

*Australia – Measures Affecting the Importation of Apples from
New Zealand*

(WT/DS367)

**New Zealand's Opening Statement
for Second Substantive Meeting**

1 July 2009

Mr Chairman, Members of the Panel:

Introduction

1. New Zealand does not wish to burden the Panel with a recitation of arguments that it has heard before. Rather, in this statement we will focus on issues arising out of the experts' reports and the hearing with the experts on Tuesday and the Second Written Submission of Australia.

2. By way of introduction, I will simply say that throughout this process there has been a reaffirmation of New Zealand's position. The experts have confirmed the fundamental tenets of the New Zealand case – that the Australian measures are not supported by scientific evidence and that the IRA does not constitute a risk assessment whose conclusions are objectively justifiable. And, Australia has failed to rebut the case put forward by New Zealand.

3. Before moving on to a substantive discussion of some of the key issues in this case, I would like to make some general comments about both the reports of the experts and Australia's responses to them and some of the arguments raised by Australia in its Second Written Submission.

Expert Responses

4. The role of experts in assisting the panel, as the Appellate Body has recently affirmed in *Canada – Continued Suspension*, includes identifying the scientific basis of the SPS measure and verifying that this scientific basis comes from a qualified and respected source. Also, the Appellate Body said, the panel can rely on experts to assist it to review whether the reasoning articulated on the basis of the scientific evidence is objective and coherent, and whether the particular conclusions drawn by the Member assessing the risk find sufficient support in the evidence.

5. In response to the questions posed by the panel, the experts did all these things. And what comes through from their reports and from the meeting with experts yesterday is that the conclusions of the IRA were not supported by science. Yesterday we heard essentially a reiteration of what we saw in the experts' reports. There was, of course, the natural reticence of scientists to rule out that in the absence of proof to the contrary an event, however remote or implausible, might occur. Thus, the experts accepted that there was scientific evidence that low populations of *E. amylovora* could be carried on mature, symptomless apple fruit exported from New Zealand, but the central point they all were making was that the IRA had significantly overestimated likelihood.

6. Experts Paulin and Deckers confirmed their written responses that the IRA's overall probability of importation was unsupported by scientific evidence – and Dr Sgrillo described it as a result derived “from many numbers that weren't validated”. Dr Paulin and Dr Sgrillo confirmed there was no scientific evidence to support the IRA's conclusion on importation

step 1 that *E. amylovora* is present in every orchard in New Zealand. Dr Paulin confirmed his view that, in relation to importation step 2 (fruit infested or infected with *E. amylovora*), Australia's evaluation is not scientifically based, cannot be objective...and is just not credible as a whole". Dr Deckers confirmed that Australia's conclusion did not take into account the sporadic character of the disease.

7. The experts also confirmed there was no scientific evidence to support Australia's theory that fruit will become contaminated after picking (importation steps 3, 5, and 7). Yet Australia's unsupported contamination theory accounts for 68% of the fruit which Australia says will enter the country carrying *E. amylovora*.¹ Dr Paulin confirmed his response that Australia's conclusions on exposure lacked any scientific evidence and relied on supposition or speculation. Dr Deckers agreed that Australia's conclusions were based on "speculation with, for me, a low level of likelihood to be reality."

8. In its SWS Australia focused on alleged support by the experts for Australia's measures.² But such support has to be understood in light of the experts' confirmation that there is no scientific evidence to support Australia's conclusions that mature fruit pose a risk of introduction of fire blight. Measures cannot be maintained if there is no evidence that bacteria, when imported, would transfer onto a susceptible host and cause disease. Dr Deckers reinforced the practical point: other countries do not impose phytosanitary measures for fire blight in relation to mature symptomless apples, they focus on the real risk. As he said, "in other situations where countries try to keep out fire blight they are not talking about fruit, but root stock and other material."

9. The matter was well summed up by Dr Paulin yesterday who said that risk of fire blight from trade in apples was about as likely as the risk of such transmission by insects carried by air currents from New Zealand. That is, the risk associated with trade in apples is no greater than it is currently through natural dispersal. What this means is that imposing measures for fire blight creates no greater protection against the transmission of the disease than having no measures at all.

10. With respect to European canker, the experts confirmed that there is no evidence that apple fruit are responsible for dissemination of the disease to new areas. Dr. Swinburne, while voicing the biologists aversion to the concept of "never", described the risk of transfer as "vanishingly small". The real risk of the transfer of European canker, the experts, confirmed, is through the movement of planting material. In addition, the experts confirmed the insufficiency of the scientific evidence supporting the IRA's conclusions as to individual importation steps and the probability of entry, exposure, establishment and spread. The experts also considered that the IRA's assessment of consequences in respect of European canker was flawed.

¹ NZSWS, paras 2.421 and 2.427, and Annex 1.

² ASWS, paras 313, 353-357.

11. While Australia attempts to find support from the experts for its measures for European canker, it overlooks important qualifications in the experts' responses. Dr. Latorre's answer about measures was premised on the "assumption" that there is a risk of entrance, establishment and spread of *N. galligena* in Australia on mature, symptomless apples imported from New Zealand".³ However, as the experts have confirmed, there is no risk of entry, establishment and spread of the disease from trade in fruit. In such circumstances, the insistence on a pest free places of production measure for European canker implies Australia has a zero risk policy. In light of the experts' responses as a whole, including their responses on exposure, establishment and spread and consequences, there is simply no basis for concluding that a mature, symptomless requirement would not meet Australia's ALOP.

12. In respect of ALCM, the expert view was unequivocal. By ignoring viability, parasitism, the prolonged period of adult ALCM emergence, and mode of trade issues, and making assumptions that were not based on any relevant scientific evidence, the IRA had overestimated the likelihood of ALCM entry and establishment. Indeed, the ALCM expert, Professor Cross, concluded that the risk assessment was so flawed that it needed to be "recalculated"⁴ and he reiterated this several times yesterday.

13. Rather than supporting or confirming the conclusions of the IRA, the experts have demonstrated conclusively that the reasoning of the IRA has not been articulated on the basis of scientific evidence that is objective and coherent, and that the conclusions that have been drawn assessing risk simply do not find support in the scientific evidence.

Australia's SWS

14. Let me turn now to the Australian SWS where there are some curious changes in direction in the Australian argument.

15. There is, first, the Australian argument about principal and ancillary measures. New Zealand has already shown that this distinction finds no basis in the *SPS Agreement*. Moreover, the substantive measures at issue in this case bear no resemblance to the merely interpretative materials that were considered not to be "challengeable measures" in the *Export Restraints* case.

16. And, it seems that New Zealand's arguments are making some headway. In its SWS Australia now claims that the Panel may make findings with respect to *all* of the measures at issue in this dispute, and that the Panel may evaluate the consistency of the ancillary measures when they are taken collectively with the principal measures.⁵ Indeed, one may be

³ Latorre, Guideline (g), p. 3.

⁴ Cross, Q 120, pp. 21-22 and Q 122, p. 22.

⁵ ASWS, paras 63-66.

forgiven for wondering why Australia went to the trouble of constructing this principal/ancillary diversion.

17. Notwithstanding this concession, however, Australia maintains its contradictory assertion that ancillary measures are not subject to the disciplines contained in the *SPS Agreement*. Australia continues to argue, for example, that only principal measures need to be evaluated in order to conduct a valid risk assessment under Annex A(4). But Australia cannot have it both ways. If principal and ancillary measures are capable of giving rise to violations “collectively”, then they must also be subject to the obligations “collectively”. So, under Annex A(4), “ancillary” measures would need to be evaluated “collectively” with principal measures to assess their impact on risk. The IRA simply did not do this.

18. My second comment relates to *Canada – Continued Suspension*. Ever since the decision of the AB in that case, Australia has claimed that the law relating to standard of review has changed and that now the law is in accordance with what Australia has been saying all along. Indeed, such is the alleged “substantial congruence” between the new law of *Continued Suspension* and Australia’s arguments that, suitably camouflaged in a footnote,⁶ Australia renounces the use of the terms “deference” and “considerable deference” presumably because Australia now believes that these notions are wired into the requirement of determining whether a risk assessment is “objectively justifiable”.

19. Once again, there is an appearance of abandonment of an extreme and unsupportable argument – that of “considerable deference”. But of course it is an appearance only; the argument has in fact been transformed – Dr. Jekyll has become Mr. Hyde – because now *Continued Suspension* by implication is being treated by Australia as embodying a “considerable deference” standard.

20. The Appellate Body did not endorse a considerable deference standard in *Continued Suspension*. Indeed, at the very outset of its analysis, the Appellate Body recalled its previous rejection of a “deferential reasonableness standard”.⁷ Instead, what the Appellate Body did was to apply well-established principles prohibiting *de novo* review, and affirming the right to rely on divergent scientific evidence. This does not signify a change in direction by the Appellate Body, much less an endorsement of “considerable deference”.

21. In *Continued Suspension* the Appellate Body emphasised that it was necessary to focus on the risk assessment and not the science in general. But, there is a significant difference between a requirement to focus on the conclusions in a risk assessment, and a requirement to give “considerable deference” to those conclusions. In this regard, the Appellate Body’s ruling in *Continued Suspension* is fully consistent with its previous rejection of deferential standards of review.

⁶ ASWS, footnote 13.

⁷ AB *Canada – Continued Suspension*, para. 587.

22. Although Australia may have jettisoned explicit references to considerable deference, its commitment to a standard of “considerable deference” continues, albeit now argued more surreptitiously. Australia has all along claimed that the IRA is supported by divergent scientific evidence, although it has never been able to explain what this divergent scientific opinion is or where it is found. And, in addition, Australia maintains a parallel argument which suggests that because the IRA Team was made up of “qualified and respected” experts, it therefore constitute divergent scientific evidence upon which Australia is entitled to rely.

23. In its SWS, Australia now attempts to shoehorn this argument into the framework provided by the Appellate Body in *Canada - Continued Suspension*. The IRA, itself, has become the “scientific basis” for the measures and it is a “respected and qualified” source by virtue of the qualifications of the IRA Team,⁸ notwithstanding the fact that a member of the apple industry was included in the IRA Team and was part of the Team’s consensus decision-making. But none of this makes any sense. *Continued Suspension* was concerned with the objective justifiability of the *risk assessment* not with the credentials of the *risk assessors*.

24. Perhaps in recognition of the weakness of these arguments, in its SWS Australia has shifted emphasis from “divergent scientific evidence” to “scientific uncertainty”. Unable to find sufficient support for its measures in any reputable scientific evidence, Australia now claims that the scientific evidence is “highly uncertain”⁹ and as a consequence of this “scientific uncertainty”, deference must be accorded to the expert judgement of the risk assessors.

25. While scientific uncertainty is not a phrase that appears in the *SPS Agreement*, the agreement sets out a framework for managing uncertainty. It requires that SPS measures be sufficiently supported by scientific evidence, which can of course include divergent scientific opinion. And, where the evidence is not sufficient to conduct a risk assessment, Article 5.7 is available. Beyond this, however, the notions of “scientific uncertainty” and “expert judgement” provide no justification for avoiding the science-based obligations in the *SPS Agreement*. And they certainly provide no basis for suggesting that deference or considerable deference be accorded to the views of the risk assessors.

26. Australia also seeks to use the notion of “scientific uncertainty” to read down the legal standard of “sufficient scientific evidence”. Scientific uncertainty is equated with the absence of sufficient scientific support for its conclusions. However, the fact that Australia cannot find data or scientific studies to support its conclusions merely underlines the speculative and hypothetical nature of the pathways considered. This is not a situation of scientific uncertainty; it is an example of the scientific evidence not supporting Australia’s measures.

27. So notwithstanding the absence of the words “considerable deference” in the lexicon of the ASWS, the concept is still alive in Australia’s argument, and is no less necessary in

⁸ ASWS, paras 31-32.

⁹ See, for example, ACER para 17.

order for Australia to be able to assert the consistency of the IRA with the *SPS Agreement*. Alive, maybe, but not well, because “considerable deference” is no less flawed than it always has been. The Appellate Body has consistently rejected a deferential standard of review, a rejection that has been affirmed in the *Continued Suspension* case.

28. There is a further aspect to Australia’s reliance on the alleged “expert judgment” of the IRA. In its SWS Australia places weight on conclusions which it asserts that the IRA Team reached but which were never reflected in the IRA itself. For example, Australia claims that Importation Steps 3, 5 and 7 in respect of European canker refer to latent infection, something that cannot be deduced from the terms of the IRA.

29. Transparency is an integral part of objective justifiability. What Australia claims went on in deliberations in the backrooms of the IRA Team is simply not relevant in this proceeding which is concerned with whether there is objective and coherent evidence that a proper risk assessment process was conducted. Australia can neither bolster up the IRA with new evidence not considered by the IRA Team nor rewrite the IRA to accord with what it believes the IRA could have said but did not, or what it now wants the IRA to say.

The Task of the Panel

Standard of Review

30. In light of Australia’s continued assertion that the world has changed since *Canada - Continued Suspension*, New Zealand wishes to take this opportunity to emphasise the fact that the task of the Panel remains unchanged. In accordance with DSU Article 11 it is to “objectively assess” the claims, evidence and arguments before it, and to determine whether the SPS measures at issue are consistent with the relevant provisions of the *SPS Agreement*.

31. It is clear that the Panel should not conduct a *de novo* review or conduct its own risk assessment. The focus must be on reviewing the sufficiency of the scientific evidence underlying Australia’s measures. In undertaking this review the Panel enjoys discretion as to which evidence to utilise in making its findings, and the value and weight to be ascribed to that evidence.¹⁰ This mandate applies whether the Panel is considering the arguments in relation to Article 2.2 or Article 5.1. Nothing in *Continued Suspension* changed this; rather it affirmed these basic propositions.

32. The Appellate Body in *Continued Suspension* provided some additional guidance regarding the focus of inquiry under Article 5.1. The Appellate Body stated that the role of the Panel is to “determine whether [a] risk assessment is supported by coherent reasoning and respectable scientific evidence and is, in this sense, objectively justifiable.”¹¹ This requires determining whether the measure is based on science coming from a respected and qualified source, that is it has “the necessary scientific and methodological rigour to be considered reputable science”, and whether “the reasoning articulated on the basis of the scientific

¹⁰ AB, *EC – Hormones*, para 135; AB, *EC – Asbestos*, para 161; AB, *Japan – Apples*, para 166.

¹¹ AB, *Canada – Continued Suspension*, para. 590.

evidence is objective and coherent.” The Appellate Body stated that this requires the Panel to “review whether the particular conclusions drawn by the Member assessing the risk find sufficient support in the scientific evidence relied upon.”¹²

33. As already indicated, *Continued Suspension* does not support a considerable deference standard. It provides no support for Australia’s claim that New Zealand must demonstrate “serious flaws” with respect to each and every conclusion in the IRA. The Appellate Body has stated that the focus must be on whether the IRA is “objectively justifiable”. And this requires an assessment of the cumulative effect of the IRA’s many flaws.

34. The Appellate Body in *Continued Suspension* also reaffirmed the “broad discretion” that panels have in exercising their “significant investigative authority” to consult experts in SPS cases.¹³ Clearly, in making its “objective assessment” the Panel will consider the relevancy and weight to be attached to the experts’ comments on the scientific evidence in this case.¹⁴ But, of course, it is for the Panel to decide whether the IRA is supported by sufficient scientific evidence.

35. This “objective assessment” by the Panel should be carried out in light of the well-established rules regarding the burden of proof.¹⁵ Australia’s suggestion, at various points in its submissions, that New Zealand faces a higher burden of proof in this case should be rejected as yet another attempt to shelter its risk assessment from proper review. There is no reason to deviate from the standard rules as to burden of proof.

Relationship between Article 2.2 and 5.1

36. New Zealand will not repeat its arguments in detail here, but will simply add a few additional comments in light of the “progressive clarification” of Australia’s views on this issue.

37. Australia’s original argument was that Article 5.1 had to be considered first because compliance with Article 2.2 “can only be answered” by reference to Article 5.1.¹⁶ As New Zealand demonstrated, this argument is manifestly inconsistent with previous jurisprudence and with the plain words of the *SPS Agreement*.¹⁷

38. Since its First Written Submission Australia has steadily sought to limit the impact of its interpretation, most recently to circumstances where Members “chose” to rely on a

¹² AB, *Canada – Continued Suspension*, para 591.

¹³ AB, *Canada – Continued Suspension*, para 439

¹⁴ AB, *US – Shrimp*, para. 104.

¹⁵ AB, *US – Wool Shirts and Blouses*, para 14.

¹⁶ AFWS, para 219.

¹⁷ NZSWS, paras 2.78-2.96.

“current” risk assessment.¹⁸ Putting aside the fact that this is inconsistent with Australia’s previous claim that relying on a risk assessment was a matter not of choice but of legal obligation,¹⁹ New Zealand would simply observe that in previous cases that have involved “current” risk assessments, Article 2.2 was considered separately, and prior, to Article 5.1.

39. Indeed, Australia’s initially radical proposal now appears to have been reduced to the proposition that “the standard established by Article 2.2 is fully met if the risk assessment satisfies the conditions elaborated in Article 5.1.”²⁰ This, of course, says nothing about the order in which those provisions should be assessed, and in any event in the circumstances of the present case it is not even correct. A determination that there has been a risk assessment within the meaning of Article 5.1 does not resolve the question whether each of the challenged measures has a rational and objective relationship with scientific evidence – an issue that arises under Article 2.2. This is especially true here where New Zealand has not made separate arguments in relation to the “based on” element of Article 5.1. Australia’s suggestion that New Zealand has somehow “conceded” this issue is, simply, incorrect.

The weight to be given to Japan Apples

40. Much has been said by Australia about the irrelevance of the decision in *Japan – Apples* to this dispute, a surprising proposition given that *Japan – Apples*, was about the application of Articles 2.2 and 5.1 of the *SPS Agreement*, that the panel concluded that the scientific evidence did not establish that mature, symptomless apple fruit would be infected by fire blight, or that they would harbour endophytic populations of the fire blight-causing bacteria, *E. amylovora*, or that they would harbour epiphytic populations of bacteria capable of transmitting fire blight. And the panel in *Japan – Apples* concluded that the scientific evidence did not establish that apple fruit – whether mature or immature – would serve as a means or pathway for the introduction of fire blight to a fire blight-free area.

41. Moreover, the panel’s conclusions in *Japan – Apples* were reached on the basis of substantially the same scientific evidence as that considered by the IRA team and by Australia in the context of this dispute. If the Panel were to reach the same conclusions in relation to the scientific evidence as were reached in *Japan – Apples*, then it would inevitably follow that Australia’s fire blight measures are maintained without sufficient scientific evidence, in breach of Article 2.2. This would not constitute “deferring” to the findings in *Japan – Apples* as Australia asserts; it would be the result of an objective assessment of the matter required of the Panel under DSU Article 11.

42. Australia attempts to distinguish *Japan – Apples* by saying it dealt with endophytic infection only.²¹ However, the conclusions in *Japan – Apples* relate equally to epiphytic

¹⁸ ASWS, para 94.

¹⁹ AFWS, paras 192 and 205

²⁰ ASWS, para 94.

²¹ ASWS, para 328.

infestation. Australia also claims that *Japan – Apples* was only concerned with the probability of entry, establishment and spread, whereas the IRA also considered consequences.²² This too is incorrect. Both the original panel in *Japan – Apples* and the Article 21.5 panel refer to the consequences of the introduction of fire blight.²³

43. Further, Australia argues that *Japan – Apples* is silent on volume of trade and that this distinguishes it from the IRA. But, both the panel and the Appellate Body refer to the fact that even though an enormous quantity of apple fruit has been traded over long distances internationally, there was no evidence that mature apples had ever led to the introduction of fire blight.²⁴

44. Australia also tries to distinguish *Japan – Apples* by arguing that the scientific evidence considered in that case is not “precisely the same” as the evidence considered by the IRA Team.²⁵ But Australia fails to point to any scientific evidence, considered by the IRA team but not considered in *Japan – Apples*, that could possibly have altered the panels’ conclusion in that case.

45. Finally, Australia claims to distinguish *Japan – Apples* on the basis that the pest risk assessment under review there did not assess the risk associated with apple fruit as a separate and distinct vector. But this has nothing to do with the panel’s findings under Article 2.2 that there is a lack of scientific evidence that apples are a pathway for the introduction of fire blight.

46. Australia’s arguments for ignoring *Japan – Apples* or for distancing this case from that decision cannot be sustained. The conclusions in *Japan – Apples* relate to the very same matters that are in issue in the present case: whether there is sufficient scientific evidence that mature, symptomless apple fruit would harbour populations of bacteria capable of transmitting fire blight; and whether there is scientific evidence that apple fruit would serve as a means or pathway for the introduction of fire blight to a fire blight-free area. Australia cannot rebut New Zealand’s case without addressing those matters. It has failed to do so.

Article 2.2

Fire blight

47. New Zealand’s central argument in relation to fire blight is that there is no scientific evidence to support the view that mature, symptomless apples could provide a pathway for the introduction of the disease. First, mature apple fruit are not a conducive environment for *E. amylovora*, which is a poor epiphyte (or not an epiphyte at all according to Dr Paulin).

²² ASWS, para 329.

²³ Panel, para. 8.105; Article 21.5 Panel, para 4.122.

²⁴ See original panel, paras 4.74-4.76, 4.79, 4.198, 4.210 6.38, 401, Appellate Body para 108, Article 21.5, para 4.21, 4.169, 4.173, 4.186, 8.165.

²⁵ ASWS, para 328.

Populations of *E. amylovora* on the apple calyx are in a declining state, not multiplying and barely surviving. Second the likelihood apples will enter Australia with *E. amylovora* on them is very small and there is no evidence to justify the high figure that Australia has used in the IRA. Third, there is no scientific evidence of transfer of bacteria from a mature apple to a susceptible host and an infection resulting. The only scientific evidence goes the other way.

48. While Australia suggests that there may be multiple interpretations of the relevant scientific evidence,²⁶ it fails to point to any “interpretation” of the scientific evidence that supports its pathway hypothesis apart from the so-called “divergent scientific evidence” of the IRA itself. Thus, according to Australia, the IRA itself becomes scientific evidence sufficient to satisfy Article 2.2.²⁷

49. Then, in a last-ditch attempt Australia has invoked the concept of “scientific uncertainty” to justify the use of the IRA team’s “expert judgement” to fill the gap in the scientific evidence.²⁸ But, none of these shifting arguments extricate Australia from the core obligation of Article 2.2; measures may not be maintained unless they are supported by sufficient scientific evidence.

50. Equally, New Zealand has no obligation to prove that apples are *not* a pathway for the introduction of fire blight. New Zealand has established a prima facie case that there is no evidence of a pathway and it is for Australia to point to the scientific evidence that supports its contention that a pathway exists. It has not, and it cannot do so.

51. And, when the experts’ responses are considered, it is not difficult to understand why Australia has been unsuccessful in this regard. The experts state that there is no scientific evidence that populations of *E. amylovora* occasionally found on mature, symptomless apples could be transferred to a susceptible host and initiate an infection.²⁹

52. In short, New Zealand’s case remains unrebutted. There is no scientific evidence that mature apple fruit will cause the introduction of fire blight. Accordingly, Australia maintains its fire blight measures without sufficient scientific evidence, in breach of Article 2.2 of the *SPS Agreement*.

European canker

53. As the experts have confirmed, there is no scientific evidence to show the transfer of European canker through trade in mature, apple fruit. The CABI datasheet on which Australia has belatedly relied was conclusively dismissed by the experts.

²⁶ ASWS, para 8.

²⁷ ASWS, para 32.

²⁸ Eg ASWS, paras 121-124.

²⁹ Paulin, Q 19, pp 12-13, Q 20, p 13; Deckers Q 36, p 14, Q 20, p 9.

54. Australia's only rebuttal rests on the claim that latent fruit infection with European canker is a widely accepted phenomenon in the scientific community.³⁰ Australia assumes that because latent fruit infection by *N. galligena* occurs in some Northern Hemisphere countries it also occurs in New Zealand. This fails to take account of the effect of climatic differences on the epidemiology of the disease. Drs Swinburne and Latorre identify two climate types in relation to European canker, exemplified, on the one hand by Northern Ireland, where in conditions of abundant rainfall, *N. galligena* produces abundant spores year round and high levels of latent fruit infection occur, and, on the other hand, by California, Chile, and New Zealand where pronounced dry periods, especially in summer, prevent spore production, latent fruit infection and fruit rots from occurring.³¹ The only evidence Australia has ever provided in support of its conclusion that latent infection occurs in New Zealand is a reference to the Braithwaite report. However, as the experts confirm, the Braithwaite report is neither relevant nor reliable in this regard.

55. Further, even if fruit were to be infected and survive processing and transport to Australia, there is no scientific evidence to support the contention that European canker could establish via discarded fruit, let alone spread under Australian conditions. The experts confirm that there is no evidence in the literature that fruit rots caused by *N. galligena* are a source of infections in new areas. Australia relies on mistaken assumptions about the ability of ascospores to be produced from mummified fruit, a theory which relies primarily on results from a singular example from the 1920s obtained using different varieties.³² The more common spores, conidia, require particular conditions for production, in particular prolonged wetness, conditions which are unlikely to prevail in the Australian climate.³³ In addition, the IRA's assumptions about the similarity of the climate of Australian apple-producing regions to other regions of the world where European canker is present are not based on scientific evidence.³⁴

56. Australia's new climate analysis fails to contradict New Zealand's position. Like the first BRS report, the climate matching study undertaken in the second BRS report also fails to give sufficient information about the parameters or the climate datasets used. Furthermore, the new study, like the old, has an almost complete mismatch between the predictions of climatic risk and the actual distribution of European canker in New Zealand.³⁵ In the new

³⁰ ASWS, ES, p.5-6. ASWS, para 474.

³¹ Latorre Q55, 57, 63, 76, Swinburne Q49, 57, 72, 75.

³² Exhibit NZ 60

³³ Drs Swinburne and Latorre, Expert replies to Panel Questions, Dr Swinburne, Q91.

³⁴ NZFWS Annex 3.

³⁵ NZSWS, para 2.183. In New Zealand, European canker occurs predominantly in the north of the North Island (Atkinson 1971) and is virtually unknown along the east coast between Wairarapa in the southeastern North Island and North Otago in the southeastern South Island. The Australian analyses, using both CLIMEX, CLIMATE (now CLIMATCH) wrongly indicate high risk in these east coast regions.

climate study this error is extended to a world scale. For example, it shows that in central Washington State in the USA, a region where European canker does not occur,³⁶ climate conditions are favourable for the permanent establishment of European canker there.³⁷

57. Moreover, it is apparent that part of what is provided in the second BRS report is not a climate analysis at all – it is a presentation of some weather data, selected on a non-transparent basis, prevailing at particular localities in selected years. However, selected weather data has no predictive value and is meaningless in the context of analysing risk of establishment and spread.

58. Then there is the Tasmania problem. Even though European canker existed in Tasmania for a substantial period of time, it did not spread. As the experts confirm,³⁸ and Australia concedes,³⁹ this too is a probable consequence of unfavourable climatic conditions.⁴⁰ Australia has argued in its Second Written Submission that it is not possible to project the Tasmanian experience onto the Australian mainland and relies on the first BRS report to show that Tasmania is less suitable for European canker establishment and spread than other parts of the Australia.⁴¹ However the first BRS report does not support the Australian argument. Figure 1 shows Spreyton as having the same risk as the south coast of Victoria. Accordingly, the most that can be concluded from the report is that the mainland would be just as unsuitable for European canker establishment and spread as Tasmania.⁴²

59. While in its first written submission, Australia attempted to downplay the failure of the disease to spread during the Tasmanian outbreak by developing a novel theory about a heterothallic strain which required a mating type which was absent from Tasmania, Australia now suggests that the outbreak may not have been *N. galligena* at all.⁴³ Given that the IRA uses the Tasmanian outbreak to support its conclusions with respect to European canker establishment and spread and the assessment of consequences,⁴⁴ this not only contradicts the IRA but also raises questions about why Australia spent 40 years eradicating a pathogen in Tasmania that Australia now claims may not have existed in the first place.

³⁶ USA Third Party Submission, para. 40.

³⁷ Figure 3, p. 243

³⁸ Latorre, Q 74, 90. Swinburne, Q 74.

³⁹ ASWS, para 556

⁴⁰ NZFWS para 4.91.

⁴¹ Para 559-560.

⁴² AFWS. Annex 2, p. 2.

⁴³ ASWS, para 553-554.

⁴⁴ The Spreyton example is referred to 15 times in the IRA, IRA, pp. 117, 141, 143, 144, 146, 147, 148, 154, 155.

60. Accordingly, the measures established by the IRA in respect of European canker are not based on sufficient scientific evidence and hence Australia is in violation of Article 2.2.

ALCM

61. As New Zealand has demonstrated, there is no scientific evidence that the sequence of events required for ALCM establishment in Australia – many thousands of apples left outside of cold storage, uncovered, in the same place, over a considerable period of time, within the limited female ALCM flight range of newly unfurling apple leaves – would occur. Indeed, the scenario on which Australia relies for establishment has never been observed to occur in the real world and is implausible because there is no scientific evidence that ALCM has ever been vectored between geographically separated countries by trade in apples. As confirmed by the expert responses, the existing scientific literature links the movement of ALCM to planting material, not to trade in apples.⁴⁵

62. In its rebuttal, Australia has simply claimed that more than enough New Zealand apples could be sent to orchard wholesalers for ALCM mating to occur.⁴⁶ But, Australia's arguments simply do not stand up to analysis.

63. First, since the likely mode of trade for apple exports to Australia would be retail ready packaged fruit, New Zealand apples are extremely unlikely to be sent to orchard wholesalers. Yet, as Australia agrees, orchard wholesalers are the only utility point likely to be within sufficient proximity to apples trees.⁴⁷ Thus, if the vast majority of New Zealand apples are not sent to orchard wholesalers then, as confirmed by Professor Cross, "there would be virtually no opportunity for ALCM to emerge, mate, exit the packing house and locate a susceptible apple tree."⁴⁸

64. Only once New Zealand apples reach their final retail destination and are outside of cold storage could emergence occur. But, even if emergence did occur at that point, New Zealand apples would not be in the quantities required for ALCM mating. Because of the very low level of viable cocoons on New Zealand apples, the prolonged period of emergence of ALCM adults and the very short life-span of ALCM, many thousands of apples would need to be outside of cold storage, in the same place, over an extended period of time, for any possibility of ALCM mating to occur. This renders completely implausible Australia's claim that ALCM emergence and mating could occur while apples are on display at retail outlets, open-air markets or when dumped as waste.⁴⁹

⁴⁵ Cross, Q 94(vii), p. 5 and Deckers Q 49, p. 32.

⁴⁶ ASWS para 645 - 647

⁴⁷ IRA, p. 168.

⁴⁸ Cross Q 105 p 15.

⁴⁹ ASWS para 660

65. As the ALCM expert confirms, Australia failed to take into account scientific evidence on the low viability of ALCM cocoons on New Zealand apples and the prolonged period of ALCM emergence.⁵⁰ As is clear from the IRA, Australia's measures for ALCM are based on the incorrect assumption that ALCM emergence would occur immediately from all cocoons on New Zealand apples, an assumption that has no scientific basis.

66. Indeed, the likelihood of many thousands of New Zealand apples being within the female flight range of newly unfurling apple shoots is negligible. As Australia has itself admitted, urban retailers are very unlikely to be near enough to apple trees for egg laying to occur. Thus, even if sufficient quantities of apples were on display at retail outlets or open air-markets, they would not be close enough to apple trees to be within the female ALCM's flight range. Likewise, even if apple waste was disposed of in the volumes required for ALCM mating, it is extremely unlikely that it would be left near commercial apple trees. Australia's argument that "large quantities of fruit waste may be left uncovered in production areas" and may be "dumped under host plants", is made without any supporting evidence.⁵¹ And, such practices would be directly contrary to Australian orchard biosecurity best practice guidelines which require agricultural waste to be destroyed or disposed of well away from orchards.

67. All of this goes to show that Australia's measures for ALCM are maintained without sufficient scientific evidence and Australia is in violation of Article 2.2.

68. In addition, there is no scientific support for the general measures that apply to all three pests. Accordingly, the general measures are also maintained without sufficient scientific support in breach of Article 2.2.

Article 5.1

Methodology

69. New Zealand has fully set out in its SWS the fundamental methodological flaws of the IRA's semi-quantitative analysis. I will confine myself here to some additional clarifications of those flaws.

First and second methodological flaws: "the negligible interval"

70. The first two fundamental flaws identified by New Zealand relate to the "negligible" interval used in the IRA to represent events that "almost certainly will not occur." As New Zealand has demonstrated, this so-called "negligible" interval (between 0 and 10^{-6}) includes values that significantly overestimate the risk. The use of a uniform distribution weights the outcome in favour of those values. The result is that these are no longer events that "would almost certainly not occur".

⁵⁰ Cross Q 109 p 17 and Q 102 p 11.

⁵¹ ASWS para 663

71. New Zealand has demonstrated that the “negligible” interval chosen by Australia is fundamentally flawed. It is not, in any sense, objectively justifiable. Indeed, Australia has not even tried to justify the intervals by reference to scientific evidence, or any other objective standard. The IRA simply applied pre-determined probability intervals taken from generic draft “Guidelines” developed in a completely different context. The IRA contains no explanation or analysis, whatsoever, as to why these pre-determined probability intervals were appropriate in the context of a risk assessment for apples, let alone for any particular step of the analysis. The IRA took no account of the implications of applying these pre-determined probability intervals when the unit considered (a single apple) is traded in the tens of millions. In this context the maximum value of the “negligible” interval represents one in a million apples, and applying a uniform distribution results in outcomes that tend toward the average of one in two million apples. The IRA’s model was based on a “most likely volume of trade” of 150 million apples.

72. This is significant given that the “negligible” interval is the lowest probability interval used in the IRA. Despite Australia’s claim that the IRA Team were free to use other intervals, not once was a lower probability interval applied. This means that every time an event was considered almost certain not to occur, no matter how unlikely, it was given an interval and distribution that predicted its occurrence once in every two million apples. This is not an event that “would almost certainly not occur”.

73. In its response Australia does not even try to point to any objective basis to justify the parameters and distribution of the “negligible” interval. Instead, it argues that the interval was used to “assist consistency in the risk assessment”, and that it cannot be criticized because “any choice of intervals is arbitrary.”⁵² Australia argues as if the specific parameters and distributions chosen are of no consequence, and that any interval will do. However, the parameters and distribution of the interval have a direct and significant bearing on the overall estimation of risk. This is especially so given that the “negligible” interval makes up over a third of all likelihood values used in the risk assessment. It is clear that, contrary to Australia’s assertion, not any choice of interval will do. The values chosen must be objectively justifiable. As Dr Sgrillo stated in his answers to written questions and confirmed again yesterday, they must make sense in terms of the unit in question, and the values in the “negligible” interval must properly reflect that the event is one that “would almost certainly not occur.”

74. Australia’s argument that the intervals were necessary to “assist consistency” misses the point. The repeated use of a flawed interval simply magnifies the problem. Therefore, even assuming that “consistency” did require the application of the same interval, this simply underlines the importance of carefully choosing objectively justifiable intervals that properly reflect what is being assessed. This was not done in the IRA. If the “negligible” interval can be said to be consistent, therefore, it is only in the sense that it consistently overestimates the risk.

⁵² ASWS, para 246.

75. Australia also suggests that the intervals find justification in the fact that, in applying them, the risk assessors were confident that the interval “contained” the actual value. This also misses a key point – namely, that the “negligible” interval ranges from zero to one in a million apples. It therefore contained a great many values, from those that represent events that “almost certainly will not occur”, to those that represent events that manifestly would occur. The effect of systematically combining this interval with a uniform distribution is that these higher likelihoods are significantly over-represented in the outcomes of the model.

76. Finally, a few words on the role of “expert judgment” in this context. Falling back on the non-transparent “expert judgment” of the risk assessors is Australia’s default position in this dispute, and it does so once more in its efforts to justify the negligible interval and uniform distribution. Australia claims that “[t]he IRA Team applied expert judgment in arriving at appropriate distributions taking into account available data and the uncertainty resulting from the absence of data.”⁵³

77. However, simply claiming that “expert judgement” has been applied does not establish that the outcome is “objectively justifiable”. Having chosen to use a methodology that uses intervals and distributions, these must be objectively justifiable by reference to something other than the undisclosed views of the risk assessors. To do otherwise would render a risk assessment self-justifying. Yet, as Dr. Sgrillo emphasised yesterday, in the absence of sufficient scientific evidence and data, this is exactly the kind of “expert judgement” upon which the IRA relies with respect to virtually every step in its risk assessment.

78. Moreover, it is difficult to see in what sense, precisely, the IRA Team applied “expert judgement” in the context of the “negligible” interval. Pre-determined probability intervals were simply imported from another context without analysis. The same interval was used, without variation, in each of the many times that a “negligible” interval was applied. And a uniform distribution was applied almost every time. Beyond simply concluding that this broad and over-inclusive interval “contained” the actual value, the role of expert judgement is not apparent.

79. Furthermore, to the extent that Australia is suggesting that uncertainty and lack of data required the application of uniform distributions to virtually all “negligible” intervals, the quantity and quality of the data are factors that should be considered in deciding what methodology to apply. The experts’ replies have made it clear that the incorporation of quantitative elements into a methodology is meant to add precision where available data and scientific evidence make this possible. It is *not* supposed to create *imprecision* through the systematic application of uniform distributions, justified on the basis of “significant uncertainties”.⁵⁴ This is especially so where the interval in question ranges several orders of magnitude. As Firko and Podleckis note, “[u]niform distributions used for probability values

⁵³ ASWS, para. 241.

⁵⁴ ACER, para 17.

that range over an order of magnitude should be used with caution.”⁵⁵ Despite Australia quoting from these authors in its submissions, the IRA Team did not appear to be aware of their important caution on this point.

80. Finally in this regard, Australia’s description of the method used to arrive at an expert opinion appears to have been an unstructured process, not following any recognised method for eliciting and combining expert opinions in order to derive particular range of values and distributions. Had a properly structured method been used,⁵⁶ one might expect that this process would have led, in most cases, to a “most likely” value and different upper and lower bounds. The fact that several expert opinions were, supposedly, combined to produce nothing more than a crude uniform distribution, with the same upper and lower values, for over a third of the intervals used in the IRA, is difficult to reconcile with the notion that a coherent and objective process was used.

Third methodological flaw: volume of trade

81. Australia’s estimate of a most likely import quantity of 150 million New Zealand apples annually (15% of Australia’s domestic fresh apple fruit market) lacks any objective justification, and is based on a range of unsupported assumptions and suppositions. Australia acknowledges that assessing likely volume of trade is “difficult”, as there is no existing trade between Australia and New Zealand.⁵⁷ Australia also accepts that the volume of apples exported to Australia will depend on the long term profitability of exports,⁵⁸ and that if large numbers of apples were imported from New Zealand to Australia, the domestic apple price would face downward pressure.⁵⁹ Furthermore, Australia’s estimate also appears to be contingent on ongoing shortfalls in its domestic apple supply.⁶⁰

82. Notwithstanding this, Australia boldly predicts that its supermarkets would abandon their existing policies that are based on preferentially stocking local fruit and embrace New Zealand imports. However, recent public statements by a senior supermarket executive confirm what New Zealand has argued all along – that Australia’s buy-local policy is firmly entrenched.⁶¹ Australia’s comparisons with New Zealand counter-seasonal exports to northern hemisphere markets where similar buy-local policies exist, are similarly inapt, as they ignore the fact that New Zealand growers would be exporting apples to Australia at the

⁵⁵ Firko and Podleckis, “Likelihood of Introducing Nonindigenous Organisms with Agricultural Commodities: Probabilistic Estimation”, Exhibit AUS123, p88

⁵⁶ NZFWS, Annex 4.

⁵⁷ IRA, p 18; AFWS, para 98.

⁵⁸ IRA, p 19

⁵⁹ AFWS, paras 335-336; ASWS, paras 293-294.

⁶⁰ IRA, p19.

⁶¹ Exhibit NZ-135.

same time of year as locally grown apples would be available. New Zealand apples would thus bear the full brunt of buy-local preferences.

83. Despite the many uncertainties inherent in Australia's conclusion on the likely volume of trade, and the doubts raised by New Zealand, Australia firmly clings to its own estimate. This is no doubt because of the importance of volume of trade to Australia's risk analysis methodology. For example, as the IRA itself acknowledges, "very low exposure values expressed on a per apple basis could be highly significant when the potential volume of trade is taken into account."⁶² This reflects an unstated motivation underlying Australia's application of the semi-quantitative methodology: to use volume of trade to boost the estimated risk associated with New Zealand apples to a level that Australia claims justifies phytosanitary measures.

Fire blight

84. The experts confirmed that many of the conclusions in the IRA relating to fire blight lack sufficient scientific support. This was true of importation steps 1, 2, 3, 4, 5 and 7. In terms of the IRA's conclusions in relation to the overall probability of importation of *E. amylovora*, and in relation to the probability of exposure of a susceptible host to *E. amylovora*, the experts did not find support in the scientific evidence.

85. In summary, the expert responses confirm that the IRA's conclusions in relation to the risk that fire blight could be introduced from imported New Zealand apples are fundamentally flawed and not objectively justifiable. Their responses confirm that "the scientific evidence *actually relied upon* did not support the conclusions drawn,"⁶³ and that Australia's theory that mature apples provide a pathway for the introduction of fire blight has no scientific support.

86. Unable to find any basis upon which to challenge the experts' responses, Australia's reaction has taken on an air of desperation. It has attacked the experts' qualifications, claiming that certain experts were unqualified to answer the very questions to which the Panel asked them to respond.⁶⁴ It has claimed that the flaws found by the experts were not serious enough to require the Panel to do anything.⁶⁵ It has suggested that the Panel needs to see whether alternative probabilities were available on the evidence⁶⁶ in effect asking the Panel to redo the risk assessment. And, Australia has asserted that it is up to New Zealand to

⁶² IRA, p 89

⁶³ Australia promotes this language as embodying the correct standard of review: ASWS, para. 318.

⁶⁴ See NZCACER, para 33.

⁶⁵ See NZCACER para 35, referring to ACER, para 60. See also ACNZCER para. 26.

⁶⁶ ACER para 116

prove that alternative probabilities to those determined by the IRA team were “obviously available on the evidence”.⁶⁷ But none of these arguments withstand analysis.

87. Under Article 5.1, the task of the Panel is to review Australia’s risk assessment, not to conduct a *de novo* review. The Panel does not have to redo the Australian risk assessment or decide whether the risk assessment in Roberts and Sawyer (2008) is “correct”, or more “correct” than that in the IRA. The Roberts and Sawyer papers are useful, however, in providing a reality check against Australia’s unsupported conclusions in the IRA. The authors of those papers reviewed all of the relevant scientific literature and concluded that the risks of a hypothetical pathway being completed in the real world are so small as to be insignificant. This is important material for the Panel to consider when it undertakes its own objective assessment of the matter.

88. In short, New Zealand’s claim that the IRA fails to provide a risk assessment in respect of fire blight has been confirmed by the experts and not rebutted by Australia.

European canker

89. New Zealand has demonstrated that the conclusions drawn by the IRA in relation to the probability of entry of *N. galligena*; the probability of establishment and spread; and the IRA’s assessment of consequences do not find sufficient support in the scientific evidence relied on. This has been confirmed by the experts.

90. Australia’s rebuttal is focused on showing that latent infection of mature apples can occur. However, Australia’s argument misses the point. New Zealand challenges the IRA’s assessment of the probability that latently infected fruit will be harvested from New Zealand orchards. As the experts confirm, Australia has not provided sufficient scientific evidence to support the values assigned to this step.⁶⁸

91. In assigning an effective probability of 1 to survival of latent infections through processing in the packing house, the IRA does not take into account the effects of New Zealand’s export practices in reducing the possibility of the shipment of infected fruit into Australia. In particular, Australia overlooks the fact that fruit would be stored in New Zealand until grading and packing for just in time delivery to the Australian market,⁶⁹ and accordingly fails to allow for the possibility that any rots which developed in store would be removed prior to export.

92. Australia also asserts that “surface infestation of mature apples occurs in New Zealand, both in the field and in processing”.⁷⁰ However there is simply no evidence of

⁶⁷ ASWS, paras 398, and see also paras 400 and 402.

⁶⁸ Swinburne 49, 57, 62/63, 72, 75, Latorre 55, 57, 63, 75, 76.

⁶⁹ Exhibit NZ-136.

⁷⁰ ES, p.6.

surface contamination by *N. galligena* to substantiate Australia's claim. The experts conclude that contamination would not "play any part in an entry pathway"⁷¹ and that "this possibility should be disregarded from the risk analysis."⁷² Since the surface contamination pathways under the IRA account for more than 80% of the total probability of entry,⁷³ it is impossible to have any confidence in the conclusions of the IRA with respect to the probability of entry.

93. Australia now argues that New Zealand (and by implication the experts) have misunderstood the IRA's methodology and that surface infestation is only a precursor to latent infection and in this way Importation Steps 3, 5 and 7 refer also to latent infection.⁷⁴ However the IRA does not discuss how or when these fruit infestations would turn into fruit infection or evaluate the likelihood of this event occurring. Australia is simply inventing a new explanation to justify its flawed contamination pathway.

94. In any event, there is simply no scientific evidence to support the contention that surface infestations will lead to infections at each of these steps. Dr Swinburne confirmed there is no scientific evidence that infestation of apples after harvest leads to fruit infections. In relation to Importation Step 5, which accounts for over three quarters of the probability of entry (or over 9,000 fruit), Dr Latorre states that "the possibility that clean fruits may be infected from inocula contaminating epiphytically mature fruits in dump water in packing houses (Importation Step 5) is negligible and irrelevant".⁷⁵ He goes on to say, "there is no experimental information convincingly supporting this conclusion"⁷⁶ and the possibility should be "disregarded from the risk analysis".⁷⁷

95. Australia also claims support from Professor Latorre for its exposure scenario, but it can only do so by selectively quoting from the experts' responses. In fact, Professor Latorre challenges the *probability* values assigned by the IRA team.⁷⁸ And, both Drs Swinburne and Latorre have identified numerous reasons why the scientific evidence does not support the IRA's conclusion on exposure.

⁷¹ Swinburne, Q 57

⁷² Latorre, Q 57, see also Q 50.

⁷³ NZSWS, Annex 2.

⁷⁴ ASWS para 497

⁷⁵ Latorre, Q49

⁷⁶ Latorre, Q49

⁷⁷ Latorre, Q 81

⁷⁸ "I would consider the probability of this event as extremely low to negligible" (Q65) and "the likelihood assigned seems to be high and these values have not been validated locally. Based on the general information available, I would assume that these events have a likelihood of occurring different from zero, but still extremely low" (Q 69)

96. In its First Written Submission, New Zealand established that the IRA's analysis of climate was flawed and that the climatic conditions in Australia were not suitable for the establishment and spread of European canker.⁷⁹ It has now been confirmed by the experts that there is no evidence - minority or divergent - to support the IRA's use of 1000mm rainfall as the relevant climatic indicator for European canker establishment.⁸⁰ None of the various models employed by Australia in its first or second climate papers suggest that this parameter is appropriate to predict the risk of the establishment of European canker. Moreover, the models are not reliable because they employ selective weather data, fail to take account of inoculum production and inappropriately use "one off" weather events to predict establishment risk. In short, Australia's use of different predictive models to bolster the IRA's conclusions as to the suitability of Australia's climate are deeply flawed and merely confirm that it is necessary to over-predict European canker risk in order to support the conclusions of the IRA.

97. As New Zealand has established and the experts confirm, Australia's assessment of consequences is significantly over-estimated.⁸¹ Australia's arguments rest on the flawed premise of the suitability of its climate and assertions about the ability of the disease to establish on alternative hosts in Australia, which are not supported by scientific evidence.

ALCM

98. New Zealand has demonstrated that the conclusions drawn by the IRA in relation to the likelihood of entry of ALCM, the probability of establishment and spread, and the IRA's assessment of consequences, do not find sufficient support in the scientific evidence relied on. This has been confirmed by the experts.

99. The experts describe the IRA's analysis of the likelihood of importation as "unclear"⁸², reliant on "old and inadequate published data"⁸³, "subject to large uncertainties"⁸⁴ and, most importantly, without "sufficient scientific evidence."⁸⁵

100. Australia's only response is its claim that the IRA's assessment of the likelihood of importation of ALCM is "irrelevant" because the IRA also relied on the August 2005 data.⁸⁶ However, many of the IRA's errors with respect to its assessment of the likelihood of

⁷⁹ NZFWS, Annex 3

⁸⁰ Swinburne, Q66, 72, Latorre, Q 72

⁸¹ See for example Latorre Q 60, 86.

⁸² Cross, Q 101, p. 11

⁸³ Cross, Q 108, p. 16

⁸⁴ Cross, Q 99, p. 9

⁸⁵ Deckers, Q 111, p. 37

⁸⁶ ACER para 246-247 and ASWS 618-620.

importation taint the entire assessment of the risks related to ALCM. In particular, the IRA's failure to take into account the scientific evidence on viability is relevant not only to the IRA's conclusions on importation, but also to the entire assessment of risk, *including* the IRA's alternative conclusions on the likelihood of entry, establishment and spread, based on the August 2005 data. As confirmed by the letter from the inspectors who carried out the inspections which we have attached to this statement, the August 2005 data related to occupied cocoons and not, as Australia incorrectly assumed, viable cocoons.⁸⁷

101. In an apparent acceptance of the IRA's failings with respect to viability, Australia has put forward various justifications for the IRA's disregard of cocoon viability. The IRA, Australia says, was entitled to ignore Rogers *et al.* 2006 because its methodology was flawed and its results were unclear.⁸⁸ And, Australia also claims that seasonal and varietal variability and scientific uncertainty somehow mitigate the IRA's errors.⁸⁹ But, none of these factors can cure the IRA's complete disregard of viability. While uncertainty may be an inherent part of risk analysis,⁹⁰ it is not a licence to ignore inconvenient evidence. We are not talking here about whether the IRA took into account the correct percentage of viable cocoons – as confirmed by Professor Cross, the fact is that it did not take viability into account at all.

102. As New Zealand has explained, the high rate of non-viable cocoons on New Zealand apples substantially affects the risk of ALCM establishing in Australia. In particular, it substantially lowers the likelihood of ALCM emergence and mating because the low level of viable cocoons means that many thousands of apples would need to be dumped in the same place, over an extended period of time, for there to be any possibility of ALCM emergence and mating to occur. As Professor Cross has said, the issue of viability is of "...crucial importance...in calculating risks and determining appropriate sample sizes...".⁹¹

103. Moreover, as pointed out by the expert, many of the key biological conclusions in the IRA with respect to the likelihood of ALCM establishment in Australia are not supported by scientific evidence. In particular, the IRA's assumption that all ALCM would emerge as soon as apples are taken out of cold storage has no scientific basis and is, in fact, directly contradicted by the available scientific evidence.

104. Even if there may be some uncertainty as to precisely when and how long it will take for adults to emerge there is no doubt that Australia's assumption of simultaneous emergence as soon as apples are removed from cold storage has no scientific support. As Professor Cross pointed out, the prolonged period of emergence substantially decreases the chance of male and female emerging during the necessary time frame for mating. To quote Professor Cross,

⁸⁷ Exhibit NZ-137.

⁸⁸ ARPQ 87, p 70 and ASWS 623.

⁸⁹ ASWS para 623 – 625 and 633.

⁹⁰ AFWS para. 803 and ASWS para. 668.

⁹¹ Cross, Q 97, p. 8.

“The risk of establishment is thus substantially reduced and this important factor has not been taken into account in Australia’s IRA....”⁹²

105. The IRA also failed to take into account that standard commercial practices in Australia in respect of cold storage of fruit and agricultural waste disposal preclude any likelihood of the scenario required for ALCM establishment occurring in Australia. Australia claims that the IRA was correct to ignore Australian waste disposal practices because the Australian industry is unlikely to comply with them.⁹³ This is a rather surprising proposition and it is a view not shared by Professor Latorre, who had a much more generous view of the “cultural attitude of Australian people” to the disposal of waste.⁹⁴ Moreover, the waste disposal practices at issue are prescribed in the manual of Australian orchard biosecurity best practice guidelines specifically designed to keep Australian apple orchards free of fire blight and European canker.

106. The IRA also failed to take into account the crucial issue of mode of trade, a matter that was noted by the ALCM expert.⁹⁵ If New Zealand apples are exported to Australia in a retail ready condition, the primary pathway identified by the IRA for ALCM establishment - orchard wholesalers - would disappear from the IRA’s assessment. Australia’s response that “it would not be to the commercial advantage of New Zealand to limit its supply to the ‘retail ready’ mode,”⁹⁶ shows the extent to which Australia is grasping at straws. The vast majority of New Zealand apples exported to other markets, as well as the likely mode of trade for apples exports to Australia, is retail ready packaged fruit.

107. Finally, the IRA’s assessment of the likelihood of ALCM spread and consequences failed to take into account the climatic factors required for ALCM establishment and spread and therefore over-estimated the consequences of ALCM. This, too, was confirmed by the experts⁹⁷ and it appears to have been accepted by Australia, which did not address the issue of spread and consequences at all its second written submission.

108. But, not only did the IRA overestimate the likelihood of ALCM entry, establishment and spread, it also failed to properly establish measures. As confirmed by Professor Cross, instead of determining an infestation tolerance level on the basis of the overall risk and its ALOP, Australia simply selected measures that would result in fumigation of every apple, effectively taking a zero risk approach.

109. Let me now turn briefly to other articles of the SPS Agreement at issue in this case.

⁹² Cross, Q 102, p. 11

⁹³ ASWS para 665

⁹⁴ Latorre Q. 89, p. 30.

⁹⁵ Cross Q 120, p 22.

⁹⁶ ASWS para 654

⁹⁷ Cross, Q 117, p. 20 and Q 96, p. 26.

Article 5.2

110. Australia considers that it had no obligation to give genuine consideration to available scientific evidence, or the other matters listed in Article 5.2 of the *SPS Agreement*. While Australia accepts that the relevant factors are to be “considered”, it resists any suggestion that such consideration must be *genuine*. A requirement to give “genuine” consideration means that there must be some evidence that Australia took into account the relevant matters. There is no such evidence and thus Australia is in violation of Article 5.2.

111. With respect to **Articles 5.5, 2.3 and 5.6**, New Zealand has made its position clear on these provisions in its earlier pleadings and has nothing further to add.

Article 8/Annex C

112. The IRA process, that Australian officials originally expected to take 12 months, took 8 years to complete. Australia has offered no justification whatsoever for this delay.

113. Obviously Australia is eager to avoid having to confront this issue, and has not countered New Zealand’s substantive claim. Instead, Australia continues to attempt to relitigate the Panel’s preliminary ruling. Australia wrongly equates the IRA process with the measures at issue. In so doing Australia blurs “the distinction between *measures* and *claims*.”⁹⁸ The IRA process is the subject of the obligation, it is not the measure at issue. The measures at issue in this case are the 17 measures identified in New Zealand’s panel request.

114. What Australia is, in effect, suggesting, is that New Zealand should have provided the *arguments* with respect to the undue delay claim in its panel request. But, as confirmed in the preliminary ruling, the complaining party is “under no obligation to develop its arguments in its panel request.”⁹⁹

115. Moreover, Australia has not explained how the IRA process, which, with the exception of the SPS measures at issue in this dispute, has ceased to exist, could be a challengeable measure under the DSU. It is well-established that “the measures included in a panel’s terms of reference must be measures that are in existence at the time of the establishment of the panel.”¹⁰⁰ Australia’s argument that the IRA process is the measure at issue cannot be reconciled with this jurisprudence.

116. Finally, it is difficult to understand how Australia could not have known what case it had to answer. New Zealand made a claim under Article 8 and Annex C(1)(a) regarding undue delay, in an SPS case involving an 8 year approval process. It was not necessary for

⁹⁸ AB Report, *EC – Selected Customs Matters*, para. 132.

⁹⁹ Preliminary Ruling of the Panel, 6 June 2008, para. 11.

¹⁰⁰ AB, *EC – Chicken Cuts*, para 156.

Australia to know precisely what arguments New Zealand would be making for Australia to have been on notice to begin preparing a defence in relation to this 8 year delay.

117. Mr. Chairman, Members of the Panel, that concludes New Zealand's opening statement. We look forward to responding to any questions the Panel and Australia may have.