

Quarantine and Biosecurity Review

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This submission is based on my ongoing experiences with the IRA process relating to the importation of prawns and prawn products. These experiences are effectively two-fold: first as a scientist with a keen interest in Australia's natural resource research and management, particularly for fish and fisheries, and second, as a consultant to two seafood importers, one very large (Kailis Bros), and one small (Sontari Foods), that have struggled to obtain even partially adequate responses to perfectly reasonable questions relating to decision making in this matter.

I have had considerable experience with government policies and practices, both Commonwealth and state, relating to biodiversity conservation and protection. Relevant experience includes recent membership of the Commonwealth Biodiversity Advisory Committee and the Threatened Species Scientific Committee, and less recently, numerous state committees, mostly in my capacity as Director of the New South Wales Fisheries Research Institute (1986-1996). Other relevant Australian experiences include: Professor of Environmental Sciences and Head of the School of Resource, Environmental and Heritage Sciences at the University of Canberra, and the senior author on Australia's only published study on the policy and management implications of Australia's need for seafood to 2050. I also have considerable international experience, having worked out of Australia for 17 years and held senior positions in a number of international organisations, including Chief Scientist with the Inter-American Tropical Tuna Commission and Chairman of the Board of the WorldFish Center.

Executive summary. The objectives and guiding principles for Australia's quarantine and biosecurity policies and risk management measures as set out in the relevant legislation and related documents appear to be sound and to reflect Australia's needs. However, the way in which subsequent management processes have been implemented by Biosecurity Australia (BA) and the Australian Quarantine and Inspection Service (AQIS) represents serious abuse of a supposedly 'science-based' and internationally agreed process of management, such as Australia is committed to under the SPS Agreement. There appears no doubt that the actions of BA and AQIS constitute deliberate creation of unnecessary obstacles to trade, in violation of the TBT Agreement.

In providing detailed comment for the Review I have followed the format of the Issues Paper of 14 March 2008. The comments below deal in turn with selected paragraphs, as numbered in that Issues Paper.

It is noteworthy that in defining the terms 'quarantine' and 'biosecurity' (paragraph 12), biosecurity is defined as 'the protection of the economy, environment and human health...', yet in all discussions of which I am aware, with officers of BA, relating to the prawn IRA they have stated most adamantly that they will not, and should not, take

economic issues into consideration. While it may not be inappropriate for the economic components of biosecurity to be accommodated in another level of Government, such as AQIS, this fundamental limitation of BA's assessments on the comprehensive impacts on Australia's biosecurity must be acknowledged. BA appears to have taken an extremely, and inappropriately, narrow view of the economic aspects of the key objective.

The importance of taking an holistic view of the stated objectives of economic, environmental and human health aspects of biosecurity is particularly pertinent for fisheries. Australia imports approximately 75% of the seafood it consumes and per-capita consumption is increasing rapidly for human health and life-style reasons. All at a time when our wild fisheries production is actually decreasing and the environmental impacts of many capture fisheries and aquaculture ventures are under increasing scrutiny. Other countries are increasing their production from the aquaculture of prawns and managing the threats of disease effectively. I believe it is of fundamental importance for the current Review to consider biosecurity and quarantine in the full context of Australia's acknowledged requirements for not only biodiversity conservation, but also for food, health and economic security.

Paragraphs 13-19 describe an appropriate scope for the Review, noting the limitations of the context mentioned above. I note particularly paragraph 18 and concur that it is not necessary to review the appropriate level of protection. There is no obvious need to have a level of protection that is out of line with the relevant international agreements. I would, however, like to draw attention to Australia's commitment to this international agreement and to the over-arching objective that Australia's quarantine and biosecurity policies be science-based (paragraph 13). In keeping with Australia's international commitment it is imperative that the science that underpins our policies be truly of defensible international standards. This is consistent with normal scientific practice where the accepted standard is the internationally peer reviewed literature.

This necessity for internationally peer reviewed science is reinforced by the discussion in paragraph 22 on the international trade implications of the SPS agreement. Specifically, Box 2: The SPS Agreement, confirms the vital role of 'international scrutiny and review' and the need for decision making to be based on 'the analysis and assessment of objective and accurate scientific data'. It is imperative for Australian stakeholders, as well as our trading partners, that the science used is demonstrably defensible under international scrutiny.

The prawn Draft IRA is not based on internationally peer reviewed standard 'analysis and assessment of objective and accurate scientific data'. BA advised stakeholders that there had been no peer review of the Draft IRA before it was released. Peer review by internationally recognised scientists contracted by stakeholders demonstrated that the science of the Draft IRA is, for many reasons, fatally flawed. Examples of the comments from those reviews include, 'the draft IRA fails to provide a sound basis for protecting Australia's biosecurity status, yet proposes the implementation of measures which are not validly based on scientific evidence and would clearly be in breach of Australia's obligation under the WTO Agreement and the SPS Agreement' (Professor Roger Morris).

In my own review I concluded that not only was the science fatally flawed but it was so consistently biased that it was impossible to accept random errors as the causes of the problems.

It must be noted that problems with the science in the Draft IRA are of such magnitude that they have totally distorted the conclusions and recommendations that have led to a total ban on the importation of whole frozen uncooked prawns. Key examples include: (a) the conclusion that pathogens, particularly IHHNV, are likely to be transmitted accidentally from frozen product intended for human consumption is inconsistent with the evidence given (b) the assertion that IHHNV is likely to cause a problem for wild fisheries (Australia has no species that are vulnerable to IHHNV in the wild and there is no documented case of IHHNV ever having caused a problem for wild fisheries anywhere in the world. BA did claim that there had been one instance, but this is easily proven incorrect), and (c) adamant adherence to the assertion that prawn farmers feeding infected prawns to their own broodstock (even though it is well known at all four of the active prawn hatcheries in Australia that feeding prawns to broodstock is unacceptable practice), constitute a risk of sufficient magnitude that imports of all whole frozen prawns must be banned. These are just three of the many errors in the science. Details of all three, and many more, have been provided to BA and are available on request

Box 2 under paragraph 22 also includes the statement that governments must be open to scrutiny in how they apply the relevant regulations to provide increased transparency to protect consumers and trading partners from hidden protectionism. To date there has been absolutely no transparency what so ever in the actions of BA and AQIS to the extent that they have not responded to correspondence nor provided rational explanations for actions which appear completely contrary to their own stated principles. Detail can be provided as requested.

Paragraphs 29-40, including Box 3, cover the continuum from pre-border to post-border activities and clearly imply there is full involvement of the Commonwealth and state and territory governments. It is most significant that the Commonwealth Government did not meet its commitment from 2002 to work with state governments to provide education and awareness of the issues relating to minimisation of the risk of spreading diseases by poor prawn farming practices. This is particularly significant as the interim management measures introduced in September 2007 included the statement, 'Biosecurity Australia will re-assess the quarantine risk if legislation were to be introduced and enforced in all States and Territories to prevent the practice of feeding prawns to crustaceans in hatcheries, farms, research institutions and public aquaria'. In 2002 the Commonwealth Government committed to addressing this problem, but did nothing.

Paragraph 34 details the role of the Eminent Scientists Group as to 'review drafts of import risk analysis reports'. The existence of this Group and the implied input of independent science review add greatly to the expectation of stakeholders of fair and honest review of the science process. The Draft IRA (page 183) depicts that this Group is required to confirm the legitimacy of the science before management action is taken. Unfortunately the reality has been far from the expected. To date (21/4/08) the Eminent

Scientists Group has had no involvement at all in the current prawn IRA, and yet new, stringent management measures were introduced in September 2007. AQIS is only authorized to bring in new management measures without the involvement of the Eminent Scientists Group in the event of an acknowledged emergency. No such emergency has been identified. The failure to meet the expectation that there would be international standard peer review of the science before any action was taken not only abuses the accepted practice for science based management but also represents obvious abuse of natural justice.

A major issue with the prawn IRA process is the composition and operation of the IRA Panel that is responsible for producing the IRA reports, including drafts. The Import Risk Analysis Handbook, 2003, (the edition relevant to the 2006 Draft Prawn IRA) states in relation to the membership of the IRA Panel, 'It is important that IRA team members do not have vested interests in relation to the IRA...and that the process is objective and seen to be objective'. It further states, 'it being essential that:- prospective external members do not, and are perceived not to, have a conflict of interest'. At least one member of the IRA panel, Dr Leigh Owens, the only non-government member, has an acknowledged conflict of interest (his own website confirms he consults for a major Queensland prawn farm, one of the primary beneficiaries of restrictions on imports) and as a prawn pathologist specialising in prawn farming it appears he is likely to personally and professionally gain from more stringent import regulations. Thus the composition of the IRA panel contravenes Australian Government policy. This alone constitutes sufficient reason to have all advice from the Panel and any subsequent management action rescinded. However there is further evidence that the management of conflicts of interest of IRA Panel members has been contrary to accepted practice. Information received under Freedom of Information (FOI) confirms that no conflicts of interest were declared to the IRA Panel. Furthermore, consultants for the Seafood Importers Association of Australasia had one meeting with IRA Panel members (12/5/07) at which the extreme influence of Dr Owens on the Panel was observed. It was also noted that the Chairman made no attempt to manage Dr Owens' obvious strong and direct influence on the outputs from the Panel. Thus the Government requirement that 'external members do not, and are perceived not to, have a conflict of interest', has been seriously violated, even if Dr Owens' conflict of interest is asserted to be only perceived.

The questions posed in the box following paragraph 54 address many of the major issues that should be considered in this review. Below I deal with them in turn:

- Australia's current quarantine and biosecurity systems are not appropriate to maintain its ALOP. The objectives are appropriate but the standard of science, the way it which it is managed and the administrative processes employed by BA and AQIS are inadequate and/or inappropriate (details are provided throughout this submission).
- The only apparent consistency in the way the ALOP is applied is in the interminable delays and lack of transparency in the processes. The end result is that delay is clearly used as a deliberate mechanism to ensure the whole process is far more trade restrictive than the science shows is required.

- The wider implications should be much better understood and given much greater emphasis. As earlier discussed Australia imports approximately 75% of the seafood it consumes, and sources of imports to meet our growing demand for health and life-style reasons are rapidly decreasing (for example China, India and South Korea have all recently become net importers of seafood, greatly changing the global balance of supply and demand). The introduction by AQIS of new management measures for the importation of prawns in September 2007 without adequate justification not only deprives Australian consumers of the primary source of uncooked prawns, but it is insulting to our seafood trading partners and seriously threatens future supplies of a variety of products. Significantly, Thailand is Australia's number one source of imported fish and other seafood. Thailand is also among the most negatively impacted by the September decision to effectively ban the importation of whole uncooked prawns and prawn products. Not only does this threaten future seafood supplies but it likely sees Australia in serious conflict with our trading partners in the WTO (Thailand has already begun such action).
- The only apparent benefits of recent actions are those that may be associated with restrictions on trade, but these are contrary to our international commitments under the WTO, SPS and TBT agreements.
- Stakeholders in the prawn IRA were of the opinion that the limitations stated in the Issues Paper were understood by Government agencies and stakeholders, however, the need to abide by these principles is apparently not understood by BA and AQIS.
- The risk assessments as described in the Draft IRA for prawns are clearly not competent. The whole IRA process is clearly not implemented in a timely manner. The current prawn IRA commenced more than ten years ago and management measures were suddenly introduced before even a final draft IRA had been produced and no emergency had been identified. No appeals are allowed until the Draft IRA is finalized and a date has not even been set for this to happen.
- The role of the Eminent Scientists Group in the prawn IRA has been inappropriate to the point of being deliberately deceitfully described. The only role the presence of an Eminent Scientists Group has had is to create the false impression that the Group would add some degree of external peer review. In practice it has had no involvement what so ever.
- The scientific aspects of the Draft IRA for prawns are of such poor standard that the obvious conclusion is that Biosecurity Australia does not have the skills/ability to assess the risks. If this conclusion is not correct then the poor state of the science and the use of it could only be attributed to deliberate distortion of the truth and abuse of the prescribed processes of risk management. The incredible bias in the Draft IRA strongly suggests the latter is more likely and that providing additional resource to BA to improve the standard of science would have no benefit.
- The threats from bio-fouling are a biosecurity issue. As are the threats from the importation of live animals and plants by the aquarium industry. On the basis of my experience with the inability of the current biosecurity/quarantine framework I have very little confidence in this system adequately handling bio-fouling or live

fish and plant imports for the aquarium trade, even though I accept that the regulatory mechanisms possible under quarantine legislation appear to be the most appropriate available. Perhaps the real issue here is also the need for quality and timely peer review of both the available science and of the policy analyses that underpin action?

- Appropriated feedback loops either do not exist or they are inappropriately used.
- Based on the information available on the prawn IRA it is impossible to determine where the management breakdown has occurred. It is possible AQIS has merely responded fairly to flawed advice from BA, but as AQIS is entitled to receive advice additional to that provided by BA it would appear AQIS has not carried out due diligence. Recent correspondence received from AQIS (available on request) clearly shows a most disturbing lack of understanding of the content of the Draft IRA and even the principles that are meant to underpin the relationship between BA and AQIS.
- There is little evidence of serious pre-border measures having been taken into account, even though they could have been of great value to the efficient management of the appropriate ALOP.
- Greater involvement of pre-border countries in the assessment process would improve the quality of the risk management process. Many countries have processes for disease management for prawn farming that are far superior to those in Australia. We have much to learn, particularly in prawn aquaculture, but those involved in the IRA process staunchly refuse to acknowledge this.
- The telling evidence on cooperation in relation to the prawn IRA process is the obvious and complete lack of cooperative action between states, territories and the Commonwealth.
- Our emergency response mechanisms are certainly not appropriately managed. Whether or not the underlying plans are adequate may be a different matter. When AQIS can implement emergency measures, such as banning the importation of whole uncooked prawns, without an identified emergency and without even progressing the IRA to the point where the Eminent Scientists Group has involvement, let alone completing the IRA, is proof that the processes are inappropriately managed.
- I have no detailed knowledge of the arrangements for export inspection and certification but the grey literature does suggest Australia has exported prawn disease(s). This appears to have been made possible by inadequate inspection of live products destined for export.

Paragraphs 55-59 and the associated questions refer to the legislative framework. I suspect that legal advice may differ, but it appears that the primary problem lies with the mismanagement of the processes that flow from the legislation and not the legislation itself. There would appear little point in amending the legislation if the current abuse of the principles of good governance continues.

Paragraphs 60-67 are also difficult to respond to because of the confusion between what should happen, and current practice. Perhaps the best example is paragraph 62, where the role of Biosecurity Australia as a 'prescribed agency' that provides 'science-based advice

independent of export interests or domestic industry pressures' is not reflected in reality. The principle of having a level of independence in the body that provides scientific advice is at least laudable and most would agree, essential, but when Biosecurity Australia openly refuses to respond to requested comments from international scientific experts, and also disregards the agreed principles for management of conflict of interests in even the most fundamental component of the process, the composition of the IRA Panel, any suggestion of independence is destroyed.

This section also raises the vexing issue of political pressure on outcomes. The perception of political interference has indeed been 'heightened by public statements by some members of parliament in the past' (para 64, last line). Hansard records clearly show the intent of several Senators to have more stringent management measure on prawn imports before the science had been considered. The public statements by Senator Heffernan, including the totally unsubstantiated and deliberately defamatory statement that prawns from parts of Asia are grown on sewage (2UE, 29/1/07), and his promotion of a specific brand of Australian aquaculture prawns on the same program, do not suggest impartiality. Repeated statements in Hansard by the Chief Executive of AQIS, Mr John Cahill, before even the closure of the period for submission on the Draft IRA, that more stringent management measures for prawn imports were to be introduced, before there was even assessment that any new measures were necessary or appropriate, are further confirmation of pressure from senior levels of Government for increased restrictions on imports, regardless of what the science might suggest. These repeated comments by Mr Cahill represent either a lack of discipline or a culture in AQIS of pursuing the introduction of new restrictions on trade regardless of the relevant science.

The suggestions in paragraph 66 provide further evidence of the need for independent, international standard peer review before decisions are made, regardless of who is given the final authority of making them. If the whole process is to be science-based, as it unquestionably should be, then it is imperative that the science is correct and seen to be correct before the final decision maker is pressured to make a decision (it is most unlikely the final decision maker will ever have the scientific skills, experience and time to personally review the standard of the science underpinning the recommendation he/she is given. As such he/she will be vulnerable to bias in the recommendation that is stated to be science-based and as such, beyond question by stakeholders or the general public).

Issues relating to communication and consultation (paras78-82) highlight the tremendous gap between stated policy and management reality, as evidenced by the prawn IRA process. The statement 'Communication with interested parties is also highly important in the current process for Import Risk Analyses' (para 78) is telling. There has been very little true communication with stakeholders during the prawn IRA and to date there is no evidence what so ever that the severe criticisms of the science and the science process provided by world authorities in appropriate disciplines and included in submissions on the IRA have been considered. They have certainly not been countered by BA. It is true there have been numerous telephone discussions between BA and AQIS staff and stakeholders, but there has been no evidence of stakeholder opinions being actually considered and used in the management process. Receipt of correspondence relating to

serious flaws in the science has been acknowledged by BA but no response has ever been received. Correspondence to AQIS relating to new import permits failed to receive a response until the correspondents were driven to complaining to the Commonwealth Ombudsman. At least one response that was then received from AQIS (letter from the National Manager Animal & Plant Quarantine to Sontari Foods, 22/2/08) was seriously inaccurate and apparently ignorant of, or at least inconsistent with, the content of the Government's own Draft IRA.

Another telling example of the refusal by AQIS to communicate effectively with stakeholders was the deliberate withholding of the Kewagama Report on Bait and Berley. This report was pivotal to the case made in the Draft IRA against imported prawns and yet BA refused to let stakeholders see it until well after the period for submissions on the Draft IRA had expired. Then it was only released after stakeholders were forced to seek its release under FOI.

If AQIS is serious about its 'community education and awareness campaigns' (para 81) why did it not follow up on its 2002 agreement to work with the states and territories to have prawn farms comply with world accepted practices relating to not feeding prawns to broodstock? It remains incredible that the possible risk associated with this internationally recognised malpractice is still considered in the Draft IRA to be the principle possible pathway for the transmission of pathogens from imported prawns. There are only three or four active prawn hatcheries in Australia so an appropriate community education and awareness campaign would be neither difficult nor expensive, even in the extremely unlikely event that staff at one of these hatcheries were not aware of the stupidity of feeding prawns to broodstock.

The above two paragraphs indicate just some of the causes of the incredible frustration experienced by stakeholders as a direct result of the Australian Government continuing to provide misinformation, and failing to communicate appropriately, on the prawn IRA. The two examples given show that for the only two significant pathways suggested in the Draft IRA as possibilities for spread of diseases from imported prawns (hatcheries feeding prawns to broodstock and the use of imported prawns as angling bait) the Government failed to carry out its 2002 commitment for communication and education. It then continued to exaggerate the threat from hatchery operators participating in a practice they know is potentially harmful to their own industry. For the second potential pathway it deliberately withheld the most significant information from stakeholders until after the period for submissions had expired.

The first question under para 82 relates to knowledge of Australia's ALOP. I believe the fact that Australia's ALOP is very low, but not zero, is reasonably well understood by the relevant stakeholder communities, at least those who have had some involvement in the IRA process. However recent correspondence (the letter of 22/2/08 from AQIS to Sontari Foods, referred to above) confirms that AQIS and BA do not understand this fundamental principle. The requirements stated in that letter clearly show that they are prepared to withhold import permits, thus totally preventing trade, until the risk is effectively reduced to zero. This draconian approach, which is not consistent with the policy, is also

prominent in the Draft IRA, where repeatedly judgments are made that overstate the risks to Australia's ALOP. Many examples are provided in the Sopac/Sontari Foods submission to the IRA.

Based on the comments above my responses to six of the seven questions in the box under paragraph 82 would each be a resounding, NO. My response to the remaining question (the second) is that obviously new mechanisms to improve communication need to be developed and implemented as a matter of urgency. Such mechanisms should include, but not be restricted to, open forums with stakeholders where issues relating to the science and how it is used can be frankly addressed. International peer review of the whole process is another obvious requirement. And yes, there are opportunities for Australia to learn from our trading partners, particularly on prawn issues where our partners produce more than a million tonnes of farmed prawns annually (compared to Australia's three to four thousand tonnes) and they facilitate increased production of seafood, vital for health and life-style reasons, while managing diseases and the threats of introduction effectively.

The required science-based approach to biosecurity should be linked to appropriate research. Management and even advisory bodies should not be involved in actually conducting this research and even the degree to which they should be involved in determining research priorities requires careful control. The essential drivers of research should be the quality of the science and its relevance to management advice, and ongoing appropriate review of outcomes from both research and management. The value of both of these critical components is dependent on the quality and independence of the peer review.

Responses to some of the questions below paragraph 90 follow, noting that I have limited knowledge of the current research process in this field:

- Truly independent and high quality peer review of both the quality of research and its effectiveness is the best method of evaluation.
- Research priorities are best set by agreement between research users and providers with appropriate input from stakeholders. There are normally few alternatives to some form of steering committee approach.
- The available evidence, as indicated by the prawn IRA, strongly suggests there is little effective input of new research information into risk management measures. The abject refusal by BA to have peer review of the process, even after management advice has been given and draconian decisions taken, suggests a deliberate avoidance of new information that may contradict predetermined perceptions and attitudes.
- A current information and knowledge gap is the lack of understanding of the value of truly independent, high quality research. This can be remedied by increasing the accountability of the science providers and the process of managing scientific input to policy. It would appear that the quality of the scientists currently providing input needs to be greatly improved, but it is possible the problem is entirely due to mismanagement of the science process. The composition of the prawn IRA Panel is indicative of one knowledge gap: the IRA

process is primarily about the management of risk, yet this Panel is predominantly comprised of veterinary pathologists when epidemiologists are obviously necessary. The management of conflict of interest by the current members of the Panel is a separate and major issue.

Obviously review (paragraphs 91-97) is urgently needed. Hopefully your review will determine what else is necessary. The inference (paragraph 94) that the Import Risk Analysis Appeals Panel is an active part of the process again demonstrates the discrepancy between perception and reality. This Panel does not play any part until the Draft IRA is finalized and has been considered by the Eminent Scientists Group. In the case of the prawn IRA management measures which have totally destroyed all trade in prawns with some countries have already been introduced (and several smaller importers have already been put out of business) and there are not even dates for completion of the draft IRA, let alone involvement of the Eminent Scientists Group, which are both required before any appeals are allowed. The delays are interminable and appear part of deliberate intent to restrain trade.

The first question following paragraph 97 refers to monitoring and review. The current operations are neither appropriate nor effective or fair, unless of course their intention is to restrain trade, which is contrary to the responsibilities of WTO signatories. The options then must include realigning current practices with Australia's requirements and commitments. As mentioned repeatedly above the need for quality independent peer review of several steps in the process is critical, as is the need for true transparency in the process. Who should be responsible for insuring this occurs ('who should conduct reviews?') is not so obvious. I do not have a strong opinion on who, so long as whoever is responsible has the benefit of international standard science and policy advice, and is truly and demonstrably accountable to the general Australian public, including the more obvious stakeholders.