rapid reporting and maintenance of records in a readily accessible form.

The Veterinary Services should provide movement certification, periodic inspections of facilities, biosecurity measures, records and surveillance procedures. Veterinary Services should conduct or audit surveillance, reporting and laboratory diagnostic examinations.

Article 4.3.3.

Principles for defining a zone or compartment, including containment zone

In conjunction with the above considerations, the following principles should apply when Members define a zone or compartment.

1. The extent of a zone and its geographical limits should be established by the Veterinary Authority on the basis of natural, artificial and/or legal boundaries, and made public through official channels.
2. Establishment of a containment zone should be based on a rapid response including appropriate standstill of movement of animals and commodities upon notification of suspicion of the specified disease and the demonstration that the outbreaks are contained within this zone through epidemiological investigation (trace-back, trace-forward) after confirmation of infection. The primary outbreak and likely source of the outbreak should be identified and all cases shown to be epidemiologically linked. For the effective establishment of a containment zone, it is necessary to demonstrate that there have been no new cases in the containment zone within a minimum of two incubation periods from the last detected case. A stamping-out policy or another effective control strategy aimed at eradicating the disease should be applied and the susceptible animal population within the containment zones should be clearly identifiable as belonging to the containment zone. Increased passive and targeted surveillance in accordance with Chapter 8.5. in the rest of the country or zone should be carried out and has not detected any evidence of infection. Measures consistent with the disease specific Chapter should be in place to prevent spread of the infection from the containment zone to the rest of the country or zone, including ongoing surveillance in the containment zone. The free status of the areas outside the containment zone would be suspended pending the establishment of the containment zone. The suspension of free status of these areas could be lifted, once the containment zone is clearly established, irrespective of the provisions of the disease specific Chapter. The recovery of the free status of the containment zone should follow the provisions of the disease specific Chapter.
3. The factors defining a compartment should be established by the Veterinary Authority on the basis of relevant criteria such as management and husbandry practices related to biosecurity, and made public through official channels.
4. Animals and herds belonging to such subpopulations need to be recognisable as such through a clear epidemiological separation from other animals and all things presenting a disease risk. For a zone or compartment, the Veterinary Authority should document in detail the measures taken to ensure the identification of the subpopulation and the establishment and maintenance of its health status through a biosecurity plan. The measures used to establish and maintain the distinct animal health status of a zone or compartment should be appropriate to the particular circumstances, and will depend on the epidemiology of the disease, environmental factors, the health status of animals in adjacent areas, applicable biosecurity measures (including movement controls, use of natural and artificial boundaries, the spatial separation of animals, and commercial management and husbandry practices), and surveillance.
5. Relevant animals within the zone or compartment should be identified in such a way that their history can be audited. Depending on the system of production, identification

may be done at the herd, flock lot or individual animal level. Relevant animal movements into and out of the zone or compartment should be well documented, controlled and supervised. The existence of a valid animal identification system is a prerequisite to assess the integrity of the zone or compartment.

6. For a compartment, the biosecurity plan should describe the partnership between the relevant industry and the Veterinary Authority, and their respective responsibilities. It should also describe the routine operating procedures to provide clear evidence that the surveillance conducted, the live animal identification and traceability system, and the management practices are adequate to meet the definition of the compartment. In addition to information on animal movement controls, the plan should include herd or flock production records, feed sources, surveillance results, birth and death records, visitor logbook, morbidity and mortality history, medications, vaccinations, documentation of training of relevant personnel and any other criteria necessary for evaluation of risk mitigation. The information required may vary according to the species and disease(s) under consideration. The biosecurity plan should also describe how the measures will be audited to ensure that the risks are regularly re-assessed and the measures adjusted accordingly.

Consensus Agreement between Biosecurity Australia and EU Commission

Australia has entered into an agreement with the European Union in relation to the principles that will apply when considering requests for recognition of zones or regions. The details of this agreement are contained in the Consensus Document signed on 28th April 2005. A copy of the text of the Consensus Document follows.

Consensus Document

Biosecurity Australia and EU Commission, DG Health and Consumer Protection

PRINCIPLES OF ZONING AND REGIONALISATION

I. OIE

Article 1.3.5.1 of the Office International des Epizooties (OIE) Terrestrial Animal Health Code (2004) describes zoning or regionalisation (for the purposes of the Code these have the same meaning) as a procedure implemented by a country to define geographical areas of subpopulations of different animal health status within its territory for the purpose of international trade in accordance with the relevant chapters of the Code.

Article 1.3.5.2 states: "*The requirements necessary to preserve the distinct health status of a zone must be appropriate to the particular disease and will depend on the epidemiology of the disease, environmental factors, control measures and surveillance.*

The extent of a zone and its limits should be established by the Veterinary Administration on the basis of natural, artificial or legal boundaries and made public through official channels.

Animals and herds belonging to subpopulations need to be clearly recognisable as such. The Veterinary Administration must document in detail the measures taken to ensure the identification of the subpopulation and the recognition and maintenance of its health status.

Thus defined, the zones constitute the relevant subpopulations for the application of the recommendations in Part 2 of the Terrestrial Code."

II. Relevant principles

Certain principles should be used as criteria for applying and assessing zoning and regionalisation (for simplicity the term zone is used henceforth). In terms of their level of relevance these principles are interdependent and variable, and depend on the epidemiology of the disease in the area in which zoning is applied. Their application and assessment depends on such factors as:

- OIE classification of the disease
- basic scientific knowledge of the epidemiology of the disease, in particular as regards animals and commodities causing spread of disease.
- the specificity of the zones:
    - Geographical factors
    - (Micro) climatological factors
    - Infrastructural factors
    - Environmental factors.

The application of these principles for trade in no way compromises the rights and obligations of both importing and exporting Parties under the Agreement on the Application of Sanitary and Phytosanitary measures (WTO SPS Agreement).

III. The Principles

1) Zones of different health status:

    a) Zones may be established in the course of eradication measures to control an outbreak of a disease including zoonoses or,
    Zones refer to the presence or absence of the disease/ pathogen in a zone, different prevalence of the disease in zones or the control measures (including vaccination) in place in the zones.

    b) Zones of different health status are separate and distinct. The following zones can be distinguished: infected zone, free zone, buffer zone, control program / surveillance zone, zones with a certain prevalence and vaccinated zones.

2) Borders of the zone:

- The function of the border is to protect and/or define the free/buffer/control zone;
- The borders of the zones may be legal, natural or artificial (geographical/ physical) barriers;
- Legal borders are legally determined for the competence of an administration such as countries, states, provinces, communes, other administrative entities such as Shires, Divisions, etc;
- Natural borders include mountains, rivers, seas, lakes, etc;
- Artificial borders include physical features such as roads, canals, railways, and intangible lines such as geographic information system coordinates;
- Regardless of the type of border used, the zone status of each animal and each farm or management unit should be clear. The choice of the type of borders should always take into account the best available option or combination of options.

3) Legislation:

- Effective legislation must be in force and available to enable the establishment, maintenance and control of the zones and their borders;
- Effective legislation must be available for movement controls and movement restrictions for a period of time under conditions to be determined by the Competent Authority (CA) for all susceptible animals and animal products and risk material (where relevant);
- Effective legislation must be available for imposing actions to control the disease in the zone and to manage the zones (surveillance, sampling etc);
- The criteria of this legislation are that:
    - it must allow establishment or lifting of zones without delay
    - it must not be hindered by procedural/competence/budget problems
    - it must be risk based and flexible, reflecting the different levels of risk.

4) Powers and performance of the CA

- The CA is in most cases the official veterinary service but may be any service that has been given this responsibility. The CA must be able to count on an effective co-operation with the police, army and any other services necessary for the enforcement of the measures;
- The CA should be a central service with central power and in case of decentralised power (such as federal states and territories or autonomous regions) structured provisions and legislation should be available to ensure an appropriate interregional co-operation.

5) Disease reporting

The disease for which zoning is carried out must be notifiable or reportable.

Quality of disease reporting/notification depends on:

- disease surveillance, early investigation and reporting
- legal provisions for the disease being notifiable/reportable to the CA
- public awareness
- history of disease occurrence
- compensation provisions in case of obligatory eradication measures
- penalties in case of non-compliance.

6) Epidemiological investigations

Investigations should take into account the epidemiology of the disease under consideration. For diseases that can be transmitted by contagious means, investigations should focus on tracing forwards and backwards from positive disease findings. For non-contagious diseases the investigation should take into account *inter-alia* relevant information related to possible vectors.

- The effectiveness of these investigations depends on:

    - Epidemiological knowledge of a given disease in the zone under consideration
    - Experience, performance and power of the CA
    - Performance of the laboratories
    - Knowledge of trade structures and pattern
    - Knowledge of degree of risk posed by feral animal reservoirs
    - Quality of record keeping systems
    - Suitability of pathogen or vector systems
    - Traceability of animals and animal products (where appropriate) depends on good identification and/or registration systems.

7) Reliability of laboratory procedures

- Reliability of laboratory procedures is crucial for confirmation of diagnosis, epidemiological investigations, surveillance, and movement controls

- Reliability must be judged in qualitative and quantitative terms. Laboratory capacity and speed of reporting may be crucial in certain circumstances.

8) Movement control and trade restrictions

- Movement control concerns movement within and between zones

- For diseases that can be spread by contagious means, the stability of a certain disease status in a zone depends on an effective movement control, which depends on:

- Performance and power of the CA and its co-operation with other services

- Traceability of animals and animal products via identification and/or registration systems

- Quality of record-keeping systems.

- For diseases that cannot be transmitted by contagious means, the value of movement controls on animals or animal products depends on the epidemiology of the disease under consideration.

9) Level of surveillance

- To effectively manage the zones surveillance must be carried out inside and outside the different zones

- Surveillance programs should consider the epidemiology of the disease, and may include active and passive surveillance, as appropriate according to scientific standards

- Confirmed and suspected cases should be followed by epidemiological investigations and surveillance

- Surveillance programs should be designed according to

- the disease agent as regards:

- surveys for evidence of the agent

- routine sampling on farms, markets and abattoirs

- sentinel animal and vector trapping programs

- banking of samples for retrospective surveys

- analysis of laboratory records.

- the host population as regards:

- demographics

- movement and trade patterns

- interaction between domesticated and wild animals

- animal identification and registration systems

- management factors.

- environmental factors as regards:

- air and quality

- vector distribution and competence

- topography

- meteorology

- degree of uniformity of the above.

- infrastructure as regards:

- feed distribution

- marketing, distribution and slaughter of animals

- pharmaceutical and other relevant industries

- veterinary and practice

- measures taken in the zone - (see 10 below)

10) Measures in the zones

If disease is detected in a free/buffer/control zone, the status of that zone must be reassessed. Scientifically supportable measures may be taken to protect or re-establish the status of the zone, including:

- stamping out

- movement control

- stand still

- vaccination (including safety of vaccines used).

11) Control of entry

Zones of higher health status should be protected from disease incursions by measures that consider the epidemiology of the disease and are consistent with international guidelines. These measures may include controls on the importation of animals, genetic material, animal products, fomites, animal feeds inc1uding swill, biologics and border audit (as appropriate). These controls are intended to apply (where appropriate) to the boundary of a free zone, which may or may not be a national border.

12) Notification of the OIE

Where applicable the party involved notifies the occurrence of the disease to the OIE, in accordance with the OIE rules.

IV. The Procedures

The CA with the responsibility for implementing the zoning policy (*the exporting Party*) is in the best position to define and maintain the zone. Providing the zone is defined and maintained according to the requirements of the importing Party *in agreement with the criteria laid down in this document*, the decision of the exporting Party's CA shall be the basis for trade.

In order to maintain confidence in the authority of the exporting Party, the exporting Party shall inform the importing Party on an ongoing basis and without delay of any evolution in the disease situation and any measure taken.

In determining whether trade in animals and animal products can occur the importing party may decide to carry out an inspection in the territory of the exporting party concerning the implementation and enforcement of the zoning provisions. Such an inspection shall be carried out without delay and shall be carried out on the basis of an audit, including an assessment of the performance of the CA. The past history of the results of previous checks and controls on importation should also be taken into account.

The final decision whether trade in animals and animal products on the basis of zoning can occur lays with the importing Party. In consultation with the exporting Party, the importing Party may decide on additional guarantees or risk mitigating factors, such as deboning/maturation, treatment, quarantine, time delays and tests. Decisions on zoning and risk mitigation /management requirements will be made in a manner that ensures rights and obligations of both importing and exporting Parties under the WTO SPS Agreement.

END OF TEXT OF CONSENSUS DOCUMENT

The Consensus Document covers principles for zoning and regionalisation, but does not cover compartmentalisation. At the time the consensus document was being finalised, compartmentalisation had not yet been accepted as part of the OIE Code and so was not considered during negotiations. Compartmentalisation has subsequently been accepted by OIE.

Biosecurity Australia accepts in principle that compartmentalisation may provide an appropriate risk management measure in some cases, such as where a disease agent in a country is restricted to wild populations, or in the case of some disease agents which are amenable to control by management means. However, the confidence which can be gained from a compartmentalisation system can only be assessed on a case by case basis.

REFERENCE LIST

1. Wilson, D., Director International Trade . 2006. "The OIE's approach to zones and compartments." Web page, [accessed February 2006]. Available at http://www.wto.org/english/tratop_e/sps_e/meet_jan06_e/oie_e.ppt.

2. World Organisation for Animal Health (OIE). 2008. "Terrestrial Animal Health Code 200 Chapter 4.3 Zoning and compartmentalisation." Web page, [accessed 2008]. Available at http://www.oie.int/eng/Normes/mcode/en_chapitre_1.4.3.htm

APPENDIX 7

Relevant Sections of OIE Code Entry – Hazard identification

Chapter 2.2. Import risk analysis

Article 2.2.2.

Hazard identification

The *hazard identification* involves identifying the pathogenic agents which could potentially produce adverse consequences associated with the importation of a *commodity*.

The potential *hazards* identified would be those appropriate to the species being imported, or from which the *commodity* is derived, and which may be present in the *exporting country*. It is then necessary to identify whether each potential *hazard* is already present in the *importing country*, and whether it is a *notifiable disease* or is subject to control or eradication in that country and to ensure that import measures are not more trade restrictive than those applied within the country.

Hazard identification is a categorisation step, identifying biological agents dichotomously as potential *hazards* or not. The *risk assessment* may be concluded if *hazard identification* fails to identify potential *hazards* associated with the importation.

The evaluation of the *Veterinary Services*, surveillance and control programmes and zoning and compartmentalisation systems are important inputs for assessing the likelihood of *hazards* being present in the animal population of the *exporting country*.

An *importing country* may decide to permit the importation using the appropriate sanitary standards recommended in the *Terrestrial Code*, thus eliminating the need for a *risk assessment*.

Relevant Sections of OIE Code Entry – Avian Influenza

Chapter 10.4. Avian influenza

Article 10.4.1.

General provisions

1. For the purposes of international trade, avian influenza in its notifiable form (NAI) is defined as an infection of poultry caused by any influenza A virus of the H5 or H7 subtypes or by any AI virus with an intravenous pathogenicity index (IVPI) greater than 1.2 (or as an alternative at least 75% mortality) as described below. NAI viruses can be divided into highly pathogenic notifiable avian influenza (HPNAI) and low pathogenicity notifiable avian influenza (LPNAI):

> a. HPNAI viruses have an IVPI in 6-week-old chickens greater than 1.2 or, as an alternative, cause at least 75% mortality in 4-to 8-week-old chickens infected intravenously. H5 and H7 viruses which do not have an IVPI of greater than 1.2 or cause less than 75% mortality in an intravenous lethality test should be sequenced to determine whether multiple basic amino acids are present at the cleavage site of the haemagglutinin molecule (HA0); if the amino acid motif is similar to that observed for other HPNAI isolates, the isolate being tested should be considered as HPNAI;
>
> b. LPNAI are all influenza A viruses of H5 and H7 subtype that are not HPNAI viruses.

2. Poultry is defined as ‘all domesticated birds, including backyard poultry, used for the production of meat or eggs for consumption, for the production of other commercial products, for restocking supplies of game, or for breeding these categories of birds, as well as fighting cocks used for any purpose’.

Birds that are kept in captivity for any reason other than those reasons referred to in the preceding paragraph, including those that are kept for shows, races, exhibitions, competitions, breeding or selling these categories of birds as well as pet birds, are not considered to be poultry.

3. For the purposes of *international trade*, this chapter deals not only with the occurrence of clinical signs caused by NAI virus, but also with the presence of infection with NAI virus in the absence of clinical signs.

4. For the purposes of international trade, a country should not impose immediate trade bans in response to a notification of infection with HPAI and LPAI virus in birds other than poultry according to Article 1.2.3. of the *Terrestrial Code.*

5. Antibodies to H5 or H7 subtype of NAI virus, which have been detected in poultry and are not a consequence of vaccination, have to be further investigated. In the case of isolated serological positive results, NAI infection may be ruled out on the basis of a thorough epidemiological investigation that does not demonstrate further evidence of NAI infection.

6. The following defines the occurrence of infection with NAI virus:

a. HPNAI virus has been isolated and identified as such or viral RNA specific for HPNAI has been detected in poultry or a product derived from poultry; or
b. LPNAI virus has been isolated and identified as such or viral RNA specific for LPNAI has been detected in poultry or a product derived from poultry.

For the purposes of the *Terrestrial Code*, 'NAI free establishment' means an *establishment* in which the poultry have shown no evidence of NAI infection, based on surveillance in accordance with Articles 10.4.27 to 10.4.33.

For the purposes of the *Terrestrial Code*, the incubation period for NAI shall be 21 days.

Standards for diagnostic tests, including pathogenicity testing, are described in the *Terrestrial Manual*. Any vaccine used should comply with the standards described in the *Terrestrial Manual*.

Article 10.4.2

Determination of the NAI status of a country, zone or compartment

The NAI status of a country, a *zone* or a *compartment* can be determined on the basis of the following criteria:

1. NAI is notifiable in the whole country, an on-going NAI awareness programme is in place, and all notified suspect occurrences of NAI are subjected to field and, where applicable, laboratory investigations;

2. appropriate surveillance is in place to demonstrate the presence of infection in the absence of clinical signs in poultry, and the risk posed by birds other than poultry; this may be achieved through an NAI surveillance programme in accordance with Articles 10.4.27 to 10.4.33.

3. consideration of all epidemiological factors for NAI occurrence and their historical perspective.

Article 10.4.3.

NAI free country, zone or compartment

A country, *zone* or *compartment* may be considered free from NAI when it has been shown that neither HPNAI nor LPNAI infection has been present in the country, *zone* or *compartment* for the past 12 months, based on surveillance in accordance with Articles 10.4.27 to 10.4.

If infection has occurred in a previously free country, *zone* or *compartment*, free status can be regained:

1. In the case of HPNAI infections, 3 months after a *stamping-out policy* (including *disinfection* of all affected *establishments*) is applied, providing that surveillance in accordance with Articles 10.4.27 to 10.4.33 has been carried out during that three-month period.

2. In the case of LPNAI infections, poultry may be kept for slaughter for human consumption subject to conditions specified in Articles 10.4.20. or 10.4.21 or a stamping-out policy may be applied; in either case, 3 months after the disinfection of

all affected establishments, providing that surveillance in accordance with Articles 10.4.27 to 10.4.33 has been carried out during that three-month period..

Article 10.4.4.

HPNAI free country, zone or compartment

A country, *zone* or *compartment* may be considered free from HPNAI when:

1. it has been shown that HPNAI infection has not been present in the country, *zone* or *compartment* for the past 12 months, although its LPNAI status may be unknown, or
2. when, based on surveillance in accordance with Articles 10.4.27 to 10.4.33., it does not meet the criteria for freedom from NAI but any NAI virus detected has not been identified as HPNAI virus.

The surveillance may need to be adapted to parts of the country or *zones* or *compartments* depending on historical or geographical factors, industry structure, population data, or proximity to recent *outbreaks*.

If infection has occurred in a previously free country, *zone* or *compartment*, HPNAI free status can be regained 3 months after a *stamping-out policy* (including *disinfection* of all affected *establishments*) is applied, providing that surveillance in accordance with Articles 10.4.27 to 10.4.33 has been carried out during that three-month period.

Article 10.4.20.

Recommendations for importation from an NAI free country, *zone* or *compartment*

for *fresh meat* of poultry

Veterinary Authoritiess should require the presentation of an *international veterinary certificate* attesting that the entire consignment of *fresh meat* comes from birds:

1. which have been kept in an NAI free country, *zone* or *compartment* since they were hatched or for at least the past 21 days;

2. which have been slaughtered in an *approved abattoir* in a NAI free country, *zone* or *compartment* and have been subjected to ante-mortem and post-mortem inspections in accordance with Chapter 6.2 and have been found free of any signs suggestive of NAI.

Article 10.4.21.

Recommendations for importation from an HPNAI free country, *zone* or *compartment,*

for *fresh meat* of poultry

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that the entire consignment of *fresh meat* comes from birds:

1. which have been kept in an HPNAI free country, zone or compartment since they were hatched or for at least the past 21 days;

2. which have been slaughtered in an approved *abattoir* in a NAI free country, *zone* or *compartment* and have been subjected to ante-mortem and post-mortem inspections in accordance with Chapter 6.2 and have been found free of any signs suggestive of NAI.

Relevant Sections of the OIE Code Entry – Newcastle Disease

Chapter 10.13. Newcastle disease

Article 10.13.1.

General provisions

1. For the purposes of *international trade*, Newcastle disease (ND) is defined as an *infection* of poultry caused by a virus (NDV) of avian paramyxovirus serotype 1 (APMV-1) that meets one of the following criteria for virulence:
   a. the virus has an intracerebral pathogenicity index (ICPI) in day-old chicks (*Gallus gallus*) of 0.7 or greater; or
   b. multiple basic amino acids have been demonstrated in the virus (either directly or by deduction) at the C-terminus of the F2 protein and phenylalanine at residue 117, which is the N-terminus of the F1 protein. The term 'multiple basic amino acids' refers to at least three arginine or lysine residues between residues 113 and 116. Failure to demonstrate the characteristic pattern of amino acid residues as described above would require characterisation of the isolated virus by an ICPI test.

   In this definition, amino acid residues are numbered from the N-terminus of the amino acid sequence deduced from the nucleotide sequence of the F0 gene, 113–116 corresponds to residues –4 to –1 from the cleavage site.'

2. Poultry is defined as 'all domesticated birds, including backyard poultry, used for the production of meat or eggs for consumption, for the production of other commercial products, for restocking supplies of game, or for breeding these categories of birds, as well as fighting cocks used for any purpose'.

   Birds that are kept in captivity for any reason other than those reasons referred to in the preceding paragraph, including those that are kept for shows, races, exhibitions, competitions, or for breeding or selling these categories of birds as well as pet birds, are not considered to be poultry.

3. This Chapter deals with NDV *infection* of poultry as defined in point 2 above, in the presence or absence of clinical signs. For the purposes of *international trade*, a Member should not impose immediate trade bans in response to reports of *infection* with NDV in birds other than poultry according to Article 1.2.3. of the *Terrestrial Code*.
4. The occurrence of *infection* with NDV is defined as the isolation and identification of NDV as such or the detection of viral RNA specific for NDV.
5. For the purposes of the *Terrestrial Code*, the *incubation period* for ND shall be 21 days.
6. Standards for diagnostic tests, including pathogenicity testing, are described in the *Terrestrial Manual*. When the use of ND vaccines is appropriate, those vaccines should comply with the standards described in the *Terrestrial Manual*.

Article 10.13.2.

Determination of the ND status of a country, zone or compartment

The ND status of a country, a *zone* or a *compartment* can be determined on the basis of the following criteria:

1. ND is notifiable in the whole country, an on-going ND awareness programme is in place, and all notified suspect occurrences of ND are subjected to field and, where applicable, *laboratory* investigations;
2. appropriate *surveillance* is in place to demonstrate the presence of NDV *infection* in the absence of clinical signs in poultry, this may be achieved through an ND *surveillance* programme in accordance with Articles 10.13.20. to 10.13.24.;
3. consideration of all epidemiological factors for ND occurrence and their historical perspective.

Article 10.13.3.

ND free country, zone or compartment

A country, *zone* or *compartment* may be considered free from ND when it has been shown that NDV *infection* has not been present in the country, *zone* or *compartment* for the past 12 months, based on *surveillance* in accordance with Articles 10.13.20. to 10.13.24.

If *infection* has occurred in a previously free country, *zone* or *compartment*, ND free status can be regained three months after a *stamping-out policy* (including *disinfection* of all affected *establishments*) is applied, providing that *surveillance* in accordance with Articles 10.13.20. to 10.13.24. has been carried out during that three-month period.

Article 10.13.15.

Recommendations for importation from an ND free country, zone or compartment as defined in Article 10.13.3.

for *fresh meat* of poultry:

Veterinary Authorities should require the presentation of an *international veterinary certificate* attesting that the entire consignment of meat comes from poultry:

1) which have been kept in an ND free country, zone or compartment since they were hatched or for at least the past 21 days;

2) which have been slaughtered in an approved abattoir in an ND free country, zone or compartment and have been subjected to ante-mortem and post-mortem inspections in accordance with Chapter 6.2 and have been found free of any sign suggestive of ND.

REFERENCE LIST

1. World Organisation for Animal Health (OIE). 2008. "Terrestrial Animal Health Code." Web page, [accessed 2008]. Available at http://www.oie.int/eng/Normes/mcode/en_sommaire.htm

APPENDIX 8

Conditions for import of cooked chicken meat

File No: 98/201 17 August 1998

QUARANTINE REQUIREMENTS FOR THE IMPORTATION OF COOKED CHICKEN MEAT

1. DOCUMENTATION

a. A permit, in writing, to import de-boned cooked chicken meat/meat products[1] (herein referred to as cooked chicken meat) into Australia must be obtained by the Australian importer from the Director of Animal and Plant Quarantine (Australia) (herein called the Director) prior to the product first being imported.

b. Each application for permission to import must include the following details:

- country of export
- name of the exporting and importing companies
- name, address and identification/veterinary control number of the processing establishment
- country of origin of raw materials
- product type and name
- full details of any process of manufacture the meat has been subjected to including core temperature/time treatment processes, packaging and labelling and post-processing quality control.

c. Each application will be assessed on the above criteria as well as any other criterion which is considered relevant by the Director.

d Product type exported must correspond exactly to approved product.

2. REQUIREMENTS

a. Certification accompanying each consignment must be endorsed by an official veterinarian in accordance with the current "Quarantine Requirements for the Importation of Cooked Chicken Meat" and will require on arrival, a "Quarantine Entry".

[1] Chicken meat is defined as any part of a chicken, being a part that is intended or able to be consumed as human food, but does not include bone or fat not attached to the tissues of the chicken from which it was derived. Chicken meat product refers to chicken meat with the addition of other ingredients of animal or plant origin.

b. Only de-boned cooked chicken meat is permitted for importation.

c. The chickens from which the cooked chicken meat/meat products are produced must be clinically healthy and must originate from the country of export of the cooked chicken meat/meat products.

d. The chickens must be slaughtered and the meat processed in establishments currently approved by the Director. The standard of construction and facilities of slaughter and processing establishments must be equivalent to those found in Australian establishments. Product must be processed and handled in an hygienic manner and in accordance with good manufacturing practices as applied in Australia. AQIS may take into account existing approvals granted by competent veterinary authorities of foreign countries.

Note: The *Australian Standard for Hygienic Production of Poultry Meat for Human Consumption* will be used as a guide in the assessment of slaughter and processing establishments for approval to process product for export to Australia. The AQIS *Code of Hygienic Practice for the Production of Heat Treated Refrigerated Foods Packaged for Extended Shelf Life* will be used as a guide in evaluating the processing and handling of product for export to Australia.

e. Officials of the veterinary authority of the country of export must be present in plants at all times when slaughtering chickens and processing cooked chicken meat for export to Australia.

f. Chicken meat for export to Australia must be processed and stored separately from all other meat products.

g. Access of workers in raw meat areas to unpackaged cooked product shall be prevented by physical means.

h. Processing equipment (cookers, ovens etc) shall be equipped with an AQIS approved system for recording the cooking time and core temperature of the product. Such records shall be maintained for all consignments for export to Australia for at least two years and be made available to AQIS on request.

i. While preparing product for Australia, establishments must conduct slaughter and processing operations in accordance with quality assurance principles and shall have a HACCP program in place.

j. All ingredients of animal or plant origin present in product for export to Australia shall comply with AQIS quarantine and other Australian requirements.

Note: Imported cooked chicken meat must comply with the *Imported Food Control Act 1992* and the Australian New Zealand Food Authority Food Standards Code under the *Australia New Zealand Food Authority Act 1991*. Under this legislation, AQIS may inspect, sample, hold and test imported cooked chicken meat for microbial agents or residues of public health concern. Additional requirements regarding labelling,

packaging and food composition standards must also be complied with. Information on the Australian Food Standards Code may be obtained from the Australia New Zealand Food Authority.

k. The cooked chicken meat/meat products shall be imported in containers which are sealed with numbered official seals.

3. SANITARY CERTIFICATION

3.1 Each consignment must be accompanied by a Sanitary Certificate in accordance with the Office International des Epizooties (OIE) International Animal Health Code Model Certificate No. 4. signed by an Official Veterinarian. The certificate must be in English and must provide details of:

- the packaging of the meat including details of the labelling,
- the addresses and veterinary approval numbers of establishments at which the animals from which the meat was derived were slaughtered, the cutting-up establishment at which it was prepared, the establishment at which it was processed and the establishment at which it was stored prior to export,
- the names and addresses of the exporter and the consignee.

3.2 The Official Veterinarian must certify in English, in addition to requirements under part IV of OIE Model certificate No.4 Attestation of Wholesomeness, that the following requirements are met:

(i) the cooked chicken meat/meat product was de-boned and derived from clinically healthy birds which originated in the country of export and from a flock in which Newcastle disease, avian influenza or fowl cholera was not reported. The birds passed ante-mortem and post-mortem inspection under official veterinary supervision;

(ii) establishment(s) where the chickens were slaughtered and the meat was processed and stored must have current AQIS approval and meet AQIS requirements for facilities and hygienic operation;

Note: The name, address and veterinary control number of each plant must be specified;

(iii) where chicken/meat which is ineligible for export to Australia is slaughtered/ processed in an establishment which also slaughters/processes chickens/ meat, for export to Australia, the chicken/meat for export to Australia was slaughtered/processed before the ineligible products, and following thorough cleaning and sanitising at the end of the previous day's operations;

(iv) Access of workers in raw meat areas to unpackaged cooked product was prevented by physical means;

(v) the chicken meat/meat product was heated at the following core temperature/ time;

74^{o}C for 165 minutes or
75^{o}C for 158 minutes or
76 ^{o}Cfor 152 minutes or
77^{o}C for 145 minutes or
78 ^{o}C for 138minutes or
79^{o}C for 132 minutes or
80 ^{o}C for 125 minutes

Note: The temperature/time parameter used must be specified;

(vi) the temperature recording equipment was checked during the cooking process and was found to be in good order. Records confirm that the time/temperature parameters specified in (iv) were achieved;

(vii) the cooked chicken meat/meat product complies with relevant national standards of the exporting country for control of residues and microbial agents of public health concern in food;

(viii) the cooked chicken meat/meat product for Australia was processed separately and physically separated during storage from other products;

(ix) the cooked chicken meat/meat product was packed on ----(date), in clean, new packaging in a manner which prevented contamination;

(x) the identification number(s) of the processing and packing establishment(s) is readily visible on the package or wrapping containing the cooked chicken meat/meat product in such a way that the numbers cannot readily be removed without damage to the package or wrapping;

(xi) the cooked chicken meat/meat product is to be shipped in a clean container, bearing official seal(s) of which are intact at the time of export. This container does not contain any meat which is not eligible for export to Australia.

4. VERIFICATION

AQIS will maintain appropriate systems to verify these requirements will be complied with on an ongoing basis. Elements of this system will include:

(1) An authorised quarantine officer will conduct a visual inspection of the product and documentation on arrival in Australia;

(2) Inspection and detention of consignments and sampling/analysis of samples may be performed under the Imported Food Inspection Program (IFIP);

(3) At the discretion of the Director, premises producing cooked chicken meat/meat product for export to Australia may be inspected/audited as to all aspects of compliance with these requirements.

5. REVIEW

Conditions for importation may be reviewed at any time at the discretion of the Director.

SARAH KAHN
Assistant Director
Animal Quarantine Policy Branch