# Unpacking the nexus in a changing world – the relationship between biosecurity, trade, health and environment

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#### **ABSTRACT**



International trade in agricultural and food commodities is essential to global food and nutrition security. Trade is enhanced by systems-based and science-based approaches to regulation that address risks to animal and plant biosecurity, zoonotic disease, food safety and nutrition. The World Trade Organization Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) recognises the 'three sisters' — the Codex Alimentarius

Commission (Codex), the World Organisation for Animal Health (OIE), and the International Plant Protection Convention (IPPC) – as the international standard-setting bodies squarely at the centre of this nexus between biosecurity, health and trade. The standards set by these bodies are integral to maintaining a transparent rules-based trading environment and reducing risk for those operating in the increasingly connected global value chain. I will explore how the work of the three sisters intersect to influence food import and export systems, continuing to adapt in a changing world, and I will discuss Australia's crucial role in promoting science-based standards and guidance that facilitate trade in safe food, with a focus on the important role Australia plays in contributing to the work of Codex.

This talk is about our international standard-setting, our day-to-day engagement, our technical market access, our biosecurity, human health, the environment – and how all these roles interact, and how all that facilitates trade.

My normal day-job is the Head of the Exports and Veterinary Services Division at the Department of Agriculture, Water and the Environment, but at the moment I have immense pleasure to be Acting as the Deputy Secretary responsible for the Agricultural Trade Group. These are both extraordinary roles, and I am absolutely committed to them.

The teams I work with are responsible for the regulation of exporting industries, as well as trade negotiations, technical market access, multilateral engagement, and tackling non-tariff barriers including through the World Trade Organization; also, international standard-setting and export reforms that drive digital products and services to deliver benefits to exporters and the broader Australian community. My roles fit right in the centre of the nexus of animal and plant health, biosecurity, trade, human health and the environment.

This record has been prepared from a transcript and the slides of the presentation.

Today I will outline Australia's important role in promoting systems and science-based approaches to regulation: they address risk in animal and plant biosecurity, zoonotic disease, food safety, nutrition, all of which underpin biosecurity and underpin trade.

My focus is specifically on the work of Codex, the Codex Alimentarius Commission. This work is absolutely critical in promoting the development and adoption of international food safety standards that facilitate the fair and free trade in safe food. Our work in Codex touches every single one of us around the world. Everyone eats; everyone consumes; everyone is affected; and yet that particular side of our work often appears to be quite dry and a little bit bureaucratic, so today I want to put some light and colour behind it all.

## Three standard-setting bodies

I will quickly introduce the standard-setting bodies (Figure 1), which we refer to as the 'three sisters' because that shows how interconnected they are:

- the World Organisation for Animal Health (OIE),
- the International Plant Protection Convention (IPPC), and
- Codex.

Together the three sisters are responsible for setting standards, guidelines, and recommendations that cover, respectively, animal health, plant health, and food safety. These organisations have been around for a very long time: since 1924 for the OIE, 1952 for IPPC, and 1963 for Codex. It was in 1995 with the establishment of the WTO, the World Trade Organization, that they were enshrined in the Agreement on the Application of Sanitary and Phytosanitary Measures, the SPS Agreement (Figure 1). They are referenced in that agreement as the organisations responsible for developing standards to which countries are encouraged to comply to harmonise their national measures. Anything that



The Agreement on the Application of Sanitary and Phytosanitary Measures (the SPS Agreement) enshrines the three sisters as the organisations responsible for developing standards to which countries are encouraged to harmonise their national measures

Figure 1. The 'three sisters' and the SPS Agreement.

is more stringent than those national measures requires scientific justification. That is very important.

It is the position of the three sisters in our most central trade framework that makes our involvement in the standard-setting process so very important. Further, certification of all food must address animal and plant health, as well as food safety. The standards that are developed by these bodies are tied together, and they work together to design our food import and our export systems.

Australia has a long history of active participation across the fora and activities of the three sisters. Dr Gabrielle Vivian-Smith, Australia's Chief Plant Protection Officer, leads Australia's delegation to the IPPC (Figure 2). In the IPPC, Australia actively participates as an individual contracting party; we are there in our own right, and as well we act as part of South Pacific Region in the Commission on Phytosanitary Measures. We also have representatives and members in all the subsidiary bodies of the Standards Committee, the Implementation and Capacity Development Committee, and many of the technical panels and working groups.

We have equally strong focus in the OIE governance structures. Australia's Chief Veterinary Officer, Dr Mark Schipp, leads the Australian delegation to the OIE, and Dr Schipp also held the role of the OIE presidency from 2011 to 2021, and he will continue on the OIE Council after 2021. Dr Schipp is also a member of the Regional Core Group for Asia and the Pacific, and that focuses specially on enhancing communication and coordination in our region. Australia also has members on two of the four OIE Specialist Commissions: that is, the Scientific Commission for Animal Diseases, and the Aquatic Animal Health Standards Commission, of which Australia holds the presidency.

I am trying to build a picture to show how influential we are in these three sisters, and how important that work is.



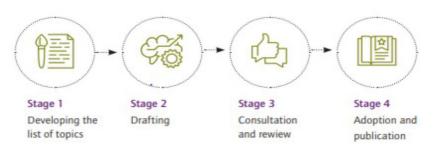


Figure 2. Role of the IPPC.

# CODEX ALIMENTARIUS Organization of the United Nations World Health

CAC	rius Commission  Codex Alimentarius Commission	Active
xecutive Comr	TO SECURITION OF A SECURITION	Active
CCEXEC	Executive Committee of the Codex Alimentarius Commission	Active
Seneral Subject		Active
CCCF	Codex Committee on Contaminants in Foods	Active
CCFA	Codex Committee on Food Additives	Active
CCFH	Codex Committee on Food Hygiene	Active
CCFICS	Codex Committee on Food Import and Export Inspection and Certification Systems	Active
CCFL	Codex Committee on Food Labelling	Active
CCGP	Codex Committee on General Principles	Active
CCMAS	Codex Committee on Methods of Analysis and Sampling	Active
CCNFSDU	Codex Committee on Nutrition and Foods for Special Dietary Uses	Active
CCPR	Codex Committee on Notificial and Poods for Special Dietary Oses  Codex Committee on Pesticide Residues	Active
CCRVDF	Codex Committee on Residues of Veterinary Drugs in Foods	Active
COMMODITY COR	Codex Committee on Fish and Fishery Products	Active
CCFFV	Codex Committee on Fresh Fruits and Vegetables	Active
CCFO	Codex Committee on Fats and Oils	Active
CCSCH		Active
700 March 1990	Codex Committee on Spices and Culinary Herbs ernmental Task Forces	Active
TEAMR	Ad hoc Codex Intergovernmental Task Force on Antimicrobial Resistance	Active
AO/WHO Coor	dinating Committees	
CCAFRICA	FAO/WHO Coordinating Committee for Africa	Active
CCASIA	FAO/WHO Coordinating Committee for Asia	Active
CCEURO	FAO/WHO Coordinating Committee for Europe	Active
CCLAC	FAO/WHO Coordinating Committee for Latin America and the Caribbean	Active
CCNASWP	FAO/WHO Coordinating Committee for North America and South West Pacific	Active
CCNE	FAO/WHO Coordinating Committee for Near East	Active

Figure 3. Australia is involved in 22 committees of Codex.

In my current role I am actively engaged in Codex: I lead the Australian delegation to the Codex Alimentarius Commission. Team Codex Australia comprises representatives from the Department of Agriculture, Water and the Environment; we also have senior representation from FSANZ (Food Standards Australia New Zealand), as well as a number of colleagues who are co-opted into a huge range of working groups — which cover subjects as diverse as food nutrition, the labelling of food and non-food products, food hygiene, residues of veterinary drugs, and residues of pesticides and other chemicals — as well as numerous subject-specific working groups.

Figure 3 shows the list of Commission Subcommittees, specific commodity committees and other working groups that Australia actively leads and promotes; they underpin all our standards on food. Participating across this spectrum gives Australia a unique opportunity to contribute to and influence the development of the text in international standards, implementation material, and a range of other policy documents at each point of its development cycle. It also means that we can work very hard in our region to participate in the development of these materials so that they are reflective of the positions of all, and not just the positions of major trading partners.

Over the past almost two years we have continued to participate in the fora virtually, to make sure that the development of these important standards and texts is not delayed, and also that Australia's perspectives and needs continue to be promoted and included in the development process.

#### Australia's value in these roles

Australia really does need to be 'at the table'. We are a balanced and a pragmatic voice that promotes science and risk-based standards, not only in



Figure 4. Australia's participation across this spectrum is important.

food safety but also in animal and in plant health (Figure 4). And I know that the perception in the international community at these bodies is that we actually *are* a balanced and pragmatic voice, and that we deliver benefits that genuinely do contribute to the international community.

We play a really important role collaborating with like-minded trading partners to counter the efforts by some countries to promote the development of standards that are overly prescriptive or hazard-based, or that mimic their own national control measures. Those control measures could be informed by political or other domestic considerations that constitute factors other than science, and that do not take account of the unique environments and production systems of all other countries.

At a technical level I often reflect with colleagues across the Department that we really do 'punch well above our weight' in each of the three sisters. A challenge, however, is translating our technical influence into spheres that are sometimes quite confronting, and at times even geopolitical. This is where I am immensely keen to be able to continue our work with Su McCluskey in her role as Special Representative for Australian Agriculture.

Australia has continued to make headway over the course of the pandemic, despite the challenges that COVID-19 has presented not only in terms of regulating trade but also in preventing physical meetings with trading partners.

- In phytosanitary matters we have been able to adopt standards related to the use of third parties in regulatory systems; these will help countries use non-government entities in a way that facilitates trade and protects plant health. Australia also has gained approval for a number of international phytosanitary treatments for the Mediterranean fruit fly and the Queensland fruit fly. Australia is one of the few countries that is affected by fruit fly, so the approval is of obvious importance to our fruit exporters, and as well to countries that import Australian product.
- In matters of animal health, Australia's voice has been important in tackling serious emerging problems. In one of the next three case studies today we shall hear about antimicrobial resistance, where global solutions must encompass the needs of a very diverse range of stakeholders. Australia has also worked very hard in the OIE processes for recognising official diseases status, and the effect of this is two-fold. It improves the credibility of the OIE's official diseases recognition system, and it helps Australia maintain our favourable disease status thereby supporting Australian exports.

• In terms of food standards, Australia has been instrumental in progressing principles and guidelines for the assessment of voluntary third-party assurance programs, as well as in guidance on paperless use of electronic certificates. What that means in practice is that we are developing process and guidance at an international level that will remove the need for paper certification accompanying export health certificates. For those who are engaged in exports, that requirement is a huge burden – both on the Department, to be able to make sure that the systems are operating effectively, and also because it makes no sense in a digital modern age to have paper certificates traversing the globe when we can exchange certificates electronically in such a secure way.

## The importance of Australia's participation in Codex

Australia has a particularly close connection to the Codex Committee on Food Import and Export Inspection and Certification Systems (CCFICS, Figure 5). It is among the most influential of the Codex committees, and one that has been chaired by Australia for a significant period of time. I am the incoming Chair.

The work of this committee, I think, well illustrates the importance of Australia's participation in Codex. CCFICS develops principles and guidelines for food import and export inspection and certification systems, with a view to being able to harmonise those systems across all trading partners around the world. The texts developed by CCFICS, and then adopted by Codex, set the benchmark for global food trade. There is no prescriptive 'one size fits all' approach. Instead it provides the basis on which all countries can model their food control systems to achieve the same outcomes.

All the texts cover principles central to the trade in food, such as guidelines for the use of quality assurance systems, and to promote the recognition of these systems in facilitating the trade in food. And they have served us well, but the committee still has a huge and quite demanding agenda ahead of us in order to make sure that Australia's food exports and food safety systems remain 'ahead of the curve' in a rapidly changing environment.

There is a conception that the international standard-setting process is incredibly 'dry' and proceeds at an absolutely glacial pace, and that is absolutely true ... but – there is always a 'but' when we talk about this – consensus building takes time, and with more than 200 member parties of Codex, with dramatically different food safety systems and approaches, you can understand why sometimes progress is slow.

However, sustained effort provides great benefits in the long term, for consumers, industry and governments. And given that it does take some time to achieve consensus on science-based and risk-based standards, it is even more important that the committee is forward-looking early on, and that we address emerging risks and trends, and are responsive to changes in our operating environment. I am proud to say that we are. It is not a stagnant space. We know, and indeed have experienced, situations where there is a vacuum of guidance in the potential for countries to go it alone and implement measures that are

# Codex Committee on Food Import and Export Inspection and Certification Systems

Develops principles and guidelines for food import and export inspection and certification systems





Figure 5. CCFICS.

not science- or risk-based, and for those countries to then expect their trading partner to mirror those measures. It is not a helpful place to be.

As Chair, Australia hosted the 25th session of CCFICS, and it was the first time in the history of Codex that we held virtual sessions. Despite the limitations of operating virtually we progressed a huge amount of very important work that in the longer term is really going to assist countries modernising their approach to the way that the trade in food is regulated, as well as ensuring that inspection certifications systems adapt and keep up with that change.

We have now experienced and implemented remote technologies to conduct audit and verification guidance, and because of that, from the Australian experience, we are driving the development in Codex of guidance on remote audit and verification for food regulatory frameworks. We are sharing that information with our colleagues in biosecurity as well so that we are keeping pace with each other. These are going to be extremely important about facilitating the acceptance of these new ways of regulating across the globe.

We have embraced electronic certification exchanges to do away with paper (Figure 6) and, as I mentioned earlier, we have been instrumental in having this guidance put forward and nominated at Codex last November. That will enable more streamlined and secure exchanges of information between trading partners. Australia also negotiated the most forward-leaning and expansive paperless trade arrangement with a significant trading partner early this year (2021). And we are hammering hard at the moment to move to completely paperless trade with another significant partner in 2022, which again I am hoping will deliver significant financial and non-financial benefits to exporters in some food sectors.

The committee is also taking forward new work to develop guidance on the prevention and control of food fraud (Figure 6), which is becoming increasingly sophisticated, with lots of criminal networks operating; it is a significant threat to consumer health.



Figure 6. Standard-setting bodies are at the forefront of addressing emerging issues and adapting to change.

There are also new food and certification production systems emerging, such as seaweed or cell-based meats, and insect protein, which may become more staple parts of our diet in the future. They all have unique food safety risks, as well as biosecurity risks. Through Codex, Australia is actively working on those.

The uptake of Codex texts is voluntary, so the committee's efforts do not stop at the point of getting the standards adopted and then published by Codex Alimentarius. We do not just silo ourselves in Codex either; we are engaging internationally and within the Department, consistently working from a solid scientific basis to counter trade-restrictive measures in a huge range of fora. We work across government and with trading partners to promote uptake of the standards, and this can happen multilaterally within our regional agreements, and it can also be through thematic sessions at the World Trade Organization. We also work in a strategic food safety dialogue with the food safety regulators of like-minded trading partners, to make sure that we both share information, and then rapidly deal with emerging issues.

Recently, the Government committed additional resources to stepping up Australia's leadership in the agricultural international food policy discussions and to enhance our capacity to influence in multilateral institutions. Through the Global Agricultural Leadership Initiative and Su McCluskey, in 2022 the committee will be focusing efforts to increase the uptake of the international standards that we, as Team Australia, have been trying to drive.

#### In summary

In Australia we really do punch above our weight.

We play a very key role in shaping international standards and guidance, so that they address risks to animal and plant biosecurity, zoonotic disease, food safety, and nutrition in a way that is transparent, systems-based, science-based and risk-based.

Our work in the three sisters is central to facilitating fair and safe trade in agricultural and food products, by maintaining a transparent and rules-based trading environment that promotes global food safety and security.

The increasingly connected global value chain, evolving consumer trends, and new technologies all present challenges and opportunities that we continue to engage with closely, to make sure that our systems keep pace and adapt appropriately.

This work does take time, but when it is done well and done right it implements and underpins trade that benefits us all.

Nicola Hinder PSM is the First Assistant Secretary of the Exports and Veterinary Services Division of the Department of Agriculture, Water and the Environment (DAWE). Ms Hinder's responsibilities include technical market access negotiations underpinning the export of a wide variety of agricultural goods from Australia. In addition, Ms Hinder's role includes the management of operational staff based throughout Australia, including in remote and regional communities, providing export certification and assurance functions. Ms Hinder is also the Australian Delegation Head for the Codex Alimentarius Commission – the international food safety standards-setting agency established by the United Nations Food and Agriculture Organization and the World Health Organization. Ms Hinder has undertaken a broad range of roles across government, including (for DAWE) biosecurity, corporate, emergency management and international trade, and has served the Australian Government on postings to the European Union and India. In 2019, Ms Hinder received a Public Service Medal for services to Biosecurity and Trade.