Introduction
The Agreement on the Application of Sanitary and Phytosanitary Measures is one of the most important, and potentially most controversial, outcomes of the Uruguay Round. The Agreement now provides a reasonably clear and coherent set of principles and rules which experience to date indicates have the ability to constrain the ability of Member States to misuse SPS measures for protectionist purposes thus negating concessions made in the course of trade negotiations.

The most controversial class of dispute, represented by Beef Hormones, involve food borne risk and in particular the perceived risk resulting from various forms of “food manipulation”. Beef Hormones has given rise to considerable controversy arising out of a widespread public concern with “artificial” human intervention in and manipulation of food production processes and has done much to create a negative popular perception of both the SPS Agreement and the WTO. The upcoming biotech cases are likely to generate much greater controversy and seem likely to bring into the open a number of serious issues relating to the balance between trade, science and democracy.

To date, however, the majority of disputes to come before the Disputes Settlement Body (DSB) have been “quarantine cases” – most notably the Australian Salmon cases and the Japan Agriculture and Japan Apples cases. These cases have concerned quarantine measures that restrict or prohibit the import of food products for the purpose of preventing the potential introduction of pests and diseases that could cause potential harm to the domestic industry producing the same product. The practical effect of such measures, whether justified or not, is to provide considerable protection from foreign competition for the domestic industry. In such cases there is a very strong potential for political pressure from domestic producers with the result that the genuine need for protection is unjustifiably extended for protectionist purposes. It is this group of disputes that is the focus of this paper.

Quarantine protection
The need for stringent quarantine protection is generally accepted by most countries. The need for such protection is particularly apparent in the case of states such as...
Australia, Japan and New Zealand where geographic isolation and the island nature of
the countries has provided a natural protection against a range of pests and diseases
that are extremely difficult, if not impossible, to control let alone eradicate once
established on a particular land mass.\(^7\) In the countries with which the author is most
familiar, Australia and New Zealand, biosecurity is a major issue and in both
countries there is considerable political pressure to increase border protection not only
as the result of lobbying from food producer groups but also as the result of popular
political pressure\(^8\) and lobbying from environmental groups.\(^9\) The recent discovery of
the Varroa Mite in New Zealand has extremely significant economic consequences
for the bee industry.\(^10\) More recently the high profile threat of the potential entry of
foot and mouth disease has led to significant upgrades in border protection in both
Australia and New Zealand. For both countries the introduction of a disease such as
foot and mouth or BSE would have devastating consequences for their agricultural
export industries. Such potential consequences explain the strong political pressures
for stringent SPS measures.

That being said, however, Australia and New Zealand are, also two of the countries
with the most to lose when unjustified SPS measures are imposed in potential export
markets. SPS standards are fully capable of being and are manipulated for
protectionist purposes. Indeed the popular sentiment and emotion that surrounds
human, animal and plant health can be used to influence and manipulate public and
political opinion to bolster a protectionist regime.

The temptation to use SPS measures illegitimately, both as a response to lowered
agricultural tariffs and as a response to unjustified consumer pressures, appears to
have been anticipated when the Agreement was negotiated.\(^11\) Agricultural policies in
the major developed economies are already highly protectionist and it is crucial for
exporters of primary products that SPS measures are not manipulated in order to
increase that protection. Interestingly, perhaps, the quarantine cases to date have
involved only Japan, a country notorious for its protectionist approach to agricultural
exports, and Australia which is both a major agricultural exporter but also a country
which has a stringent quarantine regime.

The successful operation of the SPS Agreement requires that both WTO institutions
and Member governments, when dealing with SPS measures, reach an appropriate
balance between a Members’ legitimate concerns for environmental and health
protection on the one hand and their legitimate trade objectives on the other. The SPS
Agreement seeks to achieve this balance through the principle that SPS measures
must be assessed against and based on scientific evidence. The scientific benchmark
introduces a standard of relative objectivity although it must be noted, however, that
terms such as “science” and “scientific” are not unproblematic.\(^12\) At the same time it
is important to appreciate that the response to the Agreement itself, and more
particularly the decisions made under it, must not be such as to alienate domestic
political opinion to such an extent that the Agreement becomes politically
unsustainable. Balancing the enforcement of the Agreement with political reality is
difficult but it would be naive to think that domestic political opinion is unimportant
for the future success of the Agreement.

Since 1995 WTO Panels and the Appellate Body have considered a number of
complaints relating to quarantine measures and the resulting decisions have clarified a
number of issues and made the requirements of the Agreement much clearer. Nevertheless a number of difficult issues still remain to be resolved. The objective of this paper is to review legal developments to date, primarily as they relate to quarantine disputes, and to consider whether there is now an adequate and acceptable foundation of law to guide SPS decisions as they affect quarantine measures.

The SPS Agreement

The right of governments to protect their population from unsafe food and to protect their countries fauna and flora from the spread of pests and diseases is so fundamental as to be uncontroversial. This right was explicitly recognised in Article XX (b) of the GATT which allows measures ‘necessary to protect human, animal or plant life or health’ subject to the chapeau to that Article which provides that measures are:

‘Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade…’

The SPS Agreement, negotiated during the Uruguay Round, recognises and reinforces that right. Indeed the uncontroversial nature of the right presumably explains not only the relatively non-controversial nature of the SPS Agreement but also the fact that there was considerable common ground on the principles of the Agreement during negotiations.13

The preamble to the Agreement notes that it is intended “to elaborate rules for the application of the provisions of GATT 1994… in particular Article XX(b)”. Measures that conform to the requirements of the Agreement are presumed to be in accordance with GATT 1994 (Article 2.4). The core principle, set out in Article 2 (1) reaffirms that Members “have the right to take sanitary and phytosanitary measures necessary for the protection of human, animal or plant life or health” but adds the qualification that this right is subject to the proviso that “such measures are not inconsistent with the provisions of this Agreement.” The most important qualifications in the Agreement are that a measure:

• “may be applied only to the extent necessary to protect human, animal or plant life or health” (Article 2.3);
• must be “based on scientific principles and .. not maintained without sufficient scientific evidence” (Article 2.3);
• the measure must not “arbitrarily or unjustifiably discriminate between Members where identical or similar conditions apply” (Article 2.4); and
• the measures are not to be “applied in a manner which constitutes a disguised restriction on international trade” (Article 2.4).

The Preamble to the Agreement states that Members desire to further the use of harmonised SPS standards but also affirms that this is “without requiring Members to change their appropriate level of protection”. Arguably, the Agreement does encourage some preference being given for the adoption of standards and measures which conform to international standards,14 by presuming that such standards are consistent with the Agreement and with GATT 1994 (Article 3.2). Nevertheless the actual requirement of Article 3.1 is that Members shall base their measures on international standards. Moreover Article 3.3 is explicit that each Member has the right to set a higher level of SPS protection than would be achieved by international standards as long as there is a scientific justification or as a consequence of the level
of sanitary or phytosanitary protection a Member determines to be appropriate in accordance with the relevant provisions of Article 5. The Appellate Body has made it clear that utilisation of Article 3.3 is “an autonomous right and not an ‘exception’ from a general obligation under Article 3.1.” It has also ruled that the fact a Member has chosen to adopt its own measures under Article 3.3, rather than the international measure, does not impose any initial \textit{prima facie} burden on the adopting Member to justify that measure.

The measures involved in the SPS cases are measures adopted under Article 3.3 and are therefore subject to the requirements of Article 5 which requires a risk assessment to be undertaken. In Beef Hormones the Appellate Body stressed the central role that risk assessment plays in the Agreement:

> “The requirements of a risk assessment under Article 5.1, as well as of ‘sufficient scientific evidence’ under Article 2.2, are essential for the maintenance of the delicate and carefully negotiated balance in the SPS Agreement between the shared, but sometimes competing, interests of promoting international trade and of protecting the life and health of human beings.”

**Risk assessment**

The primary function of a risk assessment is to provide the link between the appropriate level of protection determined by the Member and the SPS measure intended to achieve that level of protection. The assessment must take into account not only the scientific justification for the measure but also the Article 5.5 requirement to avoid arbitrary or unjustifiable distinctions that result in discrimination or a disguised restriction on international trade and perhaps more controversially the article 5.6 requirement that the measures are \textit{not more trade-restrictive than required} to achieve the appropriate level of protection.

In \textit{Australian Salmon} the Appellate Body made the point that the determination of the appropriate level of protection:

> “logically precedes and is separate from the establishment or maintenance of the SPS measure. It is the appropriate level of protection which determines the SPS measure to be introduced or maintained, not the SPS measure introduced or maintained which determines the appropriate level of protection.”

The risk assessment is therefore concerned to ensure compliance with:

> “the obligation in Article 2.2 that an SPS measure not be maintained without sufficient scientific evidence requires that there be a rational or objective relationship between the SPS measure and the scientific evidence”.

Annex A.4 distinguishes two separate forms of assessment with the requirements differing between them. In the case of quarantine measures the definition is:

> “The evaluation of the likelihood of entry, establishment or spread of a pest or disease within the territory of an importing Member according to the sanitary or phytosanitary measures which might be applied, and of the associated potential biological and economic consequences.”

In \textit{Australian Salmon} the Appellate Body stated that the above definition required a three step analysis:

> “a risk assessment … must:

1. \textit{identify} the diseases whose entry, establishment or spread a Member wants to prevent within its territory, as well as the potential biological and economic consequences associated with the entry, establishment or spread of these diseases;
(2) evaluate the likelihood of entry, establishment or spread of these diseases, as well as the associated potential biological and economic consequences; and
(3) evaluate the likelihood of entry, establishment or spread of these diseases according to the SPS measures which might be applied.' (emphasis added)

Article 5.2 elaborates the factors that a Member “shall” take into account in assessing risk, although this is not a closed list:

2. … Members shall take into account available scientific evidence; relevant processes and production methods; relevant inspection, sampling and testing methods; prevalence of specific diseases or pests; existence of pest- or disease-free areas; relevant ecological and environmental conditions; and quarantine or other treatment.

Article 5.3 expand this but makes it clear that a risk assessment is permitted to include a broad range of factors and in particular that it is not confined to strict scientific factors.

3. … 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 requirements of a risk assessment have now been addressed by Appellate Body in a number of disputes and a reasonably clear picture has begun to develop. At the risk of over-simplification the main points that have emerged from can be summarised as follows:

**Members have the right to determine their own appropriate level of protection.** Initially it is useful to stress that it is not the role of a risk assessment to set a Member’s appropriate level of protection. The Preamble to the SPS Agreement makes it clear that in agreeing to its structure Members are not required “to change their appropriate level of protection of human, animal or plant life or health.” The right to set a higher level of protection than that in international standards is made clear in Article 3.3 which again emphasises the “level of … protection a Member determines to be appropriate.” The Appellate Body has made it clear that each of the choices in Article 3 are equally valid and that in particular an Article 3.3 choice is not an “exception” to measures based on international standards. The Appellate Body commented:

’a Member may decide to set for itself a level of protection different from that implicit in the international standard, and to implement of embody that level of protection in a measure not “based on” the international standard. The Member’s appropriate level of protection may be higher than that implied in the international standard. The right of a Member to determine its own appropriate level of sanitary protection is an important right.”

As noted above the determination of an appropriate level of protection precedes the risk assessment and the role of the risk assessment is to provide the link between the appropriate level of protection and the SPS measure. Nevertheless, while the Appellate Body has upheld the right of a member to determine its appropriate level of protection, and in *Australian Salmon* accepted that a Member may determine its appropriate level of protection to be zero risk, it is arguable that in practice this right may be more illusory than real given the central role and powers of Panels and the Appellate Body to review assessments. This point is discussed in more detail below.

**The risk assessment must fully comply with all aspects of Article 5.** Perhaps the most important point to emerge from decisions to date is that a Member must comply fully
and completely with all required elements to a risk assessment. Failure to do so will almost inevitably result in an adverse decision that the risk assessment was not properly carried out and that the Member is in breach of its WTO obligations. The failure to demonstrate that a proper risk assessment was carried out has been central to adverse findings in most SPS cases. A good example, because of the professional and structured way the assessment was carried out and because of Australia’s subsequent attempts to remedy the defects, is the Australian Salmon dispute. A quarantine risk assessment requires and evaluation of the “likelihood” of entry and establishment of disease. In that case the Panel noted that the Australian authorities had dealt with some 24 diseases, had evaluated a series of risk-reduction factors on a disease by disease basis, and identified various quarantine options. The Panel was prepared to accept that, as the Australian assessment “to some extent evaluates a series of risk reduction factors”, it had made an evaluation in accordance with the Agreement.\textsuperscript{25}

The Appellate Body was forceful in overruling this aspect of the report. Having stated that Annex A “refers to ‘the evaluation of the likelihood’ and not to some evaluation of the likelihood” held that “some evaluation ..is not enough” and made the point that Annex A.4 “refers to ‘the evaluation of the likelihood and not some evaluation.’”\textsuperscript{26}

Again, in the second Panel Report, Australia measures fell at the final hurdle, again because the assessment had not fully completed the evaluation. In this Report the Panel considered the new 1999 Import Risk Analysis (IRA) had remedied the defects of the earlier analysis\textsuperscript{27} but concluded that the IRA failed to “indicate the rationale for the [‘consumer ready’ measure] criteria nor does it explain or assess these criteria”\textsuperscript{28} - the final link between the assessment and the measure was therefore not made.

**Risk assessment allows judgment and the consideration of a broad range of factors.**

The basic requirement of the SPS Agreement is that an SPS measure be based on scientific principles and not be maintained without sufficient scientific evidence. A risk assessment is not purely a question of science – indeed Article 5.1 and 5.2 refer to “taking into account” the relevant science. In Beef Hormones the Panel construed risk assessment in relatively narrow terms and inclined to the view that a particular magnitude of scientifically identified risk must be demonstrated. The Appellate Body, referring back to the text, was critical of this approach and in particular of the distinction made by the Panel between “risk assessment” and “risk management” (the latter encompassing policy involving social and value judgments and “non-scientific” matters). It noted that the factors that could be taken into account under Article 5.2 went beyond matters susceptible of quantitative analysis and added that there was nothing to indicate that Article 5.2 was intended to be a ‘closed list’. The Appellate Body commented:

‘assessment of risk under Article 5.1 is not only risk assessable in a science laboratory operating under strictly controlled conditions, but also risk in human societies as they actually exist, in other words, the actual potential for adverse effects on human health in the real world where people live and work and die.’ (para 187)

Moreover, while confirming that there must be a “rational relationship” between the SPS measure and the risk assessment, the Appellate Body does not require that the relationship between the measure and the scientific conclusion in the risk assessment be the only factor taken into account: “the results of a risk assessment must sufficiently warrant – that is to say reasonably support – the SPS measure at stake.”\textsuperscript{29}

The flexibility possible was summarised in Beef Hormones as follows:
We do not believe that a risk assessment has to come to a monolithic conclusion that coincides with the scientific conclusion or view implicit in the SPS measure. The risk assessment could set out both the prevailing view representing the "mainstream" of scientific opinion, as well as the opinions of scientists taking a divergent view. Article 5.1 does not require that the risk assessment must necessarily embody only the view of a majority of the relevant scientific community. In some cases, the very existence of divergent views presented by qualified scientists who have investigated the particular issue at hand may indicate a state of scientific uncertainty. Sometimes the divergence may indicate a roughly equal balance of scientific opinion, which may itself be a form of scientific uncertainty. In most cases, responsible and representative governments tend to base their legislative and administrative measures on "mainstream" scientific opinion. In other cases, equally responsible and representative governments may act in good faith on the basis of what, at a given time, may be a divergent opinion coming from qualified and respected sources. By itself, this does not necessarily signal the absence of a reasonable relationship between the SPS measure and the risk assessment, especially where the risk involved is life-threatening in character and is perceived to constitute a clear and imminent threat to public health and safety. Determination of the presence or absence of that relationship can only be done on a case-to-case basis, after account is taken of all considerations rationally bearing upon the issue of potential adverse health effects. (para 194)

As with the right to determine an appropriate level of protection, the degree of freedom that Members have to determine their own SPS measures is debatable. Again, this will be discussed further below.

Disputes to date – some comments
Before commenting on some broader issues in relation to the quarantine disputes some general observations on two aspects of the disputes decided to date might be made: why have so few respondents been unsuccessful in defending their SPS measures and have the decisions to date actually resolved the underlying dispute?

Why have respondents been unsuccessful? To date no respondent has been successful in defending an SPS measure against challenge. This situation may, however, change in future disputes. What is clear from most disputes to date, and especially the earlier disputes, is that the risk assessments under consideration were either so inadequate that they were unlikely to satisfy the Agreement's requirements or the measures in question had been put in place without a proper assessment being completed. Given the Beef Hormones ruling that the Agreement applied to SPS measures currently having application, even if their enactment predated 1 January 1995, this consequence was probably inevitable. The first SPS disputes, Beef Hormones, Australian Salmon and Japan Agriculture, were all disputes decided in the first few years of the SPS Agreement and the measures in contention largely predated the Agreement’s coming into force. In Australian Salmon the measures dated back to 1975. Even if a risk assessment could be produced it was likely to have been developed in some haste and perhaps more importantly without the benefit of a developed jurisprudence on the requirements of the Agreement. Most risk assessments considered to date have been seriously inadequate when evaluated against the Agreement’s requirements. Of course a second reason that respondents are unsuccessful may of be that their SPS measures are purely or almost entirely protectionist and that, at best, the scientific justification for the measure is tenuous.

This picture is likely to change in the future. The course of the Australian Salmon dispute is probably indicative of how disputes may progress in future. The prohibition on imported salmon had been originally implemented in 1975 and the first
risk assessment carried out in 1995-1996. It was this assessment that was considered by the first Panel. While the assessment was clearly sophisticated and focussed towards the requirements of the SPS Agreement it proved to be defective in a number of respects. Among other things, for example, Australia was held to have adopted arbitrary unjustifiable distinctions in its SPS protection by not applying the same measures to other categories of fish and by not having evaluated the ‘likelihood’ of entry and establishment. By the time Australian Salmon returned to the second Panel there had been significant changes to the quarantine regime and in particular Australia had moved to allow the entry of uncooked “consumer ready” salmon although not whole fresh, frozen of chilled salmon. On this occasion the Panel was required to consider the updated and modified 1999 import risk assessment. The Panel in its report was satisfied that the majority of the defects of the previous risk assessment had been remedied although it still reached the conclusion that the most important SPS measure the “consumer ready” requirement had not been based on a risk assessment. The assessment gave no evidence that the risks identified continued once salmon were eviscerated, head and gills removed and properly washed – at this stage the SPS risk had been eliminated and the requirement of further processing to a “consumer ready” stage was not justified by the assessment. Following this report Australia moved to bring its regime into compliance. 

The Australian Salmon case is important for two reasons. First it indicates that a member can succeed in implementing SPS measures that can withstand a WTO challenge. By the time of the second Panel Australia had produced a range of SPS measures that in the main were upheld by the Panel. Equally importantly the dispute illustrates that the disputes process can, albeit over time, place sufficient pressure on a Member first to ensure that a full and adequate risk assessment is carried out and, second to ensure compliance with the Member’s WTO obligations. In this case it seems reasonably clear that there were strong political pressures for protectionist measures but that ultimately the disputes process had the desirable effect of finally forcing Australia to base its SPS measures on science it knew to be correct by providing its government with the necessary political authority to face down the salmon industry lobbyists.

**Compliance.** Australian Salmon would, however, seem to be the only dispute that has been satisfactorily resolved. The long term trading interests of countries such as Australia and New Zealand is perceived as best served by a reputation of being “WTO compliant”. Indeed New Zealand, which had also maintained prohibitions on Canadian salmon had, when challenged some years earlier, carried out its own risk assessment and decided that the prohibition was not justified. Australia’s compliance is however atypical. In the most notorious case, Beef Hormones, the European Union has consistently refused to allow the import of beef grown with hormone growth promoters preferring to pay significant compensation to the United States as a consequence. At the same time attempts to justify the restrictions by new risk assessments have been largely unsuccessful. Another early case, Japan Agriculture although apparently resolved seems to have resulted in little having changed. Whitlock writing in 2002 describes the new measures put in place some years after the final report as “a slightly amended varietal testing requirement” and notes that Japan succeeded “in changing its varietal testing requirements to the minimum extent necessary.” Whitlock regards the resolution as a successful – although appearing to concede that there may still be questions as to the scientific
validity of the new measures and that nothing much has changed. The recent Appellate Body report on *Japan Apples* also held that Japan had imposed SPS measures without sufficient scientific evidence. Japan has until 30 June 2004 to comply with this ruling.

**Some Issues**

In the final part of this paper I would identify and make a few remarks on some issues that are likely to be contentious in the future. SPS measures are politically highly sensitive. The fact that they raise serious issues of human health as well as environmental security gives them a universal emotional and political dimension that means that if the legitimacy of the Agreement is to continue to be accepted at a popular democratic level there is a need to tread a fine line between striking down non-conforming measures and respecting democratic voice in Member countries.

A brief visit to the website of Public Citizen’s Global Trade Watch provides some indication of the hostility already generated by the SPS Agreement, hostility that is likely to significantly increase if the complainants succeed in the biotech cases. One publication, for example, states that:

“No country’s SPS measure challenged in the WTO has ever been upheld. In past cases, WTO panels consistently have interpreted WTO Member countries’ food and quarantine measures to be barriers to trade that must be weakened or eliminated, rather than as public health safeguards or prudent measures aimed at avoiding the spread of pests or animal or plant disease.”

Such criticisms may be extreme and overstated but others are based on genuine concerns as to whether trade-related concerns are given undue priority over non-trade concerns such as public health and protection of the local environment. As counter to some of the anti-WTO rhetoric note reference might be made to the point made by Howse when he argues that “there is more to democracy than visceral response to popular prejudice and alarm” and that “if rational deliberation is an important element in making democratic outcomes legitimate, then providing some role for scientific principles and evidence in the regulatory process may enhance, rather than undermine, democratic control of risk.” That may be so but the political reality remains that WTO institutions and Member governments dealing with SPS matters must achieve a democratically acceptable balance between legitimate concerns relating to environmental and health protection and legitimate trade objectives. The principle used to achieve such a balance is that SPS measures should be scientifically based. The scientific benchmark introduces a standard of, hopefully, relative objectivity into the evaluation of SPS measures. Terms such as “science” and “scientific” are not, however, unproblematic and real issues arise as to where and how scientific judgments are made let alone what may or may not encompassed in phrases such as “not maintained without sufficient evidence.”

**Appropriate level of protection and the locus of decision making:** If WTO authority on SPS issues is to be accepted in the longer term it must be supported by at least a reasonable majority of the population in democratic countries. This paper is not the place to debate sovereignty in the abstract and it is not intended to argue that by ceding some authority to WTO institutions a member has in some way compromised its sovereignty. There are, however, difficult issues relating to the boundary area between what authority has been ceded to the WTO and what remains the prerogative of the individual Member. The inherent tensions have been discussed in some detail by Thomson in an article dealing with two issues; sovereign acceptance and measure
adaptation. 37 Sovereign acceptance, he argues, becomes an issue when “Members naively assume they are free to act on ‘an appropriate level of protection’ (ALOP) yet do not pay sufficient consideration to the SPS Agreement’s countervailing requirement that that an ALOP be supported by scientific evidence.” Measure adaptation is the problem that arises when a Member is unable to calibrate its SPS measures to the requirements of the SPS Agreement. Thomson’s argument is that the ALOP is essentially meaningless as in SPS disputes the Agreement is not concerned with the ALOP but the SPS measures that are applied to achieve it. He concludes that ALOP would be best done away with and replaced by an “optimum level of restriction” concerned with the calibration of the measure in question to the risk identified; which, he argues, was what was eventually achieved in Australian Salmon.

Thomson is probably correct when he argues that ALOP is a difficult concept to grasp and to apply in practice and one that gives a false impression of the powers that Members have to set their level of protection. He argues:

“At first glance, the notion of an ALOP seems logical, even comforting. It suggests that sovereignty is intact and that a Member has complete freedom to protect its precious state of pristine human, animal or plant health if it is so blessed. Yet Members have no such freedom. The ALOP is a soothing phrase designed to provide political comfort. When put to the test, however, it is found to be almost beyond grasp. Herein lies the seed of misunderstanding, recalcitrance and compliance difficulty.”

There is, however, a difficulty with Thomson’s position and that is that it amounts to a de facto recognition that Members may have ceded greater authority to WTO Panels and the Appellate Body than is generally recognised. While Thompson may be correct that changing the terminology to be more accurate may help acceptability it is equally arguable that the recognition of the severe restraints on deciding an ALOP might equally threaten the Agreement’s public acceptability. Democratic populations, even the rational informed person discussed by Howe, 39 may well prove reluctant to accept the degree of decision making ceded to WTO bodies. Howe’s summary of the position is probably accurate: “democracy also requires respect for popular choices, even if different from those that would be made in an ideal deliberative environment by scientists and technocrats, if the choices have been made in awareness of the facts and the manner they will impact on those legitimately concerned has been explicitly considered.” This respect may become difficult to achieve if it is appreciated that not only is the right to determine an ALOP largely illusory but also where there are genuine judgment calls to be made on the nature of an SPS measure a Member government’s legitimate decisions may be overridden by a Panel that is not prepared to concede that it should give preference to governmental discretion exercised properly and in good faith.

The rhetoric of Appellate Body reports suggests considerable member discretion. As noted above the Appellate Body has stressed that it is for the Member concerned, not a Panel to decide the ALOP. It has also stated that a Member may take a strong precautionary approach, even to the extent of zero risk. In Beef Hormones, for example, the Appellate Body commented:

a panel charged with determining, for instance, whether "sufficient scientific evidence" exists to warrant the maintenance by a Member of a particular SPS measure may, of course, and should, bear in mind that responsible, representative governments commonly act from perspectives of prudence and precaution where risks of irreversible, e.g. life-terminating, damage to human health are concerned.” 40
In *Australian Salmon* it accepted that a country may determine its appropriate level of protection to be zero risk, \(^{41}\) although Thomson makes the legitimate point that zero-risk is impossible to achieve, at least for quarantine measures, in modern society.

The issue is, however, can the right to set an ALOP be anything other than illusory when a Panel effectively decides not only whether the science justifies the SPS measure – such a decision effectively revisiting and possibly lowering the level of protection – but also whether another measure would be less trade restrictive. It becomes highly debatable whether any power to effectively determine an ALOP is left to a Member government. The extent of a Member’s decision making ability is further limited when the Appellate Body’s approach to the role of a Panel is taken into account. From *Beef Hormones* on the Appellate Body has stressed the role of a Panel as the decider of fact and there has been a reluctance to defer to the judgment of a Member as to the appropriateness of a measure. In *Japan Apples* \(^{42}\) the Appellate Body strongly rejected arguments by Japan that a Panel should give precedence to an importing Member’s evaluation of scientific evidence. The Appellate Body referred to Article 11 of the DSU which requires Panels to make “an objective assessment of the facts” and noted that in *Beef Hormones* the view was expressed that “total deference” to the findings of a national body conflicts with the “Appellate Body’s articulation of the standard of ‘objective evaluation of the facts’”. It went on to note that on several occasions the Appellate Body has stated that “panels enjoy discretion as tier of facts” and enjoy a “margin of discretion” in assessing the value of and the weight to be given to evidence. It then went on to state:

> “Requiring panels, in their assessment of the evidence before them, to give precedence to the importing Member’s evaluation of scientific evidence and risk is not compatible with this well-established principle.

> 167 For these reasons, we reject the contention that, under Article 2.2, a panel is obliged to give precedence to the importing member’s approach to scientific evidence and risk when analysing and assessing scientific evidence.”

It seems arguable that this approach, if applied to situations where there is a real and genuine choice to be made, leaves little if any effective discretion to Member governments to make legitimate judgments as to the level of risk they are prepared to accept. Given the extremely serious and potentially devastating economic and social consequences that might follow the introduction of some diseases this is an extremely worrying position. The position is of even more concern as there is no appeal from a Panel’s factual decision, only an appeal on points of law. In order to challenge a Panel’s factual determination an appellant faces a high hurdle. In *Australian Salmon* the Appellate Body in rejecting elements of Australia’s case, stated:

> In our view, the Panel did not "deliberately disregard", "refuse to consider", "wilfully distort" or "misrepresent" the evidence in this case; nor has Australia demonstrated in any way that the Panel committed an "egregious error that calls into question the good faith" of the Panel. We, therefore, conclude that the Panel did not abuse its discretion in a manner which even comes close to attaining the level of gravity required for a claim under Article 11 of the DSU to prevail.

This is a very high standard, much higher than required in many domestic systems. One commentator has suggested that the level of control exercised by the Appellate Body “diminishes the incentives for panels to be as precise as possible in their assessment of the facts could diminish as well.”\(^ {43}\) The effective inability to challenge factual decisions when combined with a seemingly unwillingness to leave a proper margin of discretion to the importing Member, has the potential to be destructive of
public trust in the Agreement. If the right to chose an ALOP is to be meaningful Members must have the ability to make rational and justifiable choices between legitimate risk management choices. If Panel decisions overstep the line between critical review of such decisions to effectively making the decision themselves the acceptability of the Agreement is called into question.

To date the disputes have not involved the need for a serious judgment call by either a Member or a Panel as the science has tended to give reasonably strong support to the Panel findings. That may not, however, always be the case. One might consider, for example, popular and political reaction in Australia or New Zealand if a Panel found that the extremely restrictive measures taken to protect those countries from the introduction of foot and mouth disease were held to be more trade restrictive than necessary – let alone the reaction if such a disease was introduced subsequent to any such finding.

“Based on scientific principles”. Related to the above points are some questions as to how the Panels deal with science. The language of Article 5 states that measures must be “based on scientific principles” (Article 2.2) and members “shall take into account” available scientific evidence” (Article 5.1). As discussed above this language should allow a number of other factors to be considered in addition to “science” in the narrow technical sense. If, however, Panels choose to focus on science in this narrow sense and see their role as largely that of weighing the views of competing experts the effect is to narrow the focus of the review and again to limit the role of Member governments. Some of the relevant issues are identified by Howse in an article that is somewhat critical of the nature of the scientific evidence and of the line of investigation in Australian Salmon.\textsuperscript{44} He notes, for example, the lack of expert evidence from those whose “expertise centres on the role of science within the process of regulation...The scientists called upon were placed in a virtually impossible position: they were asked to make a purely technical/scientific judgment about the adequacy of a risk assessment as regulatory tool.” There is some indication at least that Panels may have a somewhat simplistic, or possibly optimistic, expectations of science and the certainty that it can provide. The preference for stating ALOPs in quantitative terms articulated by the second Panel in Australian Salmon\textsuperscript{45} (even though the Appellate Body has stated that a qualitative approach is acceptable) suggests a misplaced expectations of scientific certainty or indeed that all matters can be reduced to a quantitative statement.

Such criticisms may be seen as somewhat carping. The developing jurisprudence and the approach of a Panel has, however, arguably yet to be seriously tested in a “hard” disputes. If a dispute was to involve credible but uncertain, incomplete, inadequate, or disputed scientific findings and/or there was a credible and wide division of scientific opinion, such a dispute is likely to be extremely testing on a Panel. This will be particularly so if the Panel sees itself as the arbitrator of the science. In the disputes to date the scientific evidence appears to have been relatively clear cut and restricted to a relatively well defined issues. Other disputes may severely stretch this margin of comfort especially if there is no clear understanding of the need for a balance between proper and objective review and the acceptance of the necessary decision making discretion of Members. It is one thing for Members to have ceded strong review powers, it may be another if they find they have ceded virtually all decision making authority.
Conclusion
To date opinions in disputes relating to the SPS Agreement suggest that an appropriate balance is being maintained between trade and non-trade values. *Beef Hormones* was, in most ways, an initial unfortunate case. Politically it involved an unusually high level of dissatisfaction from a consumer viewpoint and arguably the requirement for rapid removal of the measure (instead of, for example, requiring a proper risk assessment) gave the impression that the WTO was careless of or unconcerned with human health issues.

*Australian Salmon* on the other hand is an example of how the system should work and of the appropriate balance that can be achieved. The case demonstrated the need for, and resulted in, a careful and detailed risk assessment. That assessment and the measures based on it were tested in the various panels with the result that Australia was required to, and did, make amendments to its quarantine regime and at the same time produced a more consistent and thorough set of SPS measures for the risks in question. It also meant that as a result of the external scrutiny a number of political factors favouring protectionism may have been eliminated from consideration. Indeed recent reports on quarantine measures, such as the Revised Draft IRA Report: “Apples from New Zealand”, indicate that less restrictive measures may be put in place for at least some products. The refusal of the Australian government to allow importation of New Zealand apples – a decision that in New Zealand is viewed as blatantly protectionist – has been a long running irritation in trans-Tasman trade relations.

Nevertheless there are still some important challenges to be met. While the SPS Agreement appears to be working well the disputes to date have involved what might be described as routine/single measure cases. The next year is likely to see a two very significant cases come before Panels and presumably, in due course, the Appellate Body. The most controversial will be the *Biotech* dispute. Recent news reports suggest that the United States is demanding that the European Union abandon its ban on growing genetically modified crops. Any decision in favour of the United States is likely to meet strong political resistance. On the measures focussed on in this paper the *Australian Quarantine* dispute looks to be of particular importance as it goes beyond a challenge to restrictions on a single product and amounts to a challenge to the Australian quarantine system as a whole. As such the case will be of particular concern to all “island” Members. The European Union request for consultations refers to the fact that “imports of products is a priori prohibited, although there is no risk assessment. Risk assessments appear to be commenced, if at all, only once the import of a product has been specifically prohibited.” This allegation seems to suggest, that the European Union is claiming that a quarantine system that “requires all WTO Members to carry out risk assessments for all possible traded plant and animal products from all possible sources, regardless of the existence or expression of any commercial interests.” If accepted by the Appellate Body the consequences and costs of such an quarantine administration may reach unreasonably onerous levels not only for developed countries but especially for developing ones. These two cases are likely to see broad political acceptance for the SPS Agreement and the WTO system generally put under increasing strain.

2 The US and Canada (20 May 2003) and Argentina on (21 May 2003) have lodged applications seeking the establishment of Panels to consider a range of EU restrictions on the approval and marketing of biotech products. See DS 291, 292, 293.


4 Australia–Measures Affecting Importation of Salmon WT/DS18/AB/R (20 October 1998)


7 The United States Trade Representative, 2004 National Trade Estimate Report on Foreign Trade Barriers (available at: http://www.ustr.gov/reports/nte/2004/) describes Australia’s SPS measures as “extremely stringent” and New Zealand’s as “strict’ and “highly conservative.” Japan is regarded as “particularly conservative”.

8 Possible biosecurity breaches are major news stories in New Zealand.

9 One of the major proponents of increased biosecurity protection in New Zealand is the Royal Forest and Bird Protection Society Inc, the country’s major environmental group. See http://www.forest-bird.org.nz/biosecurity/index.asp, (accessed 16 April 2004)

10 It is estimated that the economic impact is that, under beekeeper management only, Varroa is likely to cost New Zealand agriculture at best around $365 million and at worst around $661 million, in present value terms, over the next 35 years: see New Zealand Ministry of Agriculture and Forestry, Review of Varroa Economic Impact Assessment: Recommendations on Revision (4 December 2002), available for downloading at: http://www.maf.govt.nz/biosecurity/pests-diseases/animals/varroa/papers/assessment-review.htm


12 See the discussion in Howe, above.

13 Croome, above n p 236.

14 International standard setting bodies are defined in Annex A.3 of the Agreement.

15 Beef Hormones para 172.


17 In Beef Hormones, para 177, the Appellate Body makes it clear that a risk assessment is required in both the situations identified in Article 3.3 regardless of the somewhat unclear language used.

18 At para 203.

19 Japan Agriculture para 84.

20 Para 121.

21 Beef Hormones para 187.
The Appellate Body had earlier indicated that to require standards to be based on international standards would effectively make compulsory what were intended to be recommendations by such bodies as the Codex Alimentarius Commission (para 165).

At para 172.

At para 125

Australia - Measures Affecting Importation of Salmon. Report of the Panel WT/DS18/R (12 June 1998) at para 8.91. See also paras 8.80, 8.83 and 8.89. It should be noted that the Panel “assumed” compliance rather than making a definitive finding.

At para 124 and see also paras 127-128. Emphasis in original.


At para 7.130.

At para 193.

At para 128.


On the nature of democratic legitimacy in this context see Howe, above.

http://www.citizen.org/trade/. Public Citizen is a major US based group which claims a Membership of over 250,000.


above


At p 738.

Above.

At para 124.

At para 125

Paras 165-167.


Howse above n 2 at 2340-2349.

At para 7.129

WT/DS287/1 (9 April 2003).

WT/DS287/7: Statement by Australia at DSB Meeting (2 October 2003).