

A CONFIDENTIAL REPORT FOR NATIONAL FARMED ANIMAL HEALTH & WELFARE COUNCIL

ANIMAL HEALTH CANADA GOVERNANCE MODEL

Final Report

February 7, 2020

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INTRODUCTION

The National Farmed Animal Health & Welfare Council (the "Council") engaged Governance Solutions Inc. ("GSI"):

- ✓ To conduct research into and evaluate alternative governance models for Animal Health Canada,
- ✓ To bring a recommended path forward to the Council for consultation and dialogue, and then
- ✓ To assist with an implementation plan to put in place the preferred governance model.

This final Report summarizes the results of our research both before and since the December 11th (Working Group) and 12th (Champions Group) workshops facilitated by GSI in Ottawa, and our recommendations for three alternative governance models for Animal Health Canada.

GSI's work has consisted of targeted research (specific questions on top four selected comparator Case Studies, including interviews with New Zealand and Australia), meta-research (compiling, integrating and interpreting largely publicly available materials, plus Synthesis' Gap Analysis research and report) and stakeholder interviews (listed in the Preliminary Findings Report in December.)

The **Straw Model section** reflects GSI's recommendation of a governance straw model or path forward for AHC to consider, along with options.

The Appendices summarize all of the comparator research, including detailed findings tables for the four selected case studies.

THE CURRENT STATE IN CANADA

Describing the current state of animal health management in Canada is not primarily the purpose of GSI's report, but we do summarize some relevant factors in this section. The reader is referred to Synthesis' assessment of the current state and gap analysis, previously provided, as well as to vignettes from each sector outlining how an enhanced Animal Health Canada would improve outcomes using real life examples of diseases we have encountered in Canada in recent years. These are powerful and relevant resources.

We have a saying in governance, "governance is the servant; purpose is the master." ¹

By this, we mean that governance arrangements are tools, they are means towards an end, the end being the purpose of the entity. In order to design and agree on governance arrangements for Animal Health Canada, we first need to understand – and agree on – the purpose (scope and mandate) of Animal Health Canada. What problems are we trying to solve with Animal Health Canada?

We are not starting from scratch here: Animal Health Canada has already outlined its mission and vision²:

VISION

A sustainable agriculture and agri-food sector strengthened by an inclusive industrygovernments partnership protecting the health and wellbeing of farmed animals.

MISSION

Animal Health Canada provides leadership in building a collaborative, multi-partner model that clarifies the respective roles, responsibilities and accountabilities of each partner implementing an animal health strategy for Canada, beginning with emergency management.

A framework that outlines the scope of animal health and welfare in Canada is a useful place to organize our thinking around scope and mandate ³:

Stages	Activities		
	Biosecurity		
Prevention	Other prevention programs (e.g. vaccination programs, testing of livestock semen and biological material)		
	Communications to increase awareness and understanding		
	Border controls (permits, inspections)		
	Disease surveillance programs		
	Diagnostic lab services/capacity		
	Reporting and information sharing		
	Monitoring and risk assessment		
	Zoning and agreements with major trading partners		

¹ The final Appendix in this report summarizes what we mean by governance and some key aspects of governance reform.

² Excerpted from Animal Health Canada communications, including the November 26-27 update.

³ Excerpted from Synthesis' Gap Analysis Report.

Stages	Activities
	Agreements on vaccine banks
	Traceability and identification systems
Preparedness	IT and analysis capabilities of traceability systems
•	Species gaps
	Reporting gaps
	Production research (to mitigate disease risks)
	Training
	Education and outreach programs
	Testing/Auditing current systems
	Farm level programs/systems
	Lab testing/auditing
	Conducting and testing emergency simulations
	Planning emergency response
	Disease response communications
	Response capabilities (such as vaccination, depopulation,
	sanitation, processing capacity, etc.)
Response	Data sharing capacity/capabilities
	Transportation, permitting and other controls
	Resource capacity and how to allocate during a response (incl.
	people)
	Roles and integration of industry
	Financial support for business transition/recovery
Recovery	Market access/re-entry
Recovery	Producer support
	Mental health support for producers and others involved
	Inspections, certifications, compliance measures and other legal
Legislative &	tools/regulations
Legal controls	Zoning (OIE, provincial)
	Orders
	National collaboration across provinces and Federal/Provincial
Co-ordination &	National collaboration across species
Collaboration	Collaboration between species/commodities where risk is shared
Condooration	Decision making effectiveness (speed, collaboration)
	International relationships, standards and agreements

In Canada, there is a complex web of parties who play key roles in these stages. This begins with governments: under Canada's constitutional framework, animal health and welfare falls partly within the jurisdiction of the provinces and partly the federal government.

The primary responsibility for animal health and welfare rests with the provinces, whose legislation and regulations give sweeping powers to the Chief Veterinary Officer ("CVO") and their delegated offices, Inspectors. Interestingly, these powers can largely be delegated to other parties. These powers include isolating, seizing and/or disposing of animals, issuing orders, obtaining warrants and police assistance to

enforce these.⁴ Legislation and regulation also authorize the payment of reasonable compensation to parties affected by the exercise of these powers.

Similarly, the federal government has jurisdiction over several aspects of animal health, including imports and exports of animals, reportable diseases and toxic substances, infected places and control zones.⁵ The key federal officer is the President of the *Canadian Food Inspection Agency*, who may designate analysts, inspectors, veterinary inspectors and officers.⁶ They have similar powers as their provincial counterparts, and the payment of reasonable compensation is also anticipated.

However, none of this can work in practice – certainly in an efficient and effective manner – without the co-operation of industry.

Recent real-life examples of animal health crises in Canada serve to underline both the "problems" and the best path forward (see Appendix One for summaries of some of these.)

STATUS QUO IN CANADA, BSE AND AI

Even if most stakeholders agree – and they do here – that the "status quo" is unsustainable, we always like to begin with this as a comparator governance model, to fully understand what is working well, and what is not working well, with the current model.

We should begin by acknowledging that Canada's animal health system is generally working well, and is among the best in the world. A 2017 comprehensive audit review by the international veterinary governing body, OIE, rated Canada at a "5" or the highest level of advancement for the vast majority of relevant areas under review. The exceptions were a consistent level of inspections (varying levels of standards among provinces including some allowing on-farm sale of meat products with no licensing or inspection), controls over veterinary medicines and biologicals, animal feed safety, animal identification and movement control, and animal welfare, which rated "3" or "4".

As one interviewee concluded, "we are 80 per cent of the way there" ... but, "to achieve the final 20 per cent is requiring us to rethink the whole system."

Generally, when incidents do occur, the current model does a good job of coming together and addressing these. Where is doesn't do as well is in "peacetime" collaboration, co-ordinating investments in preparedness, traceability, vaccines, etc. There is even a national strategy, The Plant and Animal Health Strategy for Canada.⁷

Recent examples have shown that Canada is ill-prepared for dealing with animal disease risk. Canada's meat and livestock industry is hugely dependent on exports, and so on access to foreign markets. Canada has faced a couple of serious issues - bovine spongiform encephalopathy (BSE) and avian influenza (AI) – where we were clearly not well-positioned. Fragmentation in federal – provincial – industry response was exposed.

⁴ See, for example, Sections 19 to 25, and 29 of Ontario's Animal Health Act.

⁵ See, for example, the *Health of Animals Act* and the *Canadian Food Inspection Agency Act*.

⁶ Section 13 of the Canadian Food Inspection Agency Act.

⁷ See <u>https://www.inspection.gc.ca/about-the-cfia/accountability/consultations-and-engagement/partnerships-pahs/eng/1490917160508/1490917161242</u>

STRENGTHS IN CANADA'S CURRENT MODEL: POULTRY AND DAIRY

Poultry as an industry sector is much better prepared than red meat, having had to deal with outbreaks of AI, and Animal Health Canada will want to integrate the positive learnings from poultry's experience.⁸ Poultry stakeholders have adopted an updated Compensation model that incents the right behaviours: farmers self-diagnose, report and take action. Some provinces have command centres that are ready to act. Provinces such as British Columbia can and do delegate substantial powers to industry players and to third parties in the event of an outbreak of AI to deal with rapid response.

While on the topic of British Columbia, there is a positive lesson to be learned from dealing with the Japanese Beetle, in engaging third parties including landscapers in a spraying program that kept a local outbreak contained, and enabled the local authorities to act when the federal government was not in an easy position to do so: both rapid response and an appropriate level of response are important principles here.

Canada's dairy industry has invested a great deal in animal health and prevention. The six modules of proAction, the industry's program adopted by dairy farmers, include Milk Quality, Food Safety, Animal Care, Traceability, Biosecurity and the Environment.⁹

The fact that different industry sectors have travelled farther in their animal health journeys than others is a two-edged sword. On the one hand, Animal Health Canada will want to graft these successes and initiatives into a Canada-wide cross-sectoral system of animal health. On the other hand, it will be more challenging for Animal Health Canada to "sell" these sectors on the benefits of actively engaging and integrating, since they perceive a threat to undermine or duplicate the successes they have already invested heavily in.

This is part of what we mean by governance culture being more important even than governance structure. A successful Animal Health Canada will have all major industry sectors as full partners at the table, actively participating in the design, development and implementation of Canada-wide initiatives across the spectrum (stages) of animal health. This means reaching out to sectors like poultry and dairy in a respectful and sensitive way, and engaging them in a way that leverages and builds on their journeys so far.

AFRICAN SWINE FEVER: A REAL-TIME CASE STUDY

Many interviewees pointed to Canada's response to African Swine Fever as a valuable and timely lesson in both what needs to be "fixed" in Canada's current animal health system, and how to "fix" it.

First, the lesson learned was that the current system is ill-prepared to handle an event of this scale. ASF is as close as we are to a "burning platform", which is what is usually needed for significant culture change.

It took time to bring the "right" stakeholders to the table, and even when that happened, the first few meetings were largely "us and them", with finger-pointing and blame, some defensiveness and even disrespect.

⁸ See, for example, CFIA's Hazard Specific Plan.

⁹ See <u>http://www.dairyfarmers.ca/proaction</u>

Over time, all stakeholders realized just how much is at stake, and learned how to truly collaborate and partner together. Real co-ordination was experienced among the provinces and federal government, and industry.

ASF has exposed significant gaps in Canada's reimbursement model, especially in the case of widespread disposal. There is a sense that funds set aside are not sufficient to provide reasonable coverage, and Animal Health Canada can usefully play a facilitative role here beyond ASF.

LEARNINGS FROM CURRENT STATE IN CANADA

African Swine Fever has provided us with a real-time case study, and is as close as we are to a "burning platform", which is what is usually needed for significant culture change. ASF teaches us that there won't be time to go through partnership building, role clarity and weeks or months of negotiations (i.e. establishing workable governance arrangements) in the case of the next serious outbreak (and this is more a case of "when" than "if".)

The active co-operation and vigilance of farmers, ranchers and agri-businesses, not only in the "downstream" response and recovery stages, but also in the "upstream" stages of animal health – such as biosecurity, surveillance and traceability – can save critical time and money for the whole system. It is not an exaggeration to say that it can prevent crises and save lives. Canada has traditionally been more effective with downstream intervention than coordinating upstream steps.

On the other hand, a lack of active co-operation or vigilance would have the opposite effect, slowing down each stage of the process and adding costs. To the extent that there are gaps in the "upstream" stages, this can result in substantial costs during an actual outbreak which could have been mitigated or prevented by earlier co-operation and co-ordination.

In a nutshell, that is the purpose of Animal Health Canada, and the "problem" it is designed to solve: removing barriers and obstacles to a true partnership among industry sectors and governments, as well as vets groups and academe.

The "solution" is to establish a truly equal partnership among all these parties to coordinate animal health nationally in Canada. To put in place effective "co-management" of animal health across the country and across the supply chain.

The challenge we face in Canada is not just a simple government – industry bilateral one, but a multilateral web. "Government" is every province, territory, and the federal government, often with different approaches, public policy priorities, and even regulations from province to province. "Industry" is several different industries, some with supply management and so easier to corral centrally, others with almost purely voluntary co-operation on national associations. And beyond these two sets of stakeholders are others – for example, vets and their groups, especially species-specific vets groups; and academe, researchers and laboratories who provide cutting-edge research, technology and thought-leadership.

The "problem" includes:

- A lack of clarity on roles and responsibilities between industry and governments, even from province to province, and industry to industry: there are ambiguities, silos and gaps.
- There is currently "a lot of resistance and drag" in the system.
- Canada's food business is heavily dependent on exports: this poses both a risk (one trading nation can effectively harm an industry sector overnight), and an opportunity for Animal Health Canada to improve and promote animal health and its validation for Canada's trading partners.

- Uncertainty around the financial model: who contributes to support a national animal health system, and then how is "reasonable" compensation set? How might we design the compensation model to be more "risk-based", to reward those who invest upstream?
- A related financial issue is how might we move more resources upstream, into preparedness and prevention, and so reduce downstream costs? Of course there is a lag period, when you have to fund the overlap of both. This may mean higher aggregate resources, at least a reallocation of resources which means explicitly setting priorities.

EVALUATIVE CRITERIA: PRELIMINARY FINDINGS IN DECEMBER

If the "solution" is to establish a truly equal partnership among all parties to coordinate animal health nationally in Canada, what principles and questions should the governance model be evaluated against? How will we know if we have chosen an effective governance model?

One way is to apply governance principles as an evaluative framework of alternatives considered. GSI's research concludes that there are at least these four core principles of governance that must be met for governance arrangements to be effective:

Principle of Governance	What does it say (definition)?	What does it mean (application)?
Independence	To be effective, governance must be able to think and act independently of any single stakeholder or group – including members, staff, etc.	Governance arrangements (i.e. how power, authority, accountability and relationships are shared among members, board, staff and other stakeholders) should be put in place in a way that enables the Board to think and act in the best interests of the organization; the sum of all its key stakeholders'.
Transparency	Governance arrangements should be clear, unambiguous and openly communicated to all stakeholders.	There is no single "right" way to govern a not-for-profit (or hybrid public-private partnership), but once the parties agree on their chosen governance model, these arrangements should be written down in plain language, and shared openly. Ambiguity is not your friend in governance!
Alignment	Levels of accountability should mirror the levels of authority delegated.	Members may choose what mandate to delegate to the Board, and what to retain, but accountability should be for the scope of authority given. Same for Board delegating to staff. Decision-making, particularly operational and transactional decisions, should be pushed down into the organization as far as possible, consistent with people's capacity (i.e. empowerment), and people should expect to be held accountable for those decisions.
Equity (Fairness)	Governance arrangements should recognize that not all stakeholder voices have votes around the boardroom table, but our fiduciary duty – and	We need to intentionally put in place mechanisms for members without board seats, or stakeholders without memberships, to have their legitimate voices heard and acted on by the board and organization.

|--|

GSI presented these preliminary recommendations to the December workshops as part of our preliminary findings research conclusions, based on both the comparator research and stakeholder interviews:

- 1. The "status quo" is not sustainable: recent incidents have taught us that we need to be more systematic, integrated and forward-planning in the management of animal health.
- 2. A "virtual network" is not tangible enough to be viable: several of these exist, and have been tried: while they do create voluntary collaborations, they lack the teeth to mandate behaviour, and they do not create a funded, sustainable organization, nation-wide and cross-sectoral. An example given was "Trace Canada"
- 3. To most stakeholders (but not all), a full-fledged arms-length "regulatory agency" is too far a stretch and is neither necessary nor addresses the real issues: ultimate legal accountability should continue to rest with FPT governments as the ultimate "guarantor" to consumers and trade partners.
- 4. A form of "public-private partnership" has the most support and fits best: a true partnership collaboration of industry, governments and academe. In order to succeed, every partner should have something substantial to gain and/or to lose by joining and remaining in the partnership.
- 5. The culture issue is at least as important as the structure: embracing mutual respect, active engagement and collaboration, moving beyond individual roles and "rights (blame and remedies) to a collective mandate and mindset ("us" vs. "them".)
- 6. No single comparable model is a direct fit for Canada: instead, we will graft pieces of best practice onto a made-in-Canada solution for AHC.
- 7. AHC and NFAHWC are not sustainable as separate entities (from a resourcing and mandate perspective): in fact, the best solution may be for AHC to be the successor of NFAHWC, in which case you will need to address any responsibilities or programs of NFAHWC that are not within the purview of AHC.

A successful Animal Health Canada governance model will encompass the federal government, all provinces, all major industry sectors, as well as vets groups and academe. This "big tent" approach is the favoured way¹⁰ to establish Animal Health Canada, to be inclusive. This does pose some practical challenges that will need to be addressed:

1. Powers: should Animal Health Canada have the powers necessary to enforce animal health in Canada? If so, how will this be achieved? If not, how will it have the "teeth" necessary to move from an ad hoc voluntary network to a true partnership managing a system?

¹⁰ By a majority of stakeholders; a minority feel that AHC may need to move forward as a "coalition of the willing" and add others as initial successes and momentum are visible.

- 2. Membership in Animal Health Canada: to what extent can or should Animal Health Canada move forward if some stakeholders e.g. provinces or industry sectors are not ready to "sign on"? Should we be a "coalition of the wiling" or do we need to find a way (carrot and/or stick) to bring everyone to the table?
- 3. Board of Animal Health Canada: how will we put in place a governing body (Board) that is inclusive and reflective of this diverse membership, while remaining a manageable size (i.e. no more than 15 or so governors)?
- 4. Staff: how will we staff AHC and put in place effective operations?

In the next section, we will explore different types of collaborative governance models, their pros and cons, and then frame a straw model solution and path forward for Animal Health Canada.

COLLABORATIVE GOVERNANCE MODELS: A SPECTRUM

Corporate governance is "the system by which organizations are directed and controlled". This simple, concise definition can be applied to all corporations – private, pubic and not-for-profit – where there is a separation of ownership and management (Cadbury Committee Report, UK, 1992).¹¹ Governance models are the different frameworks, structures, processes and relationships by which the organization is governed.

This section of the report contains a description of the main collaborative governance models, the key features and benefits of each.



Participation/Engagement Spectrum

There are different levels of engagement sought with stakeholders, as illustrated by the engagement spectrum (above). Animal Health Canada is currently a mix of "involve" and "collaborate" in terms of how most stakeholders are engaged in decision-making on animal health. The real powers and decisions are largely in the hands of federal and provincial governments, who involve or collaborate with industry as is necessary to deal with real-time issues. Similarly, industry engages with government on a fairly ad hoc basis, generally driven by current needs.

The overarching goal of Animal Health Canada is to move up this engagement spectrum, to become more empowering of all stakeholders, to create a true partnership model.

To understand what that might look like, we researched different collaborative governance models.

¹¹ See the Appendix for more background on governance theory and reform.

As a result of our research, there is a range of governance models that can be arrayed on a spectrum or a continuum:

- From a highly centralized, tightly ordered, high control governance model at one end, to
- A broadly-based, decentralized, diverse, flexible, low control governance model at the other end of the spectrum.

Figure 1: The Spectrum of Models (The length of the arm from no autonomy to full autonomy)



This spectrum can be viewed as a trade-off between two desired qualities:

- Consistent decision-making and control: in a highly centralized model, ultimate governing body is a small "hub" that makes all of the decisions (and/or is governed by a welldeveloped set of rules (enshrined in corporate or organizing documents such as a covenant, constitution and bylaws) and/or policies. This results in consistent decisions, with low variability in activities and results, lower risks and a higher assurance of predictable, stable results; and
- Empowerment and innovation: in a highly decentralized model, decision-making authority is broadly-based and shared among a large, diverse group. This results in high variability in activities and results. Risk-taking is encouraged and therefore some attempts at innovation will fail, but others will succeed.

There is no single "right" governance model that fits all situations, since the trade-off between consistency and innovation varies greatly from organization to organization, and especially during the life cycle of an organization/entity.

In the global context¹², this trade-off may also be affected by the reality of the international stage, specifically how the governing body comes to terms with or adapts to international diversity (e.g. different legal systems, national institutions, and business cultures) that impacts on global operations. In organization literature, this is often referred to as the fundamental "tension" between the opposite demands of globalization and localization.

In governance literature, the generic global membership-based models are typically labeled "associative", "federative", and "centralized". Each model is described below, along with an illustrative "proxy" and a brief discussion of its merits.

MODEL ONE: ASSOCIATIVE GOVERNANCE

The Associative model of governance is a broadly-based, decentralized, diverse, flexible, low control governance model.

Its members are fully autonomous, independent units with their own purposes, governance and management. The members chose to associate with the global organization based on a common purpose or interest, subject to meeting certain criteria for admission set by the organization.

Typically the governing body is chosen from representatives of the member organizations and depending upon the "rules or policies" of the global organization, members of the governing body may be required to have skills, expertise and attributes beyond being a member.

The organizing or incorporating documents of the global association sets out the objects of the organization and how it will work and engage with member organizations to achieve them.

Generally the "global" Association supports and encourages cooperation, collaboration and exchange amongst the membership and further, supports collaboration and cooperation with other organizations to realize its purposes. As regards the latter, this may take several forms including affiliations, alliances, other associations, and joint ventures.

The results of our specific research show that the Associative Governance model is particularly appropriate for international membership organizations of professionals (e.g. engineers, lawyers, accountants) who are typically accredited or licensed under different national systems and industry groups who are regulated under similar regimes. Associative governance has the flexibility to accommodate and overcome such differences (localization) which would be constraints in a more centralized model.

A "confederation" is a type of associative governance. A difference between a confederation and a federation is that membership in a confederation is voluntary, while the membership in a federation is not. In a confederation, the central body is accountable to the members, who are and have the ultimate authority. In a federation, the central body holds the ultimate authority, and the members are subordinate to it.

As a form of associative governance, a confederation usually has a weak central body, appointed by the members, with specific and narrow powers delegated to it to accomplish the mandate agreed by the members, and nothing more than that.

¹² Throughout this section, "global" can be taken as a proxy for "national" in the AHC context.

In summary the Associative Governance model is ideally suited to a global organization that is international in scope (globalization in terms of purpose and participation, "spatial element") and where no governance (direction and oversight) of the member organizations/units is desired or required. Members operate entirely independently in their own jurisdictions (localization). The global organization is able to maintain its reputation and brand by means of its own governance and by establishing appropriate membership admission and expulsion criteria.

MODEL TWO: FEDERATIVE GOVERNANCE

The Federative Governance model differs greatly from the Associative model. In the former model, member organizations are entirely independent and autonomous organizations; in the latter, the notions of ownership and/or accountability of the member organizations/units to the global organization are introduced and become defining features of the federative governance model and important considerations into how the whole organization "works together".

Typically the federation is organized along geographic lines.

The governing body of the global federation is the "ultimate" body in terms having and using the dual levers of power, direction and control, over the organization. It sets the strategic direction of the global organization including mission, vision and values, strategy and priorities. It ensures proper oversight mechanisms are in place for all of the operations, and monitors performance. It articulates how the organization works together – through bylaws, rules, policy and standards.

The governing body articulates the organization's brand, is responsible for corporate communications and manages corporate reputation through policy and oversight mechanisms. It hires and fires the central CEO. Its headquarters/secretariat generally is the "keeper" of core competencies, technologies, processes and products; and ensures some standardization and coordination of formalized control systems (planning, budgeting, and administration).

The governing body determines the scope and nature of operations through the federation. Member organizations/units are an integral part of the "whole". They are not independent and autonomous, rather subject to the "rules and policies" of the global governing body. They are granted (or retain, depending on whether the centre establishes the members, or the members establish the centre) some autonomy (localization) in order to adapt to the local (regional or provincial) market that may require a particular governance framework, or locally-adapted products and services and/or to reflect the nature of the local organization in terms of life-cycle (e.g. mature market versus an emerging market).

Further, member organizations in a federation need not have the same level of autonomy, or "length of arm" from the centre.

The federative model allows the governing body to exercise judgment and flexibility in this regard and create wholly or majority-owned or controlled member organizations (subsidiaries or entities) through the organizing or incorporating documents (constitution and bylaws), and control the nature and scope of their operations and governance structure (including how the board is constituted) through memoranda of understanding, operating agreements and the like.

It is not unusual to have two or three different types of member organizations (representing different levels of autonomy) to accommodate the demands/desires of localization as described previously. Nor is it unusual for some member organizations to have a governing body, and others not. Notwithstanding, the member organizations set their priorities in keeping with the global mission, vision, values, strategic plan and priorities; they are encouraged to collaborate and share information between operations and organizations; and they may or may not have their own staff to accomplish this. Depending on the nature of the organization the composition of the governing body may be a "skillsbased" board chosen from independent experts around the globe or a "hybrid" board comprised of representatives of the membership and based on defined skills, expertise and other competencies (usually diversity in terms of geography, size of membership constituency, gender, etc.).

As mentioned in the previous section, the difference between a confederation and a federation is that membership in a confederation is voluntary, while the membership in a federation is not. In a confederation, the central body is accountable to the members, who are and have the ultimate authority. In a federation, the central body holds the ultimate authority, and the members are subordinate to it.

There are several benefits of a federative governance model. Within the general over-reaching principles and aims, the model allows flexibility between the global organization and its membership organizations to determine the "right" mix of decision-making and empowerment, and adaptability to globalization and localization forces within in the federation. In this sense it is a "nimble" organization configuration, as it is equally capable of adjusting these dimensions to respond to changes or challenges in the external or internal environments in which it and its member organizations operate.

MODEL THREE: CENTRALIZED GOVERNANCE

The Centralized Governance model is at the opposite end of the spectrum to the Associative Governance model. It is a highly centralized, tightly ordered, high control governance model.

Unlike the other two models, member organizations in a centralized governance model are "owned" by the global organization directly or through very stringent control and accountability mechanisms. As a result members' organizations have little or no autonomy.

Typically the global governing body is a "skills-based, expert board" comprised of fully independent members elected to office based on their skills, experience and expertise. It is a small group (9-15 directors). The Board sets the strategic direction of the global organization including mission, vision, values, strategy and priorities and ensures that effective strategic oversight mechanisms are in place for all national, regional and international organizations and operations. The Board hires the CEO and terminates his/her employment. It sets policy and standards for the global organization including brand leadership, reputation management and corporate communications. It supports collaboration and information exchange among the various subsidiaries and operational divisions.

Regional or provincial member organizations (whether subsidiaries or divisions) have little autonomy. Generally subsidiaries (wholly owned or majority owned) are the means by which the global organization overcomes and complies with jurisdictional legal requirements (localization). The governing board of each member association is as independent as required, but the minimum necessary to achieve the autonomy sought. Like the federative model, the degree of autonomy of members need not all be the same, some share or pool more functions, while others operate at a greater arms-length.

Further defining features of this type of global organization include: all main activities being carried out by the centre, high centralization and standardization of products and services and coordination of activities across members facilitated by the dominance of headquarters. Decision-making is centralized and consistent resulting in lower risks and a higher assurance of predictable, stable outcomes. Empowerment and innovation are minimal.

In summary, centralized collaborative governance is a highly centralized, tightly ordered, high control governance model. It is structured to ensure that decision-making is consistent and controlled within a small hub of decision-makers. Risk is low, as are empowerment and innovation. This model lends itself

to assuring predictable, stable results. In the "global" context, globalization forces are much stronger than localization.

Governance Model	Pros	Cons	
Associative	 broadly-based: low barriers to entry for new member organizations, they can "try it out" and leave if it doesn't work out decentralized: high autonomy and decision-making at local level innovative: because of high autonomy, member organizations are encouraged to innovate and be entrepreneurial, to try new and different ideas economic considerations: some member organizations may be hugely successful and generate unexpected revenues 	 low control: each member organization is autonomous and free to pursue its own strategy, direction and priorities, with a resultant higher variability in processes and outcomes higher risk: because of the lack of central direction and control, and the high autonomy of member organizations, there is a higher risk of individual failures of ideas and strategies (this can harm the reputation of the central body or brand) economic considerations: it is harder for the centre to levy, collect or distribute fees; local units do not feel obligated or loyal to look after the needs of the center or other participants 	
Federative	 in general, federative models are between the extremes of the pros and cons of the other two diverse: able to accommodate different types of arrangements with member organizations 	 in general, federative models are between the extremes of the pros and cons of the other two ambiguity: since federative models are always a "balance of power" between the centre and local units, this risks a lack of clarity or consensus on roles, and can result in tugs and tensions 	
Centralized	 high control: the centre sets strategy, direction and priorities, as well as policy and budget, the system is tightly ordered with consistency in processes and low variability in processes or outcomes 	 low empowerment and innovation locally: because all major decisions, priorities and funding are set centrally, there is less innovation and trying out new ideas and products locally: centralization tends to result in lower innovation 	

SUMMARY OF COLLABORATIVE GOVERNANCE MODELS, PROS AND CONS

 lower risk: because of central direction and control, there is less risk of individual failures of ideas and strategies (which can harm the reputation of the central body or brand) economic considerations: centre has more leeway to levy, collect and distribute fees or licensing royalties with member organizations 	 barriers to entry: because all member organizations have to agree to the central model and arrangements, more promising and independent organizations are less likely to be attracted to associate economic considerations: because local units do not generate new ideas, they will not be likely to generate new revenues beyond licensing existing products from the centre
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RECOMMENDATIONS: STRAW MODEL AND PATH FORWARD FOR AHC'S GOVERNANCE

Before outlining the recommended governance model and options, here is a summary of the path forward that Animal Health Canada will want to take¹³:

- Make a decision as to scope: is this animal health, plant health, wildlife health or all three? GSI's sense is that we are looking at animal health at this point, but it's an important choice that has pros and cons. Moving with only animal health is faster, but may have longer-term consequences of not having a well-integrated system when it is needed.
- Make a decision as to breadth: will you proceed with those stakeholders who are prepared to "sign on" to a Deed on day 1? Or is it more important to insist on the participation of all substantive market players on day 1? New Zealand chose the former, in the practical interests of getting the system up and running, and building momentum. Australia chose the latter, since its more prescriptive solution called for an omnibus agreement that encompassed all possible diseases and therefore industries.
- Make a decision as to legal form: in Animal Health Canada's case, you will want to incorporate a not-for-profit corporation whose members are the governments, industry sectors and other stakeholders who sign agreements to join (MOU's or Deeds). The powers and duties, and meetings, of the Members and Board will need to be spelled out. One question in Canada is whether this is separate from the National Farmed Animal Health & Welfare Council or not. It will be important to establish a corporation whose mandate is solely animal health in Canada. This is less of a question relevant to animal health, and more about how to deal with the other aspects of the Council.
- **Negotiate an agreement in principle:** all participating partners including FPT governments should be presented with the business case and asked to agree in principle to proceed with Animal Health Canada. The summer of 2020 is the timeframe that is being targeted for this.
- **Draft and negotiate the agreements**: this will take time, at least six months and perhaps more, but these are the fundamental bridges that bind all the partners together.
- **Implement the agreements**: launch Animal Health Canada and begin to tackle key issues in a proactive fashion. There will need to be a prioritized strategy to make sure that scarce resources are invested in the most meaningful initiatives.

¹³ This path forward was informed by interviews with New Zealand and Australia in terms of their lessons and advice.

GOVERNANCE STRAW MODEL

The governance straw model is designed to engage all the key stakeholders from day 1, at a level of engagement as close to "empowerment" on the spectrum as possible given that legal powers are retained by FPT's.

In this straw model, every major FPT government and industry sector would join the Animal Health Canada public-private partnership as a full and equal partner.

- All FPT Governments would sign an overarching FPT Memorandum of Understanding with Animal Health Canada to participate in this partnership, and to undertake activities and initiatives; these can include funding and accountability arrangements. MOU's are designed to encompass both governance arrangements (authority and accountability of Members and Board) and operational matters (e.g. information sharing, enforcement matters, reporting). While it may be helpful for Animal Health Canada to have enforcement powers as an arms-length regulatory agency or body in due course, any change in legislation will practically take five or six years, and involve multiple jurisdictions of governments. One could argue that there is no need to move the ultimate authority and accountability for animal health away from governments (primarily CFIA and CVO's) as currently legislated. Having governments as the ultimate backstop is valuable, especially to consumers including Canada's trade partners. This accountability is really a net benefit to the whole market, and therefore should be kept.
- Industry associations and sector groups would sign Covenants (or Deeds) with Animal Health Canada to participate in this partnership. A "covenant" implies a "give" and "take": we would envisage industry agreeing to participate in a national system of animal health including upstream prevention and preparedness initiatives, in exchange for clear financial arrangements and participation in AHC
- Membership: every FPT government, industry association and relevant scientists and academe would join Animal Health Canada, legally as a "member" (or owner) of a not-for-profit corporation, incorporated federally. While we use the term "public-private partnership", these often take the form of not-for-profit corporations. Membership would be inclusive, so there would be many members. As a body, it would meet once or twice a year, to deal with the "macro" questions of governance, strategy and policy, brought to them by the Board and staff. Each Member would have one vote, although this may need to be varied for certain decisions (e.g. governance arrangements may call for a majority of both industry and government stakeholders to vote in favour, a "double majority".)
- Board: research tells us that the optimal board size is between 7 and 15, and not-for-profits tend to have slightly larger boards (since diversity of voices is usually more important in these than nimbleness in for-profits.) Our straw model calls for a board of 11 to 15 senior leaders, selected based on their skills, experience and diversity, drawn from among, and elected by the Membership. There would need to be reasonable balances of industry/government, federal/provincial, gender and geographic, perhaps smaller and larger. The Animal Health Canada Board would be responsible for governance: setting strategic direction (including risk, policy and budget resourcing) and oversight (monitoring and evaluation of AHC). The Board would meet 6 times a year, perhaps more to start (7-8?) and less over time (4?).
- Staff: an Executive Director would be selected by the Board, responsible for the operations of AHC. In-house staff and outsourced relationships would be put in place by the Executive Director on behalf of AHC.

Here is an illustration of what Animal Health Canada's governance model would look like:



OPTION: COALITION OF THE WILLING

If AHC needs to proceed with only some of the key stakeholders at the initial table, agreements would take the form of bilateral Memoranda of Understanding (MOU's) with each partner FPT government, and parallel agreements with industry and other stakeholders:

- Governments can sign a Memorandum of Understanding with Animal Health Canada to participate in this partnership, and to undertake activities and initiatives; these can include funding and accountability arrangements. MOU's are an instrument that FPT governments use frequently and are comfortable with. They are designed to encompass both governance arrangements (authority and accountability of Members and Board) and operational matters (e.g. information sharing, enforcement matters, reporting).
- Industry associations and sector groups can sign legal participation Agreements with Animal Health Canada to participate in this partnership. Each stakeholder would agree to participate and collaborate actively in animal health care, both in prevention and response, and financial arrangements would be agreed

OPTION: NATIONAL CERTIFICATION PROGRAM

In addition to multilateral agreements (MOU and Covenants), partners could join a mandatory animal health certification program, which would be Canada's "brand" in the world attesting to food products that are safe and animals whose welfare is humane. In other words, the branding would play an important role in communicating about Animal Health Canada and its benefits to partners, the domestic public, and international trading partners alike.

A national animal health certification program would take the form of an "Animal Health Canada Certified" designation for every Member of the partnership. This would be given to – and earned by –

every Member, but could be revoked in the case of breaching a covenant in the partnership. This would become the "gold standard" for animalbased food, animal health and potentially animal welfare too. Consumers and Trade Partners would recognize and depend on "AHC Certified" as vouching for the reliability and safety of Canada's food supply, regardless of its source or sector. Producers and processors would display "AHC Certified" prominently on their products, websites, worksites and communications. Note, this is not intended to displace FPT governments' authority and accountability for this, but to create a unified, simple national system coordinated through AHC, with the backing of FPT governments. CFIA and CVO's would continue to use their powers, but in coordination with AHC - if one revoked, the other would agree to revoke (in the MOU).



OTHER CONSIDERATIONS

Animal Health Canada has the best opportunities in coordinating upstream initiatives – such as biosecurity, surveillance and traceability. A truly national partnership among governments and industry would facilitate a cohesive national approach to each of these, and help to bridge some of the gaps identified. There should be opportunities to reduce duplication and save costs in some "back office" functions, among the provinces, for example, a "one window" approach.

From an industry and producer perspective, the financial question is perhaps the most pressing, and so could provide a real opportunity if Animal Health Canada can facilitate solving this and so bringing industry stakeholders on-board. In reimbursement, the underlying issue to address is uncertainty: producers and processors would like to know what to reasonably expect, and those who are expected to foot the bill would like to be able to forecast and plan.

From a governance perspective, Animal Health Canada could play a facilitative and integrative role, or it could play a role in creating or coordinating a fund. On day one, it makes the most sense to play the first role, facilitating dialogue around financial arrangements and helping all stakeholders to reach agreements ahead of time (before outbreaks occur). This will incent industry producers and processors to be willing partners in the upstream stages of animal health, if they have confidence in any downstream remedies. At this point, it probably does not make practical sense for Animal Health Canada to try to establish a fund or funds. A practical constraint is the way in which governments secure funds in Canada, it would not be easy for governments to "pre-fund" something like this before there is an actual need.

A suggestion to establish an "Animal Health Insurance Program" received some initial support in principle during the interviews, and may be a tool that Animal Health Canada wants to explore. This could be structured like existing Risk Management programs in Canada's agri-sector with which producers and governments are already familiar.

Having said this, it is not the first step that Animal Health Canada should take, nor is it a solution to the governance questions, but just a potential tool in the toolkit. It's an example of how a Canada wide Animal Health Canada could explore and design innovative solutions that otherwise would not see the light of day.

APPENDIX: COMPARATOR GOVERNANCE MODELS

At its December workshops, AHC's Working Group and Champions Group agreed that and asked GSI to focus on top four selected comparators to complete a "deeper dive" on research. Here is a brief summary of applicable learnings, followed by a table with our detailed findings research:

NEW ZEALAND

New Zealand has established a joint authority empowered by statute to allow government to partner with industry to deliver plant and animal health programs, including prevention and compensation. Actual details for each are negotiated, species by species.

The national animal health organization is actually called Biosecurity New Zealand, even though it encompasses animal health care functions well beyond just biosecurity. This is an interesting choice, reflecting both the iterative approach taken and the central importance of biosecurity to its founders.

This model has the advantage of incrementally adding species and sectors to the new governance model over time, rather than expecting everyone to participate from day 1.

In conclusion, here are two highly relevant applicable learnings from the New Zealand case:

- A national animal health system can be put in place in stages, beginning with a "coalition of the willing", then adding new stakeholders as initial success is demonstrated
- The selection of a name/brand can be an important step, in New Zealand's case by raising the image and importance of biosecurity, to promote its public image and to communicate to the public and producers

AUSTRALIA: A "BIG BANG" SOLUTION

The first jurisdiction that most participants mention when looking for a comparator governance model for animal health is Australia. A national arms-length agency was created by statute with real powers.

The Australian solution is seen as committing all stakeholders to a coordinated approach. There is a single mandatory check-off at slaughter, a large amount vs. Canada's approach of multiple check-offs along the life cycle (GSI doesn't see a compelling reason to change this, but it's open for dialogue).

Perhaps its most interesting aspect is its approach to financial arrangements. In Australia, resource and reimbursement allocation proportions are pre-agreed. These are based on the estimated benefit and cost to different parties of specific diseases, with an allocation based on pre-agreed pro-rata splits (diseases are assigned to pre-agreed risk categories, each with a different allocation of financing).

Even in Australia, although government authority can delegate inspection to third parties, the ultimate responsibility (accountability) rests with government. It is worth noting that Canada is one of the few countries left in the world where the principle of self-regulation is still generally accepted and applied. In most countries, government must intervene statutorily in any regulatory body, while in Canada, the idea of a negotiated partnership among industry and government stakeholders is still a practical option.

In conclusion, here are two highly relevant applicable learnings from the Australia case:

- There are distinct advantages to having every significant player as a full participant in a national animal health system from day 1, to the extent this is possible in practice
- The financial model which risk-assesses specific diseases based on the relative costs and benefits to the public and private sectors, then used to apportion financial arrangements between

government and industry, is a useful tool for AHC's model, and can reasonably be expected to incent / reward desired behaviours

NETHERLANDS

The Netherlands provides us an interesting example of layered governance in animal health.

The EU has overarching legal and practical authority and standards in animal health, for example in surveillance, including through a major and fairly recent overarching Animal Health Act that applies to all member nations.

The public sector in the Netherlands (Ministry & Departments) takes the lead in protecting the national public interest, for example in response and intervention.

The private sector, through several different firms, plays a large role in fulfilling delegated functions in animal health, for example in prevention and monitoring.

In conclusion, here are two highly relevant applicable learnings from the Netherlands case:

- A national animal health system can be built one component at a time, with separate (bilateral) legal agreements establishing role clarity, delegating authority and funding, and putting in place accountability mechanisms
- The private sector can be deeply involved in almost any aspect of animal health care, if that is desired by all parties

CANADIAN BLOOD SERVICES

Canadian Blood Services is a commonly cited example of a public-private partnership in Canada, which encompasses FPT levels of government and the private sector.

CBS functions as an independent, not-for-profit organization (corporation) that operates at arm's length from government. One aspect of CBS' governance structure that may work well for AHC:

- Its "corporate" Members are Ministers of Health of the Provinces and Territories of Canada, except Quebec. The FPT Memorandum of Understanding (MOU) provides that the Ministers, as Members, appoint the Board and approve corporate plans, provide the policy framework for planning and decision-making, as well as provide funding for the CBS' operations.
- There is a 13 person Board of Directors, responsible for CBS' governance, overall affairs, strategic plan, budget and reporting to the Members. The Members do not have power to direct the operational decisions of the Board.

In AHC's case, the powers of the Members may need to be more proscribed, and the Board composition will need to be different since the Board needs to encompass industry stakeholders and others, and in best practice, should be skills-based, with relevant expertise and diversity.

CBS' PPP arrangements enable partners to undertake programs on behalf of the PPP. This opportunity to delegate initiatives is a helpful tool for Animal Health Canada to have in its toolkit, similar to examples of dealing with Avian Influenza and Japanese Pine Beetle (B.C.)

CBS was created as the result of a very public "burning platform" (the blood crisis and Krever Inquiry), which is often a condition precedent to a major cultural transformation. In the absence of this, how will Animal Health Canada continue to build the momentum to a significant enough change and buy-in?

In conclusion, here are two highly relevant applicable learnings from the CBS case:

- An FPT collaboration (PPP) can be formed quickly without use of new Statute Law from each jurisdiction, by agreeing on and signing a Memorandum of Understanding: this is a helpful precedent to a path forward for AHC
- One way to handle sensitive governance issues around powers and authority is to use a "two tier" governance structure, where the Members are the FPT's who retain high level powers and the Board is delegated practical authority to govern CBS: this is an option that AHC can consider to deal with the situation of FPT's not being able to delegate some statutory powers, but wanting to agree on an AHC with practical authorities where legally permissible

TABLE 1: NEW ZEALAND

Here are the detailed research findings on the New Zealand animal health comparator, which encompasses animal and plant health, and despite being called "Biosecurity", is responsible for response, not just readiness. This is intentionally designed to be more flexible and principles-based than the comparable Australian solution.

How? How did you first establish GIA NZ? How was it conceptualized and designed? How was it implemented?	NZ began by looking at what Australia was doing. There are some fundamental questions that Canada will want to answer, here are the main differences between Australia and New Zealand.			
	conceptualized and designed? How was it implemented?	An early decision was whether to do animal and plant health together – Australia chose to separate animal health, but NZ decided to move forward with a Deed under Government Act covering both animal and plant health. Australia is now looking at how they can expand to plant health. In the early days of the Deed, industry partners didn't see the benefits of animal and plant health working together, but recently, there are clearer benefits of how to leverage this, e.g. diseases that cross sectors, resources integrated.		
		NZ's Deed is principles-based, compared to Australia, which is worked out ahead of time, more prescriptive-based (25 page Deed vs. a 500 page document). Pro to principles-based is more flexibility and agility in changing operational policy (Australia). Con is it is harder to reach consensus due to ambiguity (NZ). Example is financing: each time a new disease comes up, NZ has to negotiate the cost-share, while Australia has already put these in place ahead of time.		
		Australia deals with response under their deed, but NZ deals with readiness as well as response.		
	NZ has a single government level to deal with, Australia has different levels of government to enfold.			
		Australia started out with an independent company, NZ began with government and a secretariat, now looking at rolling this out into an arms-length company.		
		In hindsight, would have been nice to have more policy in place with Government.		
	How did you	There is a range of benefits to industry stakeholders:		
	persuade industry participants to join? What if they choose to leave?	(1) a promise to industry to have an active role in preparedness, biosecurity, and response, to be fully engaged in joint decision-making. Now much more responsive and integrated at the border due to the strong collaborative partnership. It's tough to throw someone under the bus if you've been at the table with them making decisions. Have a look at the Port of Tauranga, a huge success in biosecurity led principally by industry, under the GIA banner.		

	https://www.port-tauranga.co.nz/port-tauranga-receives-national-
	(2) the realization that industry was going to have to pay anyway, and if they didn't join GIA, there would be mandatory cost recovery from non-signatories vs. negotiated cost-sharing. This never did need to kick in in reality.
	(3) initial seed funding in both Australia and New Zealand was paid by government 100%;
	(4) transitional benefits: phasing in the industry portion of cost sharing.
How is GIA NZ financed? Who pays what?	Negotiated cost-sharing between industry and government participants, similar to Australia but negotiated with each species/disease, sometimes was negotiated fairly easily but often quite challenging [see also more detailed section on Financing below.]
	Recommend that Canada establish an independent body to arbitrate the "right" mix of public/private benefit, rather than self-interested parties trying to negotiate, this is even more difficult when a disease affects more than one species – politicizes the process. NZ is still negotiated by the affected parties, would prefer to see a system of objective-based, scientifically established proportions of public/private benefit.
	Realistically, some industries have practical financial constraints, where government needs to step in and fund a greater proportion than the putative public "benefit". NZ has five sectors of \$5 billion plus, individual invoices vary from \$45 to \$12,000, many sectors can contribute very little.
	These negotiations can be a major distraction during the implementation phase, where an independent panel would alleviate this.
What are GIA NZ's legal powers?	The Crown has all the regulatory powers: legal authority still vests with the Crown, joint decision-making means that no matter how small the participant, they have an equal voice.
	There is a recognition that the benefit to the system of joint decision- making incents government to engage industry, including consultation on writing regulations. But at the end of the day, government has the final legal authority. This does have the pro of keeping government accountable, which is a good thing.
How are decisions made in GIA NZ?	A Governance Group (DGG) made up of all Signatories (meeting 2-3 times per year) that is the highest decision-making body of GIA and is the guardian of the GIA Deed. DGG is ultimately responsible for the implementation of the GIA Deed. [And see more detailed section on Governance on pages following.]

	How satisfied are stakeholders with GIA NZ?	 GIA Secretariat does conduct semi-regular stakeholder satisfaction surveys, the results of which have been generally positive. Overwhelming agreement that GIA is a success, still building pieces of the system so always room for improvement. Some parties do feel that the promised benefits haven't been delivered, that other parties benefit more, or that it hasn't been fully implemented. 22 industry stakeholders' CEO's gather regularly to discuss and review GIA's effectiveness and relationships. Relationships with government players are stronger.
		Important benefit has been to have a lot of the difficult discussions indoors and not outdoors. There has been a major shift to a true partnership model.
	How do you make sure GIA NZ is sustainable, long- term?	Be clear and proactive in communicating successes and rationale to all stakeholders – e.g. when government in NZ recently changed, made sure the benefits to biosecurity were highlighted. Don't let changes in flavours and leaders knock you off track.
	What advice do you have for us as we establish an Animal Health Canada?	Take a look at the Australia-New Zealand models, pros and cons to their differences, select the best fit for Canada. The existence of a Secretariat in NZ, funded by but operating independently from the Crown from prior to day 1, made it much easier to get it up and running. Somebody has to take the lead in implementing, and it shouldn't be the Crown. They should have the right balance of skills: be careful that technical experts' expertise is complemented by other disciplines like governance – get the balance right. Get some industry champions on-side early on, with key roles in development, signaling that it is safe for industry to join the dialogue. Be patient: the journey of taking industry into the partnership takes a lot of time, but it is well worth doing. Even when you have the industry associations on-side, this is just the beginning of a long-term mobilization. This will take a good five years to implement, and even longer to maximize benefits. Nurture especially the smaller sectors to make sure that everyone is getting something, that even the smaller voices are being heard. Engage Australia and New Zealand leaders in front of Canada to share
		experiences and ask questions.
When	Founded:	Since 2003
	How long have they been in existence?	Their timeline:

		2003 2007 2008 - 11 2011 2012 2012 2013 2014 2015	June December September December July November December	Biosecurity Strategy for New Zealand 2003 developed to provide framework for paying for biosecurity services and primary sector cost sharing Surveillance and Incursion Response Working Group (SIRWG) produced public discussion document: <i>Joint Decision-making and Resourcing for Readiness and Incursion Responses</i> MPI (formerly Ministry of Agriculture and Forestry) and industry joint working group first draft agreement produced The Interim Governance Body (IGB) is established and drafting of a second version of Deed begins The Biosecurity Act 1993 amended to enable government and industry to work together Memorandum of Understanding is signed by 23 industry organisations Draft of Deed released for comment. First GIA Biosecurity Forum held in Wellington GIA Deed approved by Cabinet Kiwifruit Vine Health and MPI become the first signatories to the Deed NZ Pork becomes a Signatory to the Deed Yellow spotted stink bug found in Temuka, first response under GIA Pipfruit NZ signs the GIA Deed
		• 2015	January February October November	NZ Equine Health Association signs the GIA Deed Queensland Fruit Fly response initiated under GIA in Auckland Onions New Zealand signs the GIA Deed NZ Forestry Owners Association Inc (NZFOA) signs the GIA Deed
		2016	February March May June August September December December July July July July August September	New Zealand Avocado Association Inc signs the GIA Deed New Zealand Citrus Growers' Incorporated sign the GIA Deed Horticulture industry groups and MPI sign first operational agreement under GIA to manage Fruit Fly NZ KiwiBerry Growers Inc joins the GIA partnership under KVH Nashi New Zealand Tomatoes New Zealand Incorporated sign the GIA Deed Vegetables New Zealand Incorporated sign the GIA Deed Vegetables New Zealand Incorporated sign the GIA Deed First review of the GIA Deed completed GIA Operations Ltd (GOL) established BMSB OA Signed Plant Based industry groups and Government sign the Brown Marmorated Stink Bug Agreement The Fruit Fly Council develop the first NZ Fruit Fly Strategy which will guide their activities over the next 5 years Dairy Companies Association of New Zealand (DCANZ) sign the Deed Summerfruit NZ and the Meat Industry Association of New Zealand (MIA) sign the Deed
How	Funding: How did they fund the initial startup? How do they fund their ongoing work? How are costs shared?	Joint decision-making and sharing of costs for agreed readiness and response activities, are in the deed: Any cost-shares for readiness and response activities will be agreed by Signatories and recorded in Operational Agreements. Signatories must ensure that they can meet their cost-sharing obligations. Cost-shares will be determined in a transparent and equitable manner. Where possible, cost-shares will be determined in advance before undertaking any readiness or response activities for an unwanted organism. The agreed cost-shares for readiness and response activities under an Operational Agreement will be based on the categories set out in Schedule 2, unless otherwise agreed. Industry will pay a maximum of 50 percent of the total cost of the readiness and/or response activity, as detailed in Schedule 2.		

Minimum commitments are not eligible for cost-sharing.
Each cost-share represents the proportion of public to industry benefit that is likely to accrue in avoiding the impacts of the unwanted organism, as well as a fixed proportion to cover exacerbator costs. The proportion of public to industry benefit is determined by Signatories under an Operational Agreement. Signatories will:
 Consider impacts of the unwanted organism on the public and industry (including non-Signatory industry beneficiaries). Calculate benefits using a mixture of quantitative values (NZ dollars), where known, and qualitative statements when it is difficult to value in dollar terms. Assess and agree the benefits achieved as a result of the activity over a one-year period assuming that: the unwanted organism spreads to its full possible range within New Zealand, no response has taken place, and minimal management options have been implemented; and then: Calculate the proportion of public benefit to industry benefit and assign the response to one of the cost-share categories set out in Schedule 2. determine whether additional non-financial components should change the classification to another cost-share category.
Final cost-shares are agreed by Signatories in accordance with the relevant Operational Agreement.
Costs may include cash expenditure or 'in-kind' contribution for readiness or response activities. Operational Agreements will specify who pays for costs in the first instance and how in-kind contributions will be valued. These contributions will be accounted for in the reconciliation of costs either at the end, or at intervals during the activity.
Where there are multiple industry Signatories to an Operational Agreement, the industry cost-share will be determined based on the proportional benefits to each industry (including any non-Signatory beneficiaries) in avoiding the impact of the unwanted organism.
Industry Signatories can set a fiscal cap, which sets a limit on its funding liabilities for cost-shared readiness and response activities. The amount proposed for a Signatory's cost-share may not exceed the fiscal cap of that Signatory, as identified in the Operational Agreement, unless agreed in writing by the Operational Agreement Signatories.
Where Signatories are not able to agree cost-shares, any party may initiate the disputes process referred to in clause 4.5.1.
For readiness activities, costs will be budgeted prior to being incurred and allocated to Signatories as agreed in an Operational Agreement.

	Following the completion of response activities, each Operational Agreement Signatory will provide information to the Secretariat on the costs incurred by that Signatory. The Secretariat will calculate the total cost of the activity and any amounts due from one Signatory to another.
	All Signatories will have the opportunity to consider each other's submitted costs and agree those costs before finalization.
Governance	The DGG formally adopted a governance framework for GIA which came into effect on 1 January 2017. The GIA framework consists of the following elements:
	• A Governance Group (DGG) made up of all Signatories (meeting 2-3 times per year) that is the highest decision-making body of GIA and is the guardian of the GIA Deed. DGG is ultimately responsible for the implementation of the GIA Deed.
	• A GIA Executive Committee (GEC) made up of 3-5 members appointed by the DGG, meeting approximately every two months that provides day-to-day governance of GIA activities and oversees the operation of the GIA Secretariat.
	• The GIA Secretariat, which implements the decisions of the DGG and GEC, provides support and advice on GIA matters.
	 Operational agreements, that serve as contracts between two or more Signatories for agreed readiness and response activities.
	• In addition to this formal structure, sector-based councils (SBCs) may be formed to coordinate common sector interests (primarily activities and investments agreed in related operational agreements). One SBC, The Fruit Fly Council is currently in operation.
	The Deed Governance Group (DGG)
	The DGG is the highest decision making body of GIA and is made up of a representative from each of the Deed Signatory groups. The group oversees the Deed processes and sets GIA operational rules including the processes for decision-making outside of consensus.
	The DGG has no role in technical matters including biosecurity response and operational agreements. It is primarily focused on oversight of Deed implementation and administration to safeguard the integrity of GIA. They meet less frequently than the GEC, meeting 2-3 times per year.

	Independence	GIA Executive Committee Secretariat Livestock council OAs Plant council OAs OAs
		The solid lines represent formal lines of accountability, i.e. the Secretariat is accountable to the GEC, which in turn is accountable to the DGG. Note that this does not prevent the DGG from interacting directly with the Secretariat when it chooses to do so, but the solid lines represent the normal, everyday situation.
		OAs are accountable to their signatory partners, and where applicable, to the SBC that includes their signatory partners. Dotted lines represent liaison and consultation relationships. So, although the DGG does not 'supervise' the SBCs or OAs, its overall responsibility for GIA and the Deed means that two-way consultation between DGG and SBCs should occur. In practical terms, the overlapping membership of these bodies ensures this occurs.
Why Government Mandate: What is their scope of authority?	Government	Government Industry Agreement (GIA):
	Mandate: What is their scope of authority?	The Government Industry Agreement for Biosecurity Readiness and Response (GIA) is a partnership between government and industry for improving New Zealand's biosecurity.
		Under GIA, industry organisations and the Ministry for Primary Industries (MPI), as the government's representative, sign a Deed that formally establishes the biosecurity partnership.
		The <u>GIA Deed</u> outlines the principles for the partnership and the commitments that each signatory makes to engage in the wider biosecurity system and co-invest to improve the collective biosecurity capacity and capability of industry and government in readiness and response.
		Deed Signatories negotiate and agree the priority pests and diseases of most concern to them and agree actions to minimise the risk and impact of an incursion or prepare for and manage a response in the event than an incursion occurs.
		Joint decision-making and cost-sharing helps to ensure that industry organisations have a formal role, alongside government, in managing their biosecurity risks.

	Purpose Statement: What are their public vision and mission statements?	Mission: The biosecurity system protects New Zealanders, our way of life, our natural and productive resources and our biodiversity from the harmful effects of pests and diseases.
What	Powers – Legislative and Legal Controls	The <i>Biosecurity Act 1993</i> and the GIA Deed
	Regulation	The Biosecurity Act 1993 and the GIA Deed
	Prevention: What exactly do	<i>Biosecurity Act 1993</i> : coalition of indigenous, industry, government and citizens created a framework and plan for biosecurity.
	prevention?	system.
		Border controls (permits, inspections):
		MPI will manage the biosecurity risk created by the movement of goods, people and vessels across the border and will maintain or establish mechanisms for Signatories to become actively involved in the management of biosecurity risk across the biosecurity system.
		Disease surveillance programs:
		Run by Ministry
		Surveillance:
		They gather data from the country's veterinary pathology labs to:
		support our disease-freedom statements
		help with the development of import health standards
		underpin risk analyses
		better understand established animal diseases
		support outbreak investigations
		 identify trends in animal diseases.

	Preparedness:	Diagnostic lab services/capacity:
	What exactly do they do in preparedness?	National Biocontainment Laboratory, The Animal Health Laboratory (AHL) identifies all cases of suspected exotic, new, and emerging diseases of all types of animals, including:
		• farm animals
		• pets
		aquatic animals
		• wildlife.
		National Animal Health Laboratory carries out tests for known or suspected infectious diseases that could have a serious effect on New Zealand. The Ministry for Primary Industries (MPI) uses the AHL to:
		diagnose and help control animal (including aquatic animal) diseases
		 certify animals and animal products as disease-free for import or export
		prepare for potential disease outbreaks.
	Response:	GIA NZ is also responsible for response.
	What exactly do they do in response?	
	Recovery:	
	What exactly do they do in recovery?	
Other		The deed spells out cooperation required from all signatories and provides access to funding of emergency response to outbreaks.

Further information can be found at: <u>https://www.mpi.govt.nz/protection-and-response/biosecurity/government-industry-agreement/</u>

https://www.port-tauranga.co.nz/port-tauranga-receives-national-biosecurity-award/
TABLE 2: AUSTRALIA

Here are the detailed research findings on Animal Health Australia (AHA), which is a multi-jurisdictional (state and commonwealth) system embracing all stakeholders in animal health in a highly prescriptive solution:

How?	How did you first establish AHA? How was it conceptualized and designed? How was it implemented?	It took 15 years of talking between governments and industry. Finally it was the EADRA that brought everyone together: a wide-ranging agreement on how 66 diseases are funded by government and industry, and within this federal – state government cost-sharing. Began with this financing agreement, then expanded into biosecurity and surveillance which were then easier to get started once confidence and relationships were built.
	How did you persuade industry participants to join? What if they choose to leave?	Whatever disease breaks out, we can immediately respond together: there is clarity on the financing arrangements, supplemented by the Ausvet plan which sets out how we will proceed. It did take some time to get all sectors in: the horse industry joined after 5 years, driven by an outbreak at the time. A stakeholder is free to act alone, but government would take control and impose the most cost-effective solution: in reality, there would be very little recovery money, no compensation, just the minimum. This is a strong incentive to sign EADRA and join AHA.
	How is AHA financed? Who pays what?	One condition to EADRA is that you have to become a member of AHA and pay member fees which then fund AHA. Financing through EADRA has a 10 year repayment provision, and smaller industries pay a smaller proportion of the risk-based financing arrangements. The goal is to forge a true partnership where everyone gains by participating.
	What are AHA's legal powers?	 AHA is a not-for-profit corporation owned by its members (currently 34). The legal powers remain vested with the governments: federal and state level. AHA's real power doesn't come from its legal authority, but from having equal partners at the table: sign up, have a seat at the table, have a say in how decisions are made, decisions are made by consensus, voices are not ignored: any one party holds an effective veto.
	How are decisions made in AHA?	Member weeks are held three times a year, as well as specific issue member open forums with key leaders. Major issues are given plenty of air time and everyone's voice is heard and taken into the consensus decision-making.

		Even building long networking breaks into member forums helps to build long-term relationships.
	How satisfied are stakeholders with AHA?	Stakeholders would be very disappointed if AHA wasn't there; of course there is always some grumbling about outcomes and about the allocation of who pays what, who contributes what (like insurance really, no one likes paying premiums, but when you have an event, you are very grateful.)
		AHA is a good example of the benefits of how this works well: AHA is perceived as a service provider and held accountable in that way.
	How do you make sure AHA is sustainable, long- term?	Have agreements to invest in upstream initiatives in "peacetime". AHA provides an opportunity for each stakeholder to ask and challenge: why haven't we done this, how might we do this?
		Animal, plant and wildlife health started as separate streams and it is a sensitive issue putting them together: they have quite different corporate cultures (e.g. speed, nimbleness). Farm biosecurity website is a good example of where the three partner together on an upstream, sustainable program.
	What advice do you have for us as we establish an Animal Health Canada?	Get it up and running, agree on terms of deed (e.g. their EADRA). It is expensive, it does take serious resources and time, but at the end of the day, everyone sleeps easier at night knowing it is there.
		If some stakeholders are hesitant, AHA recommends that they speak with their opposite number in Australia – e.g. Dairy or Sheep Canada may want to speak with their counterparts in Australia to understand the benefits of creating a national animal health management system under a single corporate umbrella. Dairy and sheep industries in Canada would benefit from foreign-carried disease management and financing arrangements.
Why	Government Mandate: What is their scope of authority?	 Animal Health Australia's objects are to: assist the Australian animal health service system in maintaining acceptable national animal health standards aimed at meeting consumer needs and market requirements at home and overseas; aid the improvement in the quality of animal health infrastructure and services in Australia by: a. providing strategic leadership in the identification of national priorities and the development of national policy for Australia's animal health system; b. facilitating the resourcing and performance of the national animal health system to meet market and commercial requirements; c. promoting international confidence in the capacity of Australian animal health services;

3.	advise and advocate action to industry and government on:
	 a. strategic national animal health priorities;
	b. animal health system delivery arrangements and
	resources;
	c. nationally consistent animal health policy;
4.	establish and manage a national animal health information
	management system;
5.	develop, manage and evaluate national animal health programs;
6.	develop and implement rolling multi-year strategic plans and an
	annual operational plan in relation to animal health service
	systems;
7.	facilitate joint involvement of industry and government in
	Australia's animal health system;
8.	facilitate joint industry and government management and funding
	for agreed national animal health programs;
9.	operate at the policy and strategic level with linkages to a wide
	range of operational/program delivery structures for animal
	health;
10	. be concerned with strategic activities which are not limited to any
	particular point along the production chain but focus on major
	national animal health issues affecting marketing of animals and
	animal products;
11	. undertake information management and communication as key
	activities;
12	. be concerned about the link between good animal welfare
	practices and trade requirements and sanctions, as well as good
	commercial performance;
13	have an involvement in residue related issues as they relate to
	animal health and impact on commercial performance;
14	actively broker sharing of resources by the Commonwealth, States
4.5	and industry for priority animal health programs;
15	. have international status as the national animal health policy and
10	advisory body;
10	b. establish close working linkages to a wide range of operational and program delivery structures in the animal health industry in
	Australia including Industry Deligy Councils and Associations
	Australian Quaranting and Inspection Service (AQIS). State and
	industry animal health administrations, the National Posidue
	Survey National Registration Authority (or the successors to those
	organizations), recearch and development hodies, and the private
	sector.
17	section,
1/	associated with animal health and animal welfare issues which
	associated with annual reach and annual wenate issues willen
	the Office International des Epizoaties (OIE) and Codey
	Alimentarius):
	Aimentanus),

		 be responsive to the needs and requirements of animal health services and act in ways which recognize the roles and responsibilities of all its members; conduct its agreed programs in a manner which is consistent with the activities of animal health service agencies of members which enables involvement of, and agreement with, the private veterinary service providers and tertiary institutions; undertake commissioned animal health service projects; conduct such public seminars and conferences as may be required in the formulation of opinion in any matters pertaining to the enhancement of the animal health industry in Australia; publish, disseminate, and market animal health service information developed through collaboration and consultation with members and any work of the Company or any other materials approved by the Company; arrange for, or to assist in, research and development into matters pertaining to animal health; administer funds (as trustee, manager or otherwise) for the purpose of national animal health programs or initiatives; carry out all or any functions and operations that in the opinion of the Board of directors, are appropriate to be carried out by the Company in furtherance of or incidental to any of the above objects.
	Purpose Statement: What are their public vision and mission statements?	 Vision: A resilient Australian animal health system through effective partnerships, known for its integrity, and recognized nationally and internationally. Mission: To assist our members and partners to enhance, strengthen and protect animal health and the sustainability of Australia's livestock industries*. *For AHA purposes; livestock are animals kept for use or profit including any class of cattle, sheep, goats, pigs, horses (including mules and donkeys), poultry, emus, ostrich, alpaca, deer, camel or buffalo, and farmed aquatic species.
Who	Stakeholders	 Membership There are 6 groups of members: 1. The Commonwealth: The government of the Commonwealth of Australia represented by the person from time to time holding office as Commonwealth Minister of the Crown responsible for agriculture. 2. States and Territories: The governments of the States of New South Wales, Victoria, Queensland, South Australia, Western Australia, Tasmania, the Australian Capital Territory and the Northern Territory represented by the person from time to time holding the office of Minister of the Crown responsible for agriculture in respect of that State or Territory government.

		 Industry Organizations: Any organization determined by the Board to represent a sector of the Australian livestock industry and have legal capacity. Aquatic Organization: Any organization determined by the Board to represent a sector or a sub-sector of the aquaculture industry engaged in farming, production or harvesting of aquatic animals in Australia (or part of Australia) and to have legal capacity. Service Provider Members: Any organization determined by the Board to be a service provider to Australia's animal health service system and to have legal capacity. Associate Members: Any organization determined by the Board to be active in the Australia's animal health service system, or scientifically or commercially interested in the health of Australian livestock or aquatic animals, and to have legal capacity.
	Co-ordination and Collaboration	Representation on and contribution to national committees and submission of policy papers to support and strengthen nationally consistent arrangements and policy approaches to the national animal health system.
		National collaboration across species: Biosecurity forum, all species. National biosecurity partnership with government, industry and community.
What	Powers – Legislative and Legal Controls: What is the full scope of their powers?	No legislative or regulatory powers, deliver training, form coalitions and partnerships, influence government.
	Regulation	Animal Health Australia (AHA) does not have any regulatory responsibility for livestock welfare but works with members to improve livestock welfare and safeguard market access.
		The state and territory governments in partnership with the Royal Society for the Protection of Animals (RSPCA) have the principal responsibility for livestock welfare in each jurisdiction.
		The Australian Government is responsible for trade and international agreements relating to livestock welfare, including live animal exports and export abattoirs.
		AHA, in liaison with the livestock industries and welfare organisations, coordinates the development of national livestock welfare standards and guidelines.
		The new standards and guidelines provide a basis for achieving livestock welfare outcomes—through regulation and industry quality assurance activities—to meet community and international

	expectations and reflect Australia's position as a leader in modern, sustainable and scientifically based welfare practice.
	In consultation with stakeholders, AHA has developed a business plan for the development of standards and guidelines
Prevention:	Biosecurity Services
What exactly do they do in prevention?	Animal Health Australia (AHA) coordinates national animal biosecurity services to protect Australia's unique environment and support their trade reputation as a supplier of healthy animals and high quality animal products, offering a broad range of biosecurity services ranging from project management on behalf of members, through to assistance with on-farm biosecurity planning through the Biosecurity Extension Team.
	AHA's Biosecurity Programs:
	AHA's Biosecurity Program brings together all projects associated with reducing biosecurity risks that livestock production industries may face.
	They achieve this by working with members in the space of biosecurity to contribute to the greater Australian biosecurity system. AHA are involved in, or manages, several projects that work towards improving animal health and minimizing the risk of an exotic disease incursions such as:
	Biosecurity Services
	Farm Biosecurity Program
	Farm Biosecurity gate sign
	 <u>National Livestock Identification System</u>
	 <u>Biosecurity Planning and Implementation</u>
	<u>Sheep Health Project</u>
	Ovine Brucellosis
	 <u>Prohibited Pig Feed (Swill)</u>
	Biosecurity RD&E Strategy
	Zoonotic Disease
	Other prevention programs (e.g. vaccination programs, testing of livestock semen and biological material):
	Vaccination Access: Funding for AHA to establish and manage the FMD Antigen Bank has been shared by the Australian Government, the eight state and territory governments and potentially affected national livestock industry associations, including Cattle Council of Australia, Australian Dairy Farmers Limited, Australian Lot Feeder's Association,

Sheep meat Council of Australia, Wool Producers Australia, Australian Pork Limited and the Goat Industry Council of Australia.
A committee comprising representatives from government and industry funding parties advises AHA in its management of the FMD vaccine supply contract. AHA also receives technical advice from an appointee of the Director of CSIRO's Australian Animal Health Laboratory (AAHL) in Geelong.
Communications to increase awareness and understanding:
There is a resource hub on website, searchable database of events and publications.
AHA hosts three meeting weeks per year. These consist of a livestock Industry Forum and an AHA Member Forum along with AHA general meetings, training sessions or consultative group meetings. These events provide invited members the opportunity to consult with the AHA Board and management on national animal health system issues and the company's role, as well as the chance to address issues of importance to their jurisdiction or industry.
Border controls (permits, inspections):
The Department of Agriculture and Water Resources has the responsibility for coordinating national emergency animal disease preparedness and responses.
Management of infectious animal diseases may be complicated by the regular movement of livestock throughout Australia because this movement offers the potential for rapid spread of infectious disease. Successful planning for and management of infectious disease relies on good understanding of normal movement patterns, the rapid identification and tracing of animal movements from infected premises and the prevention of further animal or animal product movement capable of spreading disease.
Disease surveillance programs:
Under the Australian constitution, the Australian Government is responsible for quarantine and international animal health matters, including disease surveillance reporting to the World Organisation for Animal Health (OIE), export certification and trade negotiation. State and territory governments are responsible for animal health services, including disease surveillance, investigation and diagnostic services, and reporting of diseases, within their respective borders (jurisdictions). They deliver their services through government- appointed or government-accredited animal health personnel – district veterinarians, regional veterinary officers and local biosecurity officers. In some cases, private veterinarians are contracted to the government to investigate suspect notifiable diseases. In all states and

	territories, official government veterinarians establish relationships with private veterinarians in their districts to allow effective collaboration during investigation of unusual disease incidents. National decision making and coordination for animal disease surveillance occurs through the Animal Health Committee (AHC).AHC endorsed the <u>National Animal Health Surveillance and Diagnostics</u> <u>Business Plan 2016–2019</u> , developed collaboratively by governments and livestock industries. AHA manages the national TSE Surveillance Project
Preparedness:	Diagnostic lab services/capacity:
What exactly do they do in preparedness?	AAHL is a Commonwealth Scientific and Industrial Research Organisation (CSIRO) national facility based in Geelong, Victoria and one of the six major high-containment animal health laboratories in the world. AAHL is designed for EAD diagnosis and research. Its diagnostic services are primarily funded by the department, including the following activities:
	 providing diagnosis of and emergency response to EADs, including relevant research and surveillance works
	 providing technical and scientific advice on EADs
	 providing education and training in EAD recognition and diagnosis for animal health workers
	• serving as an World Organisation for Animal Health (OIE) reference centre for bluetongue, avian influenza, Newcastle disease, Hendra and Nipah virus diseases, yellowhead disease, epizootic haematopoietic necrosis, ranavirus infection, abalone herpes-like virus disease, new and emerging diseases and laboratory capacity building, a Food and Agriculture Organization of the United Nations (FAO) reference laboratory for biological risk management, and a national reference laboratory for brucellosis and rabies.
	• maintaining and improving microbiological and physical security of the containment facility.
	In addition to AAHL, the six central state or territory government laboratories and various private and university animal health laboratories support the national animal health system.
	National Animal Health Information System (NAHIS) Data:
	The NAHIS collates data into projects for a range of important diseases. Quarterly statistics of endemic disease monitoring and laboratory testing is reported in <u>Animal Health Surveillance</u> <u>Quarterly</u> (newsletter of Australia's National Animal Health Information System)

	Zoning and agreements with major trading partners:
	Australia is OIE member country. There are bilateral agreements with New Zealand on limited animal imports. The Australia Indonesia Partnership for Emerging Infectious Diseases (AIP-EID) 2011-2015 is a bilateral government-to-government partnership that has proven to be mutually beneficial for both countries. Indonesia and Australia are both keenly aware of the importance of strengthening the delivery of veterinary services. The AIP-EID Program focuses on combating threats of the incursion of disease, whether endemic and/or newly emerging, or diseases that have the potential to create a pandemic.
	They partner with other countries and organisations to improve early detection, preparedness, response and recovery options for rabies and other emerging and infectious diseases.
	Through the World Organisation for Animal Health (OIE), Australia has provided assistance for an anti-rabies vaccine bank that can be used by some of the world's poorest countries.
	They support their close neighbours, Papua New Guinea (PNG) and Timor-Leste, to stay free from rabies through:
	assistance with rabies response strategies
	diagnostic capacity and surveillance
	 development of national rabies management plans, outlining their approach to control and eradication of the disease.
	The Technical International Animal Health Liaison (TIAHL) group consists of representatives from the Australian Government Departments of:
	<u>Agriculture and Water Resources</u>
	Foreign Affairs and Trade (DFAT)
	• <u>Defence</u>
	and:
	State and territory governments
	<u>Australian Centre for International Agricultural Research</u> (ACIAR)
	<u>Australian Animal Health Laboratory (AAHL)</u>
	Zoo and Aquarium Association (ZAA)
	Veterinary Schools of Australia and New Zealand (VSANZ).
	Chaired by the Australian Chief Veterinary Officer, the role of this
	group is to gain a better understanding of offshore animal biosecurity risks to Australia and the region and to share information on overseas
	projects and activities. The group does this by discussion of emerging

	international animal health issues to promote operational coordination and information sharing between its members.
	The group meets every four months to discuss current international animal health activities conducted by Australian government agencies and universities, with a focus on the South East Asia and Pacific regions. The coordination of these activities with multilateral international animal health agencies such as the <u>World Organisation</u> for Animal Health (OIE), the Food and Agriculture Organization of the <u>United Nations (FAO)</u> , and international animal health laboratories and research organisations, is also a focus.
	Agreements on vaccine banks: FMD Antigen Bank funded and established with UK partners
	Traceability: Animal Health Australia (AHA) undertakes regular audits of the National Livestock Traceability Performance Standards as a process for the continual improvement of the various National Livestock Identification Scheme (NLIS) programs.
	Endorsed by the Primary Industries Ministerial Council (PIMC) in May 2004, the performance standards are a result of consultation with state and territory technical advisors and industry experts. It is envisaged that all states and territories and industry systems will aim to meet these standards.
	Production research (to mitigate disease risks):
	Commonwealth Scientific and Industrial Research Organisation (CSIRO) - CSIRO scientists are working with Tasmania's Atlantic salmon growers to prevent amoebic gill disease (AGD) in salmon. (trout/Salmon hybrid)
	CSIRO- developed an improved prawn pathogen detection system to help prawn farmers identify diseases and inform stock management decisions while producing higher quality products for consumers.
	CSIRO would be the equivalent of a Canadian Federal Crown Corporation.
	Training: Animal Health Australia helps provide education and training to its members to assist them with their responsibilities under the <u>Emergency Animal Disease Response Agreement (EADRA)</u> . Through participation in a range of training activities, company members can ensure they have trained personnel to participate in the management of an EAD incident. Animal Health Australia works closely with its stakeholders to develop, maintain, and review EAD training activities.
	AHA has a number of training resources available to company members that will assist them to achieve their training objectives.

Emergency animal disease training
Online training for vets
Education and outreach programs:
Animal Health Australia helps provide education and training to its members to assist them with their responsibilities under the Emergency Animal Disease Response Agreement (EADRA).
Testing/Auditing current systems
Farm level programs/systems
General surveillance
• The <u>National Significant Disease Investigation (NSDI)</u> <u>Program</u> subsidises training of private veterinary practitioners in disease investigation and subsidises private veterinary practitioners to investigate significant disease incidents in livestock and wildlife.
• The <u>LookCheck App Project</u> is a collaboration of Animal Health Australia and the Australian Veterinary Association aimed at enhancing disease surveillance and building stronger networks between private veterinary practitioners and livestock producers. A trial is funded by the Australian Government Department of Agriculture and Water Resources as an investment within the Northern Australia Biosecurity Framework.
• The <u>APL Evidence of Absence Surveillance Project</u> aims to deliver exotic disease exclusion information for pig disease events through routine disease investigations undertaken by pig vets
Targeted surveillance and monitoring:
• The <u>National Arbovirus Monitoring Program (NAMP)</u> monitors the distribution of economically important arboviruses (insect-borne viruses) of ruminant livestock and associated insect vectors in Australia.
• The <u>National Sheep Health Monitoring Project</u> monitors abattoir data for sheep health conditions that reduce farm profit through productivity losses or meat processing wastage.
• The <u>National Transmissible Spongiform Encephalopathies</u> <u>Surveillance Project</u> demonstrates Australia's ability to meet the requirements for a BSE negligible-risk and classical scrapie-free country, and provide early detection of these diseases should they occur.
 The <u>Screw-worm Fly Surveillance and Preparedness</u> <u>Program</u> includes surveillance and associated enabling activities to

	detect a SWF incursion early enough to ensure a high likelihood of success of an eradication program.
	Lab testing/auditing:
	The Australian Animal Pathology Standards Program (AAPSP), a joint initiative of the Australian Society for Veterinary Pathology, the Sub Committee on Animal Health Laboratory Standards and Animal Health Australia, aims to improve the diagnostic capability of the National Animal Health System by supporting the development and delivery of;
	Pathology proficiency testing
	 Online reference materials and modules for continuing professional development
	Online second opinion service
	 An annual series of technical workshops for pathologists to be delivered in each state/territory
	Conducting and testing emergency simulations:
	Animal Health Australia has been involved with a number of simulation exercises for Members, either through the Rapid Response Team (RRT) program (now the National Biosecurity Response Team) or as specially funded projects.
Response: What exactly do they do in	Animal Health Australia (AHA) manages the Emergency Animal Disease Response Agreement (EADRA), a unique contractual arrangement between Australia's governments and industry groups to collectively reduce the risk of disease incursions and manage a response if an
response?	outbreak occurs.
responser	outbreak occurs. Planning emergency response:
responser	outbreak occurs. Planning emergency response: Animal Health Australia (AHA) coordinates the ongoing review and maintenance of Australia's animal biosecurity plans and statements contained in Australia's animal biosecurity manuals.
responser	outbreak occurs. Planning emergency response: Animal Health Australia (AHA) coordinates the ongoing review and maintenance of Australia's animal biosecurity plans and statements contained in Australia's animal biosecurity manuals. Disease response communications:
responser	outbreak occurs. Planning emergency response: Animal Health Australia (AHA) coordinates the ongoing review and maintenance of Australia's animal biosecurity plans and statements contained in Australia's animal biosecurity manuals. Disease response communications: In addition to the NASOPs overseen by AHC, the National Biosecurity Committee's National Biosecurity Emergency Preparedness Expert Group (NBEPEG) has accepted responsibility for the development of NASOPs that are of a generic nature and have application to all biosecurity responses. The NASOPs developed by NBEPEG are also included below to provide a single point of access to all available NASOPs.
responser	outbreak occurs. Planning emergency response: Animal Health Australia (AHA) coordinates the ongoing review and maintenance of Australia's animal biosecurity plans and statements contained in Australia's animal biosecurity manuals. Disease response communications: In addition to the NASOPs overseen by AHC, the National Biosecurity Committee's National Biosecurity Emergency Preparedness Expert Group (NBEPEG) has accepted responsibility for the development of NASOPs that are of a generic nature and have application to all biosecurity responses. The NASOPs developed by NBEPEG are also included below to provide a single point of access to all available NASOPs. • <u>Conducting debriefings in a biosecurity response (pdf - 127 KB)</u>

		<u>Conducting briefings in a biosecurity response (pdf - 106 KB)</u>
		Response capabilities (such as vaccination, depopulation,
		sanitation, processing capacity, etc.):
	Animal Health Australia (AHA) manages the development and review of the Australian Veterinary Emergency Plan (AUSVETPLAN) on behalf of its Members.	
	AUSVETPLAN contains the nationally agreed approach for the response to emergency animal disease (EAD) incidents in Australia. The plan is captured in a series of manuals and supporting documents.	
	Operational manuals detail decontamination, animal destruction, disposal compensation and wild animal response strategies.	
		Data sharing capacity/capabilities:
		National Animal Health Information System (NAHIS) Data
		Resource capacity and how to allocate during a response (incl. people)
		AUSVETPLAN Control centres procedures 1 and 2 scalability of responses.
		Roles and integration of industry:
		AUSVETPLAN and the deed detail industry involvement.
	Recovery:	Financial support for business transition/recovery:
	What exactly do they do in recovery?	In the Deed and in AUSVETPLAN procedures, if not covered (new disease) local authority has jurisdiction.
		Cost sharing detailed in the Deed.
		Market access/re-entry:
		Must achieve "resolved premises" status (Biosecurity Emergency Preparedness Working Group).
When	Founded	January 1996 incorporated
How	Funding:	Levy Collection \$7,409,255
	How did they fund	Direct member subscriptions \$3,073,096
	the initial startup?	Revenue for other programs \$4,833,271
	How do they fund their ongoing work?	Costs are shared based on the deed for emergency responses based
	How are costs shared?	financing based on the perceived degree of benefit to the public compared to the perceived degree of benefit to private industry. Each

		species/disease is assigned to a risk-based category based on these benefits, and financing is then allocated on the same basis.
	Governance	Unless otherwise determined by the Ordinary Members in general meeting, there shall be a Board of no fewer than five (5) directors and no more than seven (7) directors as determined by the Board from time to time.
		The Company in general meeting will consider and, if thought appropriate, approve the Selection Committee's nominees for directors to the Board of the Company. If the Company in general meeting does not approve the appointment of any nominee the Selection Committee will select another nominee. In making the decision whether or not to approve the Selection Committee's nominees the Ordinary Members will take into account prescribed factors.
		In recommending the appointment of directors, the Selection Committee will consult with the Chairperson and the Ordinary Members and take into account the following mix of capabilities:
		 knowledge of and expertise in the extensive livestock production sector or a sector or sub-sector of aquaculture; knowledge of and expertise in the intensive livestock production sector or a sector or sub-sector of aquaculture; expertise in the processing marketing sector, with a strong understanding of major export markets for aquatic animals or livestock and their products; understanding of industry organisational arrangements, networks
		 and interfaces with Government; 5. knowledge of and expertise in Government policy and its development; 6. expertise and technical qualifications in the delivery of animal health services; 7. expertise in quality management approaches to animal health; 8. strategic planning expertise; 9. economic expertise; 10. financial management expertise; and 11. corporate governance expertise.
	Independence	AHA is a corporation, funded by members and works co-operatively with government

Alignment	Board is appointed by members based on skills via a selection committee.

More information can be found at:

https://www.agriculture.gov.au/animal/health/system

https://www.animalhealthaustralia.com.au/

https://www.agriculture.gov.au/animal/health

https://www.wildlifehealthaustralia.com.au/

TABLE 3: THE NETHERLANDS

Here are the detailed research findings on animal health management in the Netherlands, which is a multi-layered system with a large role played by the private sector:

Why Government Mandate: What is their government	The member states of the European Union (EU) have agreed which animal diseases are so serious that governments always need to be involved in fighting them. These diseases are known as 'notifiable animal diseases.	
	mandate from their	Diseases that are notifiable:
	legislation? What is their scope of	 can spread quickly, also to other EU member states;
	authority?	 can have a devastating impact on the animal population affected;
		 cannot be prevented or controlled by conventional means;
		 can cause serious economic damage to farmers and EU member states.
		The main notifiable animal diseases in the Netherlands are:
		BSE or mad cow disease
		foot and mouth disease
		Q fever
		 parrot fever (psittacosis)
		swine fever
		• bird flu
		 Schmallenberg virus (SBV)
		equine herpes virus (EHV)
		viral infection in seals
		The EU has directives on combating animal diseases. The member states implement the directives through national policy guidelines on animal disease control.
	The <u>Netherlands Food and Consumer Product Safety Authority</u> is responsible for controlling animal diseases. It organises exercises and offers training courses. The Netherlands Food and Consumer Product Safety Authority works together with:	
		Wageningen Bioveterinary Research
		 the Ministries of <u>Health, Welfare & Sport</u>, and of <u>Agriculture</u>, <u>Nature and Food Quality</u>.
		• the National Institute for Public Health
		<u>GD Animal Health</u>

		Royal GD: In the Netherlands, GD Animal Health is commissioned to monitor animal health by the Dutch Ministry of Economic Affairs and the Producer organisations and interbranch organisations. GD monitors and reports to government.
		Wageningen Bioveterinary Research collaborates with public and private partners to safeguard animal and public health.
		They contribute to the prevention, eradication and control of animal infectious diseases through research, diagnostics and consultancy. By doing so, WBVR helps to guarantee international trade and to preserve the international top position of the Dutch livestock industry.
	Purpose Statement:	Mission: Teaming up for animal health, in the interest of animals, their owners and society at large.
	What are their public vision and mission statements?	Vision: Good health is in the interest of animals and contributes to sustainable farming. This work fulfils the wishes of a society that wants eco-friendly food that is tasty, safe and healthy.
Who	Stakeholders: Who are the formal stakeholders and how are they affiliated? What is	Royal GD is a corporation. Its main revenue sources are from testing and laboratory services. It employs 500 people including 90 veterinarians. They are commissioned by the government, and work on all species. It is unclear from public records how they are structured to work with others or how other groups are affiliated.
	the scope of their reach?	The aggregation and interpretation of information are the key components of monitoring animal health. GD Animal Health obtains information nationally by collaborating with veterinary practitioners, farmers and agricultural organizations. They also work together with other Dutch institutions, such as the WBVR (Wageningen Bioveterinary Research) and the RIVM (National Institute for Public Health and the Environment). GD Animal Health is the initiator of this professional animal health network. All information gathered from these sources is analyzed, interpreted and communicated with these organizations, veterinary practitioners and farmers. International relations are of growing importance to them. They share information with colleagues abroad to expand their knowledge base, improve treatment and help each other improve animal health worldwide.
	Co-ordination and Collaboration	The <u>Netherlands Food and Consumer Product Safety Authority</u> is responsible for controlling animal diseases. It organises exercises and offers training courses. The Netherlands Food and Consumer Product Safety Authority works together with:
		Wageningen Bioveterinary Research
		 the Ministries of <u>Health, Welfare & Sport</u>, and of <u>Agriculture</u>, <u>Nature and Food Quality</u>.

the <u>National Institute for Public Health</u>
<u>GD Animal Health</u>
International relationships, standards and agreements:
GD Animal Health acts as partner in many international projects related to animal health, such as disease-control programs, monitoring programs, the establishment of veterinary diagnostic labs, and lab capacity building projects. GD Animal Health has been active in eastern and central Europe, Egypt, Indonesia, India, Ethiopia, Ireland, Finland and Russia. Successful projects include disease (mastitis) control programs, risk-analysis studies, epidemiological studies, legal aspects of food safety related to animal products, IT infrastructure, capacity building of veterinary diagnostic laboratories and training of vets and laboratory staff.
Because of the importance of the international aspects of animal diseases Wageningen Bioveterinary Research stimulates actively the participation of employees in international networks of excellence. The institute also invests in coordinating roles in international authoritative projects.
CoVetLab.org is an acronym for "Collaborating Veterinary Laboratories" and also the name of the website of Club 5, a European communication and collaboration network consisting of five national reference veterinary laboratories. The aim of the collaboration is to advance high-quality veterinary science by the dissemination of knowledge, sharing of experience and the transfer of skills and technology between the members, and to enlarge the scientific capabilities.
EPIZONE
EPIZONE is the Network of Excellence for Epizootic Disease Diagnosis and Control. This European Union (EU) funded research project officially started on 1st of June 2006 and is supported by the EU's Sixth Research Framework Program with a total EU contribution of €14 million over a five year period.
EPIZONE aims to develop a network of scientists to improve research on preparedness, prevention, detection, and control of epizootic diseases within Europe. Therefore, the economic and social impact of future outbreaks of foot-and-mouth disease, classical swine fever, avian influenza, and other relevant epizootic diseases like bluetongue and African swine fever, can be reduced through increased excellence by collaboration.

		MED VET NET ASSOCIATION The activities of Med-Vet-Net have been based around a 'Virtual Institute' concept. The institute comprises 15 public health and veterinary institutes in 10 countries: Denmark; France; Germany; Hungary; Italy; Sweden; The Netherlands; Poland; Spain and the United Kingdom. Med-Vet-Net officially started on 1 September 2004. Med- Vet-Net is funded for 5 years. The network comprises over 300 multidisciplinary scientists. Zoonotic diseases constitute 75% of the new and emerging diseases worldwide. Food-borne diseases and food production-associated diseases cause many worldwide economic and social problems. Europe is faced with potential threats including avian influenza, Foot and Mouth Virus, West Nile Virus and bluetongue. <u>NeuroPrion</u> Network of Excellence dedicated to research on prion diseases In September 2003 a new European "Network of Excellence" was
		launched to protect humans and animals against prion diseases. The project NeuroPrion was selected by the European Commission under the Thematic Priority 5 "Food Quality and Safety".
		Para TB Tools
		The overall strategic objective of this research project is to generate new tools for the diagnosis and detection of M. paratuberculosis (Mptb) in animals and animal products; to improve methods for elimination of Mptb from foodstuffs; and to define the risks associated with Mptb and its potential role in Crohn's disease.
		Venomyc The main objective of Venomyc is to develop a multidisciplinary European network of laboratories researching into mycobacterial diseases of veterinary interest, to conduct research into improved diagnosis and epidemiology of mycobacterial diseases.
What	Powers – Legislative and Legal Controls: What is the full scope of their powers?	Unknown
	Regulation	Unknown

Prevention:	Biosecurity:
What exactly do they do in prevention?	Farmers are responsible for the health of their livestock. Sometimes, the government has to step in and help prevent or combat a disease. This is necessary if a disease is exceptionally infectious or dangerous. Livestock farmers must:
	 ensure adequate hygiene at their place of business;
	 be alert to symptoms of disease;
	 report (suspected) animal diseases to the <u>Netherlands Food</u> and Consumer Product Safety Authority;
	 comply with requirements when importing animals from countries outside the European Union (EU);
	 vaccinate their animals if possible and necessary.
	The government monitors animal health, together with other organizations, including the Netherlands Food and Consumer Product Safety Authority. This enables them to:
	 take immediate action in the event of an outbreak of infectious animal disease; identify and track outbreaks of animal disease; identify the causes of animal diseases that do not normally occur in the Netherlands; identify new animal diseases.
	Netherlands is a member of SAPHIR program which develops vaccines for livestock. Vaccination may be compensated if an outbreak occurs and the underlying disease is treatable in this manner.
	Through publications in the journal of the Royal Dutch Veterinary Association, articles in the farming press (Agrarisch Dagblad,) and publications by the Animal Health Service the awareness of CSF for veterinarians (the "GD Veterinair", a newsletter for veterinarians) and farmers is maintained.
	Disease awareness campaigns targeted at farmers and professional personnel who regularly visit farms are held when needed. Besides these publications, various Internet sites (<u>http://www.gd-dieren.nl/pages/frames/frplvzkv.htm</u> , <u>http://www.europa.eu.int/</u> and <u>http://www.oie.int/</u>) are used to maintain disease awareness.
	Border controls (permits, inspections): Trading in animals can bring diseases to the Netherlands. To prevent this, transporters can use the <u>Import Veterinair Online system</u> (in Dutch). It tells them how they can safely import live animals or animal

products into the EU. Examples of animal products are wool, meat, dairy products and hunting trophies.
Travellers can also bring animal diseases into the country. That is why they can only <u>import live animals or animal products if they satisfy</u> <u>strict requirements</u> .
When an infectious animal disease occurs in other countries, in or outside the EU, there is a chance that it may spread to the Netherlands. If there is a heightened risk, the government can take extra measures. There may be stricter border controls of travelers and goods, and animal transport may be controlled more strictly or even banned.
Disease surveillance programs:
Since 2007, every Member State of the European Union has drawn up a Multi-Annual National Control Plan (MANCP). Member States report to the European Commission through an annual report on the implementation and results of official controls. The MANCP annual report describes the official controls in the areas of food safety, animal health, animal welfare, animal feeds, phytosanitary matters and organic production.
In the Netherlands, a range of organizations are involved in producing this report.
Monitoring under Regulation (EC) No 882/2004 is conducted by:
 the Netherlands Food and Consumer Product Safety Authority (NVWA); the Netherlands Controlling Authority for Milk and Milk Products (COKZ); the Netherlands Controlling Authority for Eggs (NCAE), a department of the COKZ; GD Animal Health (GD).
Monitoring under Council Directive The Animal Health and Welfare Act states that if an animal shows symptoms of a contagious animal disease, this must be reported to the authorities by the livestock holder and veterinarian. To eliminate confusion, a national 24-hour telephone line has been opened.

	Preparedness:	Diagnostic lab services/capacity:
	What exactly do they do in preparedness?	In the Netherlands, Wageningen Bioveterinary Research works together with the Department of Veterinary Science at Utrecht University and the Animal Health Service in the 'Knowledge chain of infectious animal diseases. As a result, optimum use is made of all of the veterinary knowledge in the Netherlands, ranging from information taken from the field to academic research. Moreover, the separate groups of experts and staff participate in a large and diverse number of international networks. This guarantees that knowledge is used effectively and efficiently, and that government and commercial organizations are fully supported in their efforts to combat animal diseases.
		Reporting and information sharing:
		The Animal Health and Welfare Act states that if an animal shows symptoms of a contagious animal disease, this must be reported to the authorities by the livestock holder and veterinarian. To eliminate confusion, a national 24-hour telephone line has been opened. It was announced with a publicity campaign. In cases of, for example, an increased risk of outbreak due to a disease in another Member State, there is a possibility of deploying additional legal powers. An extra incentive for reporting suspicious cases is achieved by compensation of diseased animals for 50% of their value in healthy condition. Holdings reporting diseased animals are visited by a team of RVV specialists who decide if further action is necessary, depending on the situation at the holding.
		Monitoring and risk assessment:
		The Office for Risk Assessment & Research (BuRO) is an independent part of the Netherlands Food and Product Safety Authority (NVWA).
		BuRO provides independent advice to the Inspector-General of the NVWA, to the <u>Dutch Ministry of Health, Welfare and Sport</u> , or the <u>Ministry of Agriculture, Nature and Food Quality</u> . The science-based risk assessments encompass food safety, consumer product safety, animal health, animal welfare, plant health, and nature.
		Zoning and agreements with major trading partners:
		Part of EU trading agreements and animal health system.
		Agreements on vaccine banks:
		Part of EU program
		Traceability and identification systems:
	1	There is significant work on animal husbanury and animal tracedulity

	with a high rate of compliance by farming community.
	Training is provided through GD
	Education and outreach programs:
	GD Academy provides education and training related to animal health and animal diseases for farm managers, their staff and veterinarians, pharmaceutical companies, the feed industry and governments. Their training programs focus on cattle, swine, poultry and small ruminants such as sheep and goats. Their <u>animal health experts</u> discuss current topics and issues and guide users of the information in translating the theory into practice, enabling them to apply the acquired information immediately.
	Conducting and testing emergency simulations:
	Once a year a simulation exercise of an animal-disease outbreak is held in particular to test the standing instructions.
Response: What exactly do they do in	In the event of an outbreak, the Secretary General of LNV is the official leader of the LNV chain of command. To effectively combat an outbreak, the following measures are to be taken:
response?	 The National Departmental Crisis Centre (NDCC-LNV) will be activated. The departmental crisis staff (DCS) will be assembled, and will meet in room 9H06 of the Ministry's main building. The DCS is made up of: Secretary General (SG) as head, Director General, CVO (also co-ordinator of the operations team), the directors of DV, VVA, DL, RVV, IDLelystad, AID, LASER, the relevant regional LNV director (also co-ordinating director of the RCC), the crisis management co-ordinator RVV and the secretariat will be led by a policy staff member of VVA. One or more regional LNV crisis centres (RCC-LNV) will be activated.
	Wageningen Bioveterinary Research is integral part of the crisis organization when outbreaks of animal diseases occur in the Netherlands. The institute plays both an executing and an advisory role.
	In case of suspicion of certain animal diseases, Wageningen Bioveterinary Research operates on a 24 hours a day – 7 days a week basis for diagnostic testing. As soon as an outbreak of a notifiable contagious disease is confirmed, Wageningen Bioveterinary Research operates at contingency level. The institute plays both an executive as advisory role towards the Dutch authorities. Wageningen Bioveterinary Research is capable of carrying out large quantities of diagnostic tests by taking advantage of large capacity robotic testing equipment.

Wageningen Bioveterinary Research has extensive experience with scaling up of test capacities during outbreaks.
They have National and regional department crisis centres.
Disease response communications:
EU legislation regarding control of animal disease has been implemented in the Animal Health and Welfare Act (AHWA). Article 15 of the Act deals with the control measures to be undertaken by the Ministry of Agriculture, Nature Management and Fisheries (LNV) for diseases in cattle, pigs, sheep, poultry, bees, minks and other mammals and fish. In the Regulation on notification of infectious animal diseases (Articles 2) CSF is denoted as infectious animal disease in livestock, bringing it under the scope of Article 3 of the Animal Health and Welfare Act. Articles 19 and 100 of the Act require compulsory notification of suspected CSF by the owner/keeper and the veterinarian.
A special incident desk has been set up that can be contacted 24 hours per day. The course of action on receipt of a notification of CSF is set down in the CSF contingency plan.
As soon as livestock is suspected of being infected the measures set down in Article 4 of Directive 2001/89EEG are taken. The mayor of the municipality takes the required measures as soon as possible. As most of the cases require emergency action, the head of region of the National Inspection Service for Livestock and Meat usually takes the necessary action and informs the mayor immediately (Article 21 of the AHWA).
In addition, under Article 14 of the Veterinary Practice Act, every veterinarian is obliged to conduct his profession according to the normal rules and practices. This means that the veterinarian is also obliged to ensure that no damage is inflicted to animal health or that there is damage to public health or the national economy.
Response capabilities:
Article 5, sub-paragraph 1 of Directive 2001/89/EEC lays down that as soon as CSF is officially confirmed on a farm, all susceptible animals present on the farm must be slaughtered on site.

	Recovery:	Financial support for business transition/recovery:
	What exactly do they do in recovery?	The Animal Health and Welfare Act has a closed system of compensation. This is set out in detail in Articles 85 to 90 of the Animal Health and Welfare Act. Article 86 of this Act states that compensation can be granted from the Animal Health Fund if animals were slaughtered or rendered harmless under measures to combat infectious animal diseases. Compensation for animals suspected of being diseased equals the value of the healthy animal, for diseased animals 50% of this value and for animals that died before the moment of suspicion 0%.
		Products and materials will be compensated with the value at the moment the measures were taken, with the provision that the amounts so determined can be decreased by general measures determined by the government.
		The value will be assessed by a licensed animal assessor.
		The Minister will inform the owner of the amount as soon as the valuation has been made and accepted.
		Market access/re-entry:
		Conditions may be attached to the granting of compensation regarding the layout, hygiene, re-stocking of the animals and veterinary supervision of the farm. This could also apply to the rules which may be set for the levies raised to fund the compensatory payments. The Minister could reduce compensation, withhold payment or demand repayment if it is determined that the conditions have not been met.
When	Founded: How long have they been in existence?	Over 100 years for both GD and Wageningen (testing, research detection and analysis functions)
How	Funding: How did they fund the initial startup? How do they fund	The Dutch sector and ministry have together established the Animal Health Fund. Monitoring and eradication of notifiable diseases (e.g. avian influenza, M.g./M.s. and certain salmonella's) is funded by this fund.
	their ongoing	All farmers pay a pre-determined levy.
	WORK? How are costs shared?	The ministry and the animal sectors evaluate on a yearly basis the division of the levies and assess the costs to be expected in the upcoming year.

	Governance	Government run using public corporations to provide system inputs (Training, testing, labs etc.)
	Independence	Public (private sector) corporations are independent (GD, Wagingen) and provide services for a fee.
		Industry associations represent their own interests with government.

More information can be found at: <u>https://www.gdanimalhealth.com/monitoringsurveillance</u>

TABLE 4: CANADIAN BLOOD SERVICES

Here are the detailed research findings on the Canadian Blood Services. Note: CBS is not in the animal health sector, so some of the questions we asked of the sector-related organizations are not applicable. The primary rationale for selecting CBS as the fourth research comparator was its originating omnibus FPT Agreement, and associated binary governance structure of Members and Board.

Why	Government Mandate: What is their government mandate from their legislation? What is their scope of authority?	Canadian Blood Services was incorporated in 1998 under the Canada Corporations Act. In 2014, articles of continuance were filed to transition to the Canada Not-for-Profit Corporations Act. They function as an independent, not-for-profit organization that operates at arm's length from government.
	Purpose Statement: What are their public vision and mission statements?	Vision: To help every patient. To match every need. To serve every Canadian. Mission: We are Canada's biological lifeline.
Who	Stakeholders: Who are the formal stakeholders and how are they affiliated? What is the scope of their reach?	CBS is primarily funded by the provincial and territorial ministries of health. Formal stakeholders are the provincial and territorial ministries of health (except Quebec). They also receive funding through private donations.
	Co-ordination and Collaboration	 There is National collaboration across provinces and Federal/Provincial on issues related to blood, plasma, stem cells, organs and tissues. Canadian Blood Services is a not-for-profit charitable organization. IT is regulated by Health Canada as a biologics manufacturer and is primarily funded by the provincial and territorial ministries of health. Canadian Blood Services operates with a national scope, infrastructure and governance that make it unique within Canadian healthcare. In the domain of blood, plasma and stem cells, they provide services for patients on behalf of all provincial and territorial governments except for Quebec. The national transplant registry for interprovincial organ sharing and related programs reaches into all provinces and territories, as a biological lifeline for Canadians. There are no international relationships, standards or agreements.

What	Powers – Legislative and Legal Controls: What is the full scope of their powers?	CBS is an arm's length organization, funded by governments, with the board being controlled by governments through the appointments process. CBS has full autonomy as a NFP Corporation.
		All licenses and registrations are issued by Health Canada related to inspections, certifications, compliance measures and other legal tools/regulations.
		Canada wide scope except Quebec.
	Regulation: Where does regulation fit in their model? Do they regulate? The government? Another government agency?	Health Canada regulates.
	Prevention:	Screening and testing:
	What exactly do they do in prevention?	Their surveillance of the blood system includes:
		 monitoring of transmissible disease testing in blood donors; investigating possible transfusion transmitted infections in blood recipients (including bacterial infections); and horizon scanning for new, emerging pathogens that may pose a risk now or in the future.
		Biosecurity
		Other prevention programs (e.g. vaccination programs, testing of livestock semen and biological material)
		Communications to increase awareness and understanding
		Border controls (permits, inspections)
		Disease surveillance programs

Preparedness:	Diagnostic lab services/capacity:
What exactly do they do in preparedness?	Canadian Blood Services Diagnostic Services Laboratories and the National Immunohematology Reference Laboratory (NIRL) provide a broad range of routine and referral services, including: perinatal testing, pre- and post-transfusion testing, routine and complex antibody investigations, transfusion reaction investigations, and assistance in finding the most suitable components for patients. We also provide red blood cell and platelet antigen genotyping, along with consultation services to support hospitals, clinics and physicians.
	Their laboratories use serological and molecular testing platforms and provide technical support and medical consultation to laboratory partners and health-care providers.
	Laboratories are located in the following cities: Vancouver / Edmonton / Regina / Winnipeg / Brampton / Ottawa
	Monitoring and risk assessment:
	Quality Audits internally and with outside vendors,
	Health Canada licensing
	Zoning and agreements with major trading partners:
	Co-operative services with Quebec.
	Canadian Blood Services drives world-class innovation in blood transfusion, cellular therapy, and transplantation — bringing clarity and insight to an increasingly complex health care future. In collaboration with an extended network of partners, their team fosters discovery and clinical research, conducts product and process development research, translates knowledge through leading practices, and builds capacity through training and education.
	Education and outreach programs:
	An important role of Canadian Blood Services is to build long-term capacity in the fields of transfusion and transplantation science and medicine to ultimately benefit patients. To do this, Canadian Blood Services contributes to the development of educational tools, knowledge dissemination tools, and best and leading practices.

		Testing/Auditing of current systems:
		As a biologics manufacturer, quality audits are conducted by Canadian Blood Services as an integral part of continuous quality improvement. They conduct quality audits to evaluate internal compliance, safety, security and performance of their blood component manufacturing activities. Results of the quality audits are carefully reviewed by the department business owner, and a process improvement implementation plan is formulated.
		In addition, external audits are conducted of their suppliers of materials and services. Before any product or service can be acquired, user requirement specifications are determined to ensure the material or service will meet their needs. Products or services will only be acquired from approved suppliers, determined by initial and on-going audits.
	Response: What exactly do they do in response?	N/A
	Recovery: What exactly do they do in recovery?	N/A
When	Founded	CBS has been in existence for 20 years
		"Big Bang" – CBS was started as a result of the tainted blood scandal
How	Funding: How did they fund the initial startup? How do they fund their ongoing work? How are costs shared?	Startup was government funded
		They fund their ongoing work mainly by government funding (ministries of health)
		Shared costs: The provincial and territorial ministers of health provide most of the funding for Canadian Blood Services' operations and act as the organization's corporate members. The ministers appoint the organization's board of directors, approve Canadian Blood Services' annual budget and receive its three-year corporate plan
	Governance	Their 13 board members are appointed by the provincial and territorial ministers of health. The board is responsible for the organization's governance, overall affairs, strategic plan, budget and reporting on Canadian Blood Services' performance to the corporate members.
	Independence	They are an autonomous Not for Profit Corporation
	Transparency	Since its inception in September 1998, Canadian Blood Services has been committed to operating in an open, transparent and collaborative

		manner. To ensure effective public participation, Canadian Blood Services has launched a number of public involvement initiatives.
	Alignment	Alignment is achieved through the governance structure, with each significant principal represented on the board. The National and Regional Liaison Committees help ensure that interested Canadians contribute to decision-making on issues affecting the blood system. The National Liaison Committee is intended to identify issues, and offer ideas, opinions and concerns from across Canada.
	Equity (Fairness)	Equity is achieved through the governance structure, with each significant principal represented on the board.

Further information can be found at: <u>https://blood.ca/en</u>

COMPARATOR CASES SUMMARY (CONTINUED)

In addition to the four selected comparators, we did gain relevant applicable learnings from other comparator case research, which we summarize here¹⁴:

OIE: PPP's

The world body which oversees veterinary services, the OIE, not only conducted a widespread inspection of Canada's animal health system, but more recently shared its research on comparable governance models.

The "bottom line" is that OIE, based on its research, strongly endorses public-private partnerships as the most effective approach for nations to take to managing animal health. True collaboration and coordination is essential, since each party cannot do this alone, but relies on all the others to effectively manage animal health. OIE requires participation by governments.

Rather than this being legislated, a form of PPP is often a much easier, simpler and pragmatic approach.

In its full presentation OIE outlines three different types or iterations of PPP, that are helpful in terms of understanding the "governance journey". GSI presented and discussed these at the December workshops.

CHEMISTRY INDUSTRY ASSOCIATION OF CANADA

Despite being from outside the animal health sector, there is one feature of governance at CIAC that we wanted to highlight since it is an innovative governance alternative that AHC could benefit from:

The Chemistry Industry Association of Canada stewards "Responsible Care" among its members, a third party certification of environmental / community sustainability. This is the glue that holds an otherwise diverse and voluntary membership together, and then drives key initiatives.

On joining CIAC, each member signs on to the "Responsible Care" certification program, and begins a rigorous series of inspections and tests before receiving this.

Over the years, what started as an effort to change the image of the chemical industry turned into one of their members' greatest accomplishments, one viewed today with pride. Members themselves protect and defend the "Responsible Care" certification, since it validates to the public, clients and governments alike that they can rely on the safety of chemical products produced under this.

The next four comparators are industry regulatory bodies in Canada, illustrating alternatives, pros and cons for governance model choices.

¹⁴ Council members have access to September 2015 and November 2018 governance reports, as well as OIE's recent presentation, which go into much more depth on these, and other, comparative models (e.g. USA).

CANADA'S CREDIT UNION SYSTEM

Why? Purpose and Context

In 2016, the national architecture of Canada's credit union system was revamped. The vision was to roll all trade association functions into the national body, and to limit the provincial and regional bodies to their mandated regulatory roles. The main driver was to reduce costs, by eliminating duplications, enhancing specialization, and to gain a better and clearer value proposition.

Canada's credit unions are regulated provincially, and as such are required to belong to provincial "Centrals" to provide a liquidity pool and therefore solvency assurance. Since credit unions need to operate across provinces and internationally, a Canadian "Central" was established to provide national treasury and payment facilities. Each Central fulfilled a regulatory role, and was regulated by OSFI, the federal financial regulator.

Over the years, all the provincial Centrals took on a dual mandate role, that of a trade association. While each offered different services, professional development, research and publications, marketing and advertising, and consulting services were all major programs and sources of revenue.

As the number of credit unions dropped and their average size increased (through M&A's), many questioned the duplication of services and sought to streamline these, both horizontally (i.e. from province to province) and vertically (from the provincial "tier 2" level to the national "tier 3" level).

At the same time, OSFI changed the regulatory structure, moving regulation of provincial Centrals to each province's financial regulator, and the requirement for Canadian Central to play a regulatory role was removed.

In 2016, after considerable negotiations and dialogue, a revamped structure was rolled out. The Canadian Credit Union Association (CCUA) replaced Credit Union Central of Canada, with solely a trade association mandate. Concurrently, several provinces merged their Centrals to create Regional Centrals, while other provinces kept theirs – these continue to be dual mandate, regulatory and trade association.

Quebec's caisses populaires system is not part of the Canadian Credit Union Association, it is separately regulated and governed within Quebec. This is not just a reflection of the Canadian dynamic, but the fact that Desjardins oversees and manages the system in Quebec, in a manner quite different than the autonomy of individual credit unions outside Quebec.

Who Does What? Role Clarity

CCUA works on behalf of its members in four key areas:

- Advocacy and Government Relations
- National Regulatory and Network Compliance
- Professional Development and Education of credit union employees and board members
- National Awareness Building

In the first area, advocacy and government relations, CCUA fills this role for most provinces, except for Alberta and Manitoba whose Centrals decided to hold on to provincial advocacy and government relations. However, this was the most complete streamlining of services, in government relations.

Several regional and provincial Centrals still do marketing and advertising, research and publications, as well as consulting services. There is therefore still a role overlap in the marketing and research pillars – CCUA undertakes these functions nationally, and on behalf of several provinces' credit unions, but other credit unions receive these services from both tiers.

Interestingly, in order to launch a national advertising program recently, CCUA reached out to member credit unions to build a "coalition of the willing" who were prepared to underwrite this. This approach raises the spectre of "free riders", that is some members will benefit from this program without having directly contributed to its development and implementation.

In the other pillar of professional development and education, this was brought together many years ago into the national body, but there are still some provincial and regional Centrals who offer professional development programs to credit unions. There is less duplication here, but still some.

The provincial and regional Centrals continue to fulfill their regulatory role in providing mandatory liquidity coverage and related treasury and investment functions. As mentioned, many also have retained varying degrees of involvement in most of the other areas that are trade association-related.

How? Governance and Decision-making

Probably the most significant change in the 2016 reforms was that CCUA's owner-members are the credit unions directly, while its predecessor CUCC's owner-members were the tier 2 Provincial Centrals. This was important to the credit unions to exert direct control over the national body, and to remove the intervening role of the provincial bodies.

This also has a significant implication to financing: CCUA's membership is now voluntary, and therefore it must present a value proposition to credit unions to pay a member dues assessment in order to finance its budget. CCUA's budget is allocated pro-rata to credit unions based on their \$ assets to calculate each owner-member's (credit union's) dues or fees.

CCUA has a Board of 16, which will reduce to 11 on January 1, 2021. During the five-year transition period, the CEO's of the provincial/regional Centrals continue to serve as board members, until the end of 2020.

The 11 CCUA Board members are selected:

- 6 from the largest 19 credit unions, which represent 65% of the system by assets
- 3 from the 53 medium-sized credit unions, which represent 25% of the system
- 2 from the 175 smaller credit unions, which represent 10% of the system

A Nominating Committee manages and vets nominations, but the credit unions themselves elect their Board members in these three peer groups.

While each provincial and regional Central has variations in its governance, typically their Boards comprise 11 to 15 individuals, following a hybrid or mixed composition model: some board members are active member credit union directors or managers, some have financial services industry experience but are not active in credit unions, while a small number are from other sectors, selected to fill identified gaps. Examples of these gaps are consumers, technology, governance and legal expertise.

CCUA and each provincial/regional Central has a CEO, who is selected by and accountable to each Board. Staff then report to the CEO in the traditional manner.

There is no formal governance or decision-making role for a cross-functional group of CEO's or Chairs. Instead, the Chairs and CEO's of the national association, regional and provincial Centrals meet twice a year to keep one another informed of major initiatives, to coordinate efforts where helpful, and to air and address any multi-lateral opportunities or challenges. However, these do not conduct joint strategic planning or other more formal decision-making or resource allocation functions. Instead, the national body and the regional/provincial bodies work directly with their credit union members in the development of strategic initiatives and consulting on system needs and aspirations.

What? Learnings from Case

The vision was to roll all trade activities into the national body, and to limit the provincial and regional bodies to their mandated regulatory roles. This was only partly achieved in practice.

This vision is still seen by many as the ultimate aspiration or outcome, although this is being achieved in stages and not all at once, for pragmatic reasons.

The obvious lesson is that people don't want to give up doing what they have been doing, especially if this generates revenues and therefore creates jobs and scale within an entity. "Turf" battles are almost always fought on points of principle, but almost always come down to money and people.

In the credit union system, a tool to address these "turf" wars was to make the individual credit unions the owners of both the provincial and national bodies, directly. By doing this, they are empowered to make financing decisions for both tiers, bringing greater discipline to the budget process. More direct governance results in a better value proposition and better accountability, that is the premise or hypothesis.

The streamlined, delineated model is working much better both in terms of efficiency (value for money) and alignment (direct connection to owner-members by both tiers). The sense is that the better you clarify and differentiate roles, not only will needless duplication be eliminated, but better outcomes will be achieved by specializing.

One provocative question is, why would you leave association functions with provincial bodies if these can be undertaken by a national body?

And a related provocative question: shouldn't regulatory bodies focus on regulatory functions solely, to ensure scarce resources are protecting the public, and to concentrate everyone's minds?

CANADA'S DAIRY INDUSTRY ASSOCIATIONS

Why? Purpose and Context

Under Canada's supply management system, certain commodities, including dairy, are regulated by industry bodies in each province, with regulatory powers and accountabilities put in place by each provincial government. Each of these nine provincial associations also have dual mandates, and act as industry associations (Newfoundland & Labrador and the territories essentially have no dairy supply).

Because of the way Canada's dairy markets function as two main geographic markets, two regional level bodies are in place (called P4 for western Canada's four provinces, and P5 for five provinces in eastern Canada).

Finally, a national body, Dairy Farmers of Canada, provides services identified as being best delivered nationally.

Obviously, this leads to challenges on role clarity and on how to effectively govern such a multi-tiered collaborative.

Who Does What? Role Clarity

Despite having one more tier than most industries' associations, there is a fairly high degree of role clarity among these tiers:

The national body, DFC, has these roles:

- National marketing programs
- Canadian animal health (welfare, disease prevention, preparedness, response and recovery)
- Standards of identity (e.g. cheese)
- Research and publications: statisticians housed centrally

DFC has substantive relationships with Agri-Canada (AAFC), the Canadian Dairy Commission and Canadian Milk Supply Management Committee (CMSMC) that it manages on behalf of the dairy industry. In fact, the price per hectolitre of milk requires the approval of all three of DFC, CDC and CMSMC.

The P4 and P5 regional level entities are responsible for:

- Inter-provincial dairy markets / trade
- Residual supply (surplus milk distribution)
- Pricing by class

The provincial associations have dual mandates:

Supply management functions (regulatory):

- Managing the supply of milk
- Marketing: selling milk from dairy farms to processors and scheduling its transportation
- Input production
- Input pricing

And industry association roles, including (e.g. Manitoba):

- Representing the interests of dairy farmers at the provincial and national level
- Developing and implementing advertising and promotional programs for fluid milk and real cream
• Delivering nutrition and dairy agriculture education programs

How? Governance and Decision-making

Dairy farmers are the owners-members of each provincial body, such as Dairy Farmers of Manitoba for example.

As owners, the dairy farmers elect the board of each provincial body, a nine-member board of directors composed of dairy farmers in Manitoba's case.

Because of their regulated supply management role, some provincial governments vet the selection and onboarding processes of provincial board members. In some provinces, this means outlining expected competencies of board members, so that board members are not selected only based on popularity, but informed by a matrix of sought-after skills and competencies. The province does retain the right to set aside one or all board members, and this has happened in the past, typically if the province evaluates that board members are acting in the interests of the industry and not in protecting the public interest (food safety for consumers, for example).

Each provincial Chair and Vice-Chair then become the board members of P4 and P5.

At the national level, DFC is owned by the nine provincial associations. As such, DFC's board is appointed by each provincial association, based on the pro rata milk production of each province. This is a representative board selection model. Each province begins with one board member, then provinces with more milk production have more: Ontario has 3, Quebec 3, and British Columbia 2. This is intended to address the huge differences in size (stake) of these dairy markets, and their pro rata share of financing the budget.

DFC produces an annual plan which is provided to the nine provincial associations as its ownermembers.

When it comes to powers and authority, though, DFC's powers are delegated by the P4 and P5 regional bodies.

Each board selects a CEO for its entity, and each CEO hires staff in the traditional model.

What? Learnings from Case

Despite having a fairly high degree of role clarity, the governance of Canada's dairy industry is not without tensions.

Dual mandate entities almost always face a dilemma, seeking to achieve both the perception and reality of effectively acting to protect the public interest while concurrently fulfilling an advocacy role to advance the interests of the industry. Some provincial governments, led by British Columbia, are forcing industries to split these functions into two separate organizations. Others, like Ontario, are using the approach of designating a higher number of independent, or public, board members on bodies with regulated functions.

Canada's dairy industry faces other governance challenges that are also instructive for CPA's. The allocation of quota is a fundamental driver of revenue growth, and there is fierce competition for scarce increases in quota allocation. Ontario and Quebec, who together hold about 60 per cent of the dairy market, press for at least a pro rata share of quota, while western Canada presses for a greater share of quota to build processing plants, most of which are concentrated in Ontario and Quebec. This is a classic case of the "have" provinces ceding some pro rata "power" to the smaller provinces to advance

their interests. The inter-provincial tensions are resolved through negotiations, and through the P4/P5 regional and national governance bodies.

Another example is "ProAction", which is an animal health and welfare program initiated by the national body, Dairy Farmers of Canada. The vision is that every dairy farm in Canada would be part of this program, to guarantee a consistent standard of animal health and welfare from coast to coast. However, provincial bodies have elected to opt out of ProAction, which significantly diminishes its effectiveness. This is an example of a governance model where the provinces hold most of the keys or levers of power, including over the national association, so the national association cannot mandate participation in a national program to protect the public interest. The provinces that opt out are arguably protecting their members' interest over the public interest. There is no overarching governance mechanism to (1) require the provincial associations to adopt a program to protect the public interest, or to (2) mandate the adoption of a national initiative by all provinces when the provinces are the "owners" and have not delegated this power to the national body.

Marketing is another function which is provided by the national association, but which provinces can opt in or out of. Recently, Ontario pulled out of the national marketing initiative, which had a significant effect on the budget and staffing of DFC.

What can be learned here? By adopting a multi-tiered governance model, decision-making is slow. The competing economic interests of members from large, powerful provinces and smaller, developing provinces often end up in stalemates, or in compromises that protect the status quo rather than facilitating change. If innovation, change and nimbleness at a system-wide level are important outcomes than consensus, then a collaborative governance model that delineates and vests real powers in the national body would be a better choice. Conversely, if maintaining autonomy and consensus are more important outcomes, then a decentralized governance model, empowering the provincial associations and constraining the national body, would be preferable.

CANADA'S PHARMACISTS PROFESSION

Why? Purpose and Context

In Canada, the pharmacists' profession separated its regulatory and association functions years ago. This leaves professional associations that no longer have mandatory membership and associated duessetting powers; instead, they must find a way to attract members to join and pay dues.

Each province has a Pharmacists Association, and there is a national body, the Canadian Pharmacists Association (CPhA). For many years, the Canadian and provincial organizations functioned completely independently from one another; they both recruited individual members directly from the pharmacist profession.

This governance model was completely changed (effective 2014) to create a federated governance model, where the provincial associations are the owners-members of the national association.

The primary driver of this change was economic: a desire among pharmacists to streamline and specialize functions, to reduce overall dues. Unlike many other professions, pharmacists face increasing economic pressures, as disruptive competitors (on-line and corporate) threaten the rubric of the profession, while governments limit fees that they can charge, and impose higher expectations and standards on the profession.

Who Does What? Role Clarity

CPhA "helps Pharmacists and achieves our mission and vision by collaborating with our member organizations, pharmacists and key stakeholders" through:

- Speaking as the national voice for the profession
- Leading practice advancement to enable pharmacists to utilize the full extent of their knowledge and skills in providing health care
- Protecting the safety, security and integrity of the medication system through the development of and participation in medication safety and quality improvement initiatives
- Supporting pharmacists in providing medication management, health promotion and disease prevention services
- Collaborating with other health care providers and key stakeholders to optimize health outcomes for Canadians
- Being the trusted source of education, information, tools and resources to support safe and effective medication use and optimal drug therapy outcomes

For many years, CPhA used to generate significant revenues by publishing the profession's "Blue Book" and associated resources, but this revenue stream has been disrupted by other competing publications (loss of effective monopoly.)

Since the provincial associations became its owner-members, CPhA drafts a budget in support of program initiatives, and once this is approved, each province collects and remits a fee (\$25 per pharmacist professional) to CPhA.

CPhA's main initiatives include:

- Advocacy, especially on issues that are national in scope: national pharmacare and cannabis are two current "hot topics" in government relations and policy development
- Coordinating a national marketing campaign

The provincial associations retain responsibility for a wide range of functions, including:¹⁵

- Professional development programs
- Drug information
- Standards of practice
- Insurance programs
- Patient education tools
- Research and advocacy activities

Interestingly, even research and advocacy roles are included in provincial mandates, so there is an overlap or tension with the national body here. Provinces, especially the larger, better funded ones, undertake research and advocacy on issues which are not national in scope. In health care, which is largely a provincial matter, this is a wide scope for the provinces.

Driven by the need to recruit and retain professional members, the provincial associations are constantly developing new programs to bring value to members and to generate non-dues income.

How? Governance and Decision-making

Since the governance reform, CPhA's members are the 10 provincial associations and 1 faculties association (Yukon; and Students & Interns; are Associates.) Representatives of these associations make up the majority (11) of the CPhA Board of Directors, plus 4 Independent Directors are selected to fill skills gaps (e.g. legal, financial, communications, government relations & public policy).

The decision to add four independent directors, to create a hybrid board, was not easy, since the profession followed a strictly representative board model in the past, and many profession members resisted this change in a pure professional association (in other words, they see the rationale for independent board members in the regulatory bodies, but not here).

However, they were persuaded to give this a try, arguing that it is not practical to expect a pool of representatives who are both pharmacist professionals and elected leaders of their provincial bodies to generate 11 individuals with sought-after expertise and skills in disciplines that are important to governance and board effectiveness.

The pharmacist professionals are the owners-members of each provincial association. While each provincial association composes and selects its board members slightly differently, Ontario is an informative example. OPA's Board is made up of 14 directors and one observer that includes representatives from Central Ontario (Metro Toronto and Postal Code L), Eastern Ontario, Western Ontario, Northern Ontario, a Hospital representative and a Pharmacy Technician representative. Recent governance reforms at OPA reduced the board size (from 18) after it had been growing steadily over the years. A strictly representative board model was retained, however.

Pharmacists who belong to a provincial association automatically belong to CPhA as CPhA Associates. In order to access CPhA benefits, each pharmacist must register with CPhA directly.

What? Learnings from Case

One learning from this case is the complete separation of regulatory and association functions at both the provincial and national levels, eliminating any dual mandates. This has the clear advantage of bringing clarity to roles, and to ensuring that the regulatory bodies can focus their initiatives and

¹⁵ This example is for the Ontario Pharmacists Association.

resources on protecting the public interest. However, a disadvantage is that it creates associations that no longer have mandated membership and check-off (mandatory dues), requiring each to articulate a value proposition to attract and retain voluntary membership. Budgets must be developed with clear alignment to the value and benefits that members receive, and in challenging economic times, associations must cut their budgets and/or become innovative in developing non-dues revenue streams. Professional development and insurance programs are examples of these. Over time, this can lead to the "tail wagging the dog", where the non-core member programs have grown to such an extent that they are the main focus of the association and of its leadership, instead of a means of subsidizing member dues.

It is not surprising, then, that the number one tip from the interviewees here was to "listen, to be consultative at length", to identify potential success factors, then to craft and engage members in a value proposition that is essentially a unique selling proposition.

A related observation was this: that there is a tendency of professional associations to not want to collaborate with their parallel regulatory bodies, which is another disadvantage of separate mandates. By splitting the energy and momentum of professional members between two streams, the regulatory stream is missing out on the synergies possible when there is a dual mandate.

Another aspect from the pharmacists profession is where they are situated on the federative governance model spectrum. In their case, the provincial associations are essentially "all powerful": they agree on which initiatives should be allocated to the national association, they directly govern and control the national body, they effectively control its budget approval and dues collection. The national body makes its business case to the provinces, and fulfills these delegated roles.

Another governance practice choice is between a representative board and a mixed board selection model. The Canadian Pharmacists Association, after some persuading, added four independent board members to bring sought-after expertise and skills into the boardroom, otherwise dominated by members of the profession. Since the 2014 reform, CPhA has been successful in attracting high-level individuals to these board positions, but there is still an "us" vs. "them" tension in terms of whose interests and voices are being heard. Conversely, Ontario rejected a similar proposed reform, largely to remain clear on who the owners-members are, and to align control with board numbers.

It has now been five years since these governance reforms, and leaders in the profession are pressing for a review to evaluate how well these are working. Some provinces question whether CPhA is living up to its value proposition.

This reflects another governance issue that all professions' governance models face: the differentials among provinces. In the case of pharmacists, Ontario and Quebec are well funded and able to undertake the bulk of member services on their own: naturally, they question whether they could get by without a national association. Alberta and British Columbia have the critical mass to undertake a lot of activities, but are a little less skeptical of the value of a national body. Smaller provinces see the need and value of a national body much more, in fact they would like to see the national body centralize even more functions that they have difficulty delivering in terms of capacity or expertise. It is the Canadian experience again, reflected in another profession.

CANADA'S PROFESSIONAL ENGINEERS

Why? Purpose and Context

The engineering profession in Canada is distinguished by the fact that both its national and provincial associations have dual mandates: they have mandated regulatory responsibilities as well as professional association roles.

Engineers Canada is the national organization of the 12 engineering regulators that license the country's 300,000 members of the profession.

Each province then has a professional association of engineers (in some cases combined with others, e.g. geo-scientists), such as Engineers and Geoscientists BC, the Association of Professional Engineers and Geoscientists of Alberta (APEGA) and Professional Engineers Ontario (PEO).

This provides a good illustration of a profession where both tiers have dual mandate functions.

Who Does What? Role Clarity

Engineers Canada's work is focussed on 10 core purposes, as established by its owner-members, the engineering regulators:

- Accrediting undergraduate engineering programs
- Facilitating and fostering working relationships between and among the regulators
- Providing services and tools that enable the assessment of engineering qualifications, foster excellence in engineering practice and regulation, and facilitate mobility of practitioners within Canada
- Offering national programs
- Advocating to the federal government
- Actively monitoring, researching, and advising on changes and advances that impact the Canadian regulatory environment and the engineering profession
- Managing risks and opportunities associated with mobility of work and practitioners internationally
- Fostering recognition of the value and contribution of the profession to society and sparking interest in the next generation of professionals
- Promoting diversity and inclusivity in the profession that reflects Canadian society
- Protecting any word(s), mark, design, slogan, or logo, or any literary, or other work, as the case may be, pertaining to the engineering profession or to its objects

Each provincial association has parallel roles, for example, APEGA in Alberta:

- Licenses Professional Engineers and Geoscientists
- Sets practice standards
- Develops codes of conduct and ethics that govern Members and Permit Holders
- Investigates and disciplines Members and Permit Holders
- Investigates and takes action against individuals and organizations that practise our professions without licences or permits
- Investigates and takes action against individuals and organizations that use our protected titles without licences or permits
- Provides services to Members and Permit Holders to support them in their professional practices

An interesting aspect of roles is that Engineers Canada has put in place an affiliate insurance program with a private sector insurance company that provides insurance products to individual members, while generating sponsorship revenues for Engineers Canada. Over the years, this has grown to represent a substantial portion of EC's annual revenues, which then provides an important subsidy to membership fees or dues in funding its budget for national programs. After subtracting the non-dues portion of revenues from the total budget, EC then levies a per head (\$10.21) assessment which the PT's (provincial and territorial associations) then collect with their member license fees each year.

How? Governance and Decision-making

Engineers Canada has ten shareholders, the PT regulators, each of whom holds 1/10 ownership in the national body. Each of the ten gets 1 board seat on EC, then for every 20,000 registrants, each gets additional board members. This currently results in a board size of 23, plus an Adviser, who is the representative of the Chief Executive Officers' Group, a coordinating body consisting of all the PT CEO's.

EC's Board is its governing body, responsible for ensuring appropriate organizational performance by:

- Setting strategic direction for the organization that will meet the needs of the engineering regulators
- Creating written governing policies that address how the organization, and the Board itself, shall function
- Monitoring the Chief Executive Officer to ensure organizational performance
- Making decisions related to the Canadian Engineering Accreditation Board and the Canadian Engineering Qualifications Board
- Attracting and inspiring volunteers

While each province's board (or "Council") has its own composition and selection, British Columbia's Council comprises 13 members elected from the profession and 4 appointed by the provincial government. Interestingly, the President (Chair) and Vice-President (Vice-Chair) are elected directly by the profession's members at the same time as they cast on-line ballots for their profession members on the BC Board.

In Alberta's case, APEGA's Council is made up of 16 elected professional members, including a Council president, plus three appointed public members. Engineers Canada and Geoscientists Canada directors attend Council meetings but do not sit as Councillors. They are not involved in Council committee work, and they do not vote in Council meetings.

In Ontario's case, there are 17 profession members: 10 elected by geographic region, 3 at large and 4 selected as executive officers, plus 7 members appointed by the provincial government for a total of 24.

What? Learnings from Case

Despite the dual mandate nature of both tiers (PT and national), there is a high degree of role clarity. In the case of regulatory roles, that is natural given these are typically explicit in statutory and/or regulatory mandates. In the case of professional association roles, this is largely because the national body, Engineers Canada, is owned by the 10 PT's. Therefore, EC looks after the national interest of the 10 PT's. EC's roles are therefore either in a clear national mandate, or clearly agreed by the 10 PT's and delegated by them.

There are tensions among the PT's in terms of what should be allocated to the national body, and what kept by the provinces. One such tension is in the accreditation role. Some PT's seek changes to the accreditation process and would like to have more direct control over this; others are more confident

with this sensitive and important matter in the hands of EC to accredit universities across Canada and to identify the pathway for others. Larger provinces PT's don't see much of a value proposition from EC beyond accreditation; while smaller PT's would like to see more services pooled. Smaller provinces don't have enough resources to effectively regulate, and rely on EC to help with regulatory roles (e.g. out of jurisdiction accreditation).

The final allocation often comes down to empathy: to what extent are the larger provinces prepared to show empathy for the smaller provinces in pooling resources in EC and continuing to support a strong central body?

This ownership model means that the 10 PT's discipline or constrain EC's budget envelope, and by approving this at the EC Board level, the PT's effectively set or cap the assessment per engineer each year. There are pros and cons to this, vs. individual profession members owning and controlling the national association directly, but in both cases there is transparency: it is clear what portion of members' dues are being allocated to the national body, and the rationale or business case for this. In one model, the PT's make this decision nationally, in the other model, individual profession members make this decision directly for both the national and provincial tiers. This transparency leads to better accountability.

Within each province, there are tensions between dual mandates and splitting the mandates. A few years ago, Ontario tried to split the regulatory and advocacy roles into two organizations, in fact a second organization was established, but this didn't succeed. Different people give different reasons for this, but it is clear that the advocacy association had no practical ability to access member dues, and in the absence of this, and any proactive plan to move chapters and voluntary committees out of PEO, it got no traction. Clearly, a sizeable group continues to favour a dual mandate, despite both international trends and provincial government aspirations for regulatory bodies to focus entirely on protecting the public interest. To some extent, this must come down to money – to the ability of a regulator to mandate membership and to mandate dues check-off, and therefore to have access to substantial revenues that can then be allocated to activities including advocacy and advancing the profession.

As with other professions, the provincial government in British Columbia is pressing for a separate regulatory function and an end to dual mandates.

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APPENDIX: CORPORATE GOVERNANCE THEORY AND REFORM

Corporate governance is "the system by which organizations are directed and controlled". This simple, concise definition can be applied to all corporations – private, pubic and not-for-profit – where there is a separation of ownership and management. The Cadbury Committee Report (UK, 1992) provided this universal definition of corporate governance and called upon boards of directors to take responsibility for the governance of their organizations. The Cadbury Report spearheaded the era of governance reform in which boards currently operate.

Since the Cadbury Report, there have been two distinct approaches globally to promoting and ensuring effective corporate governance: a principles-based (non-prescriptive) approach enshrined in codes of practice or "guidelines" requiring companies to voluntarily comply or "explain" their non-compliance; and a rules-based (prescriptive) approach enshrined in regulation requiring companies to comply or face legal remedies for non-compliance.

The former is found in many countries around the world, and the latter, most notably in the United States (The Sarbanes-Oxley Act, 2002).

There have also been guidelines and codes developed and promulgated by various interested international associations and global institutions, namely the Organization for Economic Development (OECD), the International Finance Corporation and the UN, and the International Corporate Governance Network (ICGN) – all in an effort to promote effective global governance standards.

The OECD Principles of Corporate Guidelines (1999, revised 2004) have emerged as the global "gold standard" or benchmark, and often influence the development of national codes. They address six key areas of corporate governance:

- The structure of an effective corporate governance framework;
- The rights of shareholders and key ownership functions (including that organizations should help shareholders exercise their rights by openly and effectively communicating information and encouraging them to participate in general meetings);
- The equitable treatment of shareholders (including that board and key management disclose any material interest);
- The role of stakeholders (including that organizations have legal, contractual, social and market driven obligations to stakeholders including employees, investors, creditors, suppliers, local communities, customers and policy makers);
- Disclosure and transparency (including making public the roles and responsibilities of board and management; procedures to independently verify and safeguard the integrity of the company's financial reporting and timely disclosure of all material matters affecting the organization); and
- The responsibilities of the board (including having sufficient and relevant skills and expertise to review and challenge management performance; proper size and appropriate levels of independence and commitment to fulfil its duties; director code of conduct that promotes integrity and high ethical behaviour and responsible decision making, and access to accurate, relevant and timely information).

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By extension these principles underpin modern or "reform" models of corporate governance and have become best practices for effective corporate governance in all sectors – private, public and not-for-profit.

PRINCIPAL-AGENT GOVERNANCE

There are different models of corporate governance and "no one size fits all". Models are designed largely upon the underlying intent of the owners (principals) vis-à-vis the fundamental governance responsibilities of direction and control, and influenced by institutional frameworks, norms and expectations of the society in which the organizations operate.

Corporate governance reform, particularly in the Anglo-American system is based on "Agency theory" and the agency model of corporate governance. Briefly this model attempts to delineate clearly the roles and responsibilities of the key players – principals (owners), agents (management) and the board of directors (as the independent intermediary between the two).

The Agency model of governance focuses the board on its primary roles of direction and control/oversight, drawing a "bright" line (or balance) between its roles and those of management, and holding management accountable. It requires the board to fulfill its legal functions (fiduciary duty, duty of care and duty to be independent) and requires the directors to have the necessary competence (skills, experience, diligence) and character (independence) to do so. This is what is meant by reference to a "skills based" board.

As regards the Board of Directors' main "direction" roles, the board:

- sets the strategic direction of the corporation (mission, vision, values, objectives and strategies, performance measures);
- is actively involved in Board renewal and management succession;
- identifies and assesses the major risks facing the corporation (upsides and downsides);
- draws clear lines of authorities empowers board committees and management through delegation ("bright line") and aligns management with the purposes of the corporation and holds them accountable; and
- stewards the resources of the corporation, ensuring they are allocated wisely (risk management and budgets) and in keeping with the strategic direction.

In terms of its main "control" or oversight roles, the board:

- monitors performance (both financial and non-financial including using the right measures of success/performance, getting the right level of information at the Board and holding management accountable; having a robust audit and control system; and assessing Board and CEO performance); and,
- reports to the principals (owners) and stakeholders (continuous and periodic disclosures, open and transparent).

Management shares the responsibility for strategic leadership and stewardship with the board and is specifically responsible for *operational* leadership and management of the corporation (the "operational system") which includes, but is not limited to, financial and risk management, human resources management, marketing and product development, business development, customer and supplier relationships, and stakeholder relationships. The distinction between the governance system and the operational system is an important distinction and is essential in terms of accountability, e.g. holding management accountable for performance.

Clearly in the Agency or "reform" model of governance, the Board's mandate is underpinned:

- on the "direction" side of governance equation, by the principles of leadership (strategic direction, board renewal and management succession) and stewardship (risk governance, delegations and accountabilities, and resource allocation); and,
- on the "control" side, by the principles of monitoring and reporting.

Typically this type of Board averages eleven directors (a range of between 9 to 15 directors), and has two or three core board committees (Audit, Governance and Nominating, and/or Human Resources) populated with board members.



Figure: Reform Governance

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