



Operational Strategies
BUSINESS MODEL REVIEW
MARCH 2015



AUSTRALIAN
SEAFOOD
COOPERATIVE
RESEARCH CENTRE



FRDC
FISHERIES RESEARCH &
DEVELOPMENT CORPORATION



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Conclusions and Recommendations

SafeFish is assessing its strategic and operational strategies and structures in response to two needs: to ensure *SafeFish* has a long term future beyond funding cycles, and to fulfil a condition of the *SafeFish* funding agreement.

This report is submitted to the recently appointed independent Chair of *SafeFish*, Dr Anne Astin, and her *SafeFish* Partnership Group colleagues. The report responds to a Terms of Reference (see Appendix 1) developed by *SafeFish* to identify a preferred Business Model that reflects stakeholder investment needs, positions the partnership to create value for stakeholders, and enables its longevity.

This report provides independent interim advice regarding the Partnership Group's preferred operational model and structures over the next 3 years. This advice is based on strategic discussions with stakeholders, known work programs, and priorities currently defined. A more comprehensive and longer term strategic discussion is now required to identify and strategically focus on what seafood problems *SafeFish* is to solve. This requires stakeholders and the FRDC to jointly consider and agree the integrated risk management and strategic investment platform that is essential to guide *SafeFish* and its work program over the next 5-10 years.

Purpose

The purpose of *SafeFish* is to:

- Provide rapid technical response to maintain free and fair access to key markets; and
- Underpin the safety and hygiene of seafood sold commercially.

Report Conclusions

SafeFish's current business model has achieved its start-up objectives, but this model is not sustainable into the future. A transition is proposed to a new business model based on an expanded partnership model between Industry and Governments.

This review concludes that *SafeFish* should be primarily sponsored by the FRDC over the next three years, but remain operationally located at SARDI to optimise scientific networking and engagement, and promote the efficiency of the technical and expert Panels.

The transition of *SafeFish* to a more commercialised Business Model will occur over 3 years from 2015-16, and involve greater participation by a number of seafood sectors.

Report Recommendations

The following recommendations are made:

- Adopt a more commercial partnership business model that recognises both the commercial interests and public good contributions of *SafeFish*,
- Ask all seafood supply chain partners to contribute to funding and Panel capacity,
- Seek financial contributions based on a tiered assessment of economic risk across all seafood sectors,
- Introduction or maintain fee-for-service arrangements where appropriate,
- Actively engage with agencies on the Partnership Group but do not require their funding contribution,
- Transition to the new Business Model over 3 years from 2015-16.



1. Fundamentals

Questions about Seafood Safety

In 2007 the Australian Seafood CRC (ASCRC) considered the safety risks related to Australian seafood, for consumers here and overseas. A number of expert reviews¹ were commissioned to inform the design and development of the new seafood Market Security Program.

The reviews sought answers to some fundamental uncertainties related to the technical performance of Australian seafood and its sustained ability to access and compete on local and overseas consumer markets. These questions included:

- What are the expectations of our seafood markets and regulators?
- What are the main seafood food safety risks and how should they be managed and minimised?
- What is the capability of our fishers, technicians, managers and supply chain partners to deliver safe seafood?
- Where should investment in R&D be targeted to optimise seafood safety?
- How to achieve the best and most effective return on this investment?
- Who should implement and manage the Program, and related investments and outcomes?
- How would the investment be financed, immediately and over the long term?

Global Context

Seafood is the most globally traded human food protein, and Australia is a mid-tier exporter and importer, particularly with Asian economies. It is not surprising then, that seafood safety has become a Trade and Market Access (TMA) “given” in both the global and domestic economy.

The role of seafood safety as a driver for industry competitiveness is summarised at right. Fishing and Aquaculture Industry success and viability has always been

¹ Two papers provided the bulk of advice to the review process: Review of Technical Market Access Issues relevant to Australian Seafood Industry Members of the Australian Seafood CRC, D. Padula and A. Pointon, South Australian Research & Development Institute, October 2007, and Assessment of Infrastructure and Priority Needs for the CRC Technical Market Access Support Program, K. Shiell (VRS Pty Ltd), December 2007.

Food Safety is increasingly part of Competitive Advantage

Global context is fundamental to SafeFish's Charter and performance, in both operational effectiveness and strategic leverage terms.

From its inception SafeFish has been informed by business trends and realities.

Export markets dominate Australia's seafood supply. Export's share has fallen a little (2008 - \$1.3Bn & 59% share, to 2012 - \$1.2Bn at 52% share), but the bigger concern is how well our seafood safety regime is moving to differentiate our Industry value proposition in export markets, and drive market competitiveness. Unpacking this trend means we must first ask the question: Is SafeFish ready to lead Australia's seafood safety?

Six years after Australia switched (in 2006) from net seafood exporter to net importer (by value), imports now have a 37% lead over exports (**ABARES FishStats, 2012**), and rising. In parallel, global seafood supply chain leadership has shifted markedly from producers to consumers and their supermarket agents.

Locally our seafood export competitiveness is challenged by near-term A\$ strength (until recently), our free-trade policy settings, massive global low-cost aquaculture growth, and rising domestic demand for fish in a healthy diet.

Big changes in seafood markets, supply chains, and in supply segmentation are now reshaping consumer preferences, and therefore our food safety differentiation and investment choices. Two that are important to SafeFish include:

- Greater China now takes 53% of our edible seafood supply by value – equating to growth in China's per capita seafood demand of 6%p.a. The emerging Chinese supermarkets' food safety for high-net-worth consumer branding is critical for us.
- Modern mass media means consumers in emerging markets know about food risks (e.g. AHPNS in prawns, melamine milk contamination) and demand safe seafood.



measured by sales margins, but that increasingly means TMA and market competitiveness. So understanding global and local seafood trade and consumer trends is fundamental to local seafood enterprise performance. It is therefore core-business for *SafeFish*. Big trends underpin *SafeFish*'s role, and the choice of strategies used by stakeholders to leverage brand Australia. Our seafood suppliers must embed product safety and technical integrity as part of their competitive offer in response to these market changes, or they will become uncompetitive.

Customers and Beneficiaries

The customers for and beneficiaries of safe seafood come in many forms. Their interests can range from extreme to casual, from direct to indirect, from temporal to spatial, etc.

Global trade is driving holistic food chains to collaborate to produce safe food. But seafood safety will always require tradeoffs – customers may want zero seafood risk but will not pay for it, and so seafood suppliers will make value judgments in line with their own risk tolerance.

The critical question for *SafeFish* relates to the risks in the production-to-consumption pathway for seafood, in the hands of commercial investors.

This discussion now briefly assesses the supply chain:

- To identify the broad risks to human health from seafood and where they may arise in the supply chain (Figure 1)
- To confirm the severity of these seafood risks and that they variously arise from all fish species and all forms of seafood (Figure 2), and
- To consider where these consumer seafood risks are manifest in the investment and risk management motivations for individuals and enterprises along the seafood chain (Figure 3). This will inform us regarding the most likely beneficiaries from the services *SafeFish* should provide and who will make risk tradeoffs and equitable investment in *SafeFish*'s future.

Figure 1. Source of Seafood Supply Chain Safety Risks

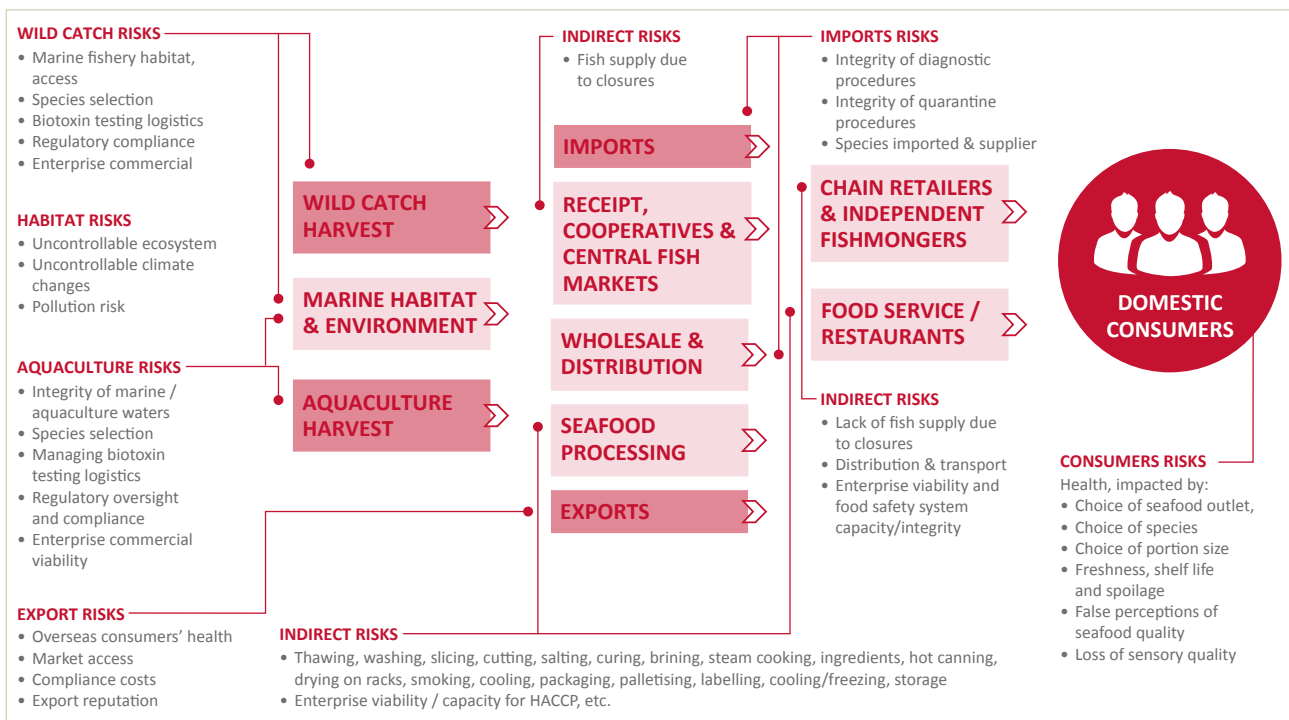


Figure 2. Key Pre-Harvest and Harvest Hazards across Finfish, Molluscs and Crustaceans

| | Finfish | Molluscs | Crustaceans |
|----------------------------------------------------------------------------|---------|----------|-------------|
| A. PRE-HARVEST & HARVEST | | | |
| Chemical | | | |
| Mercury; Arsenic (inorganic); Veterinary drug residues | | | |
| Cadmium; Lead; Pesticides, herbicides, algicides, fungicides, antioxidants | | | |
| Lead | | | |
| Wax esters; Ciguatoxins; | | | |
| Cyanotoxins | | | |
| Marine biotoxins | | | |
| Biological | | | |
| Vibrio parahaemolyticus, V. cholerae, V. vulnificus | | | |
| Histamine | | | |
| Listeria monocytogenes | | | |
| E. coli | | | |
| Salmonella | | | |
| Coagulase-positive Staphylococci | | | |
| Campylobacter | | | |
| Bacillus | | | |
| Shigella; Aeromonas; Norovirus | | | |
| Clostridium botulinum | | | |
| Parasites (nematodes, cestodes, trematodes) | | | |
| Physical | | | |
| Fish Hooks | | | |
| Shell fragments | | | |
| B. PROCESSING & PACKAGING | | | |
| Chemical | | | |
| Tin (canned seafood) | | | |
| Disinfectants, sanitisers, and lubricants | | | |
| Biological | | | |
| Listeria monocytogenes | | | |
| Clostridium botulinum | | | |
| Coagulase-positive Staphylococci | | | |
| Salmonella | | | |
| Vibrio | | | |
| Norovirus | | | |
| Hepatitis A virus | | | |
| Standard plate count | | | |
| Physical | | | |
| Metal fragments | | | |
| Hard or sharp objects | | | |

Source: Adapted from Table 2 (SARDI, 2013) Red shaded cells indicate that the Australia New Zealand Food Standards Code contains a regulatory requirement for the hazard. Orange shaded cells indicate that the hazard could potentially occur or has caused an illness in the past.

Figure 3. Seafood Supply Chain: Risks, Motivations, Collaborations and Beneficiaries

| Supply Chain | Supply Activities that Create Risk | Potential Risk and Food Safety Hazard | Parties already Active in this Seafood Safety Area | How SafeFish can Leverage this through Collaboration | Range of Beneficiaries from an Effective SafeFish |
|----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Production & Harvest | Fish containing microbiological or chemical hazards contaminated either in their habitat, by their diet or during harvest. Bivalve filter feeders are a higher food safety risk. | Variable risks arising from choice which will include Waters and habitat, Species, Preharvest and Harvest. Excessive regulation. | State, Territory and Commonwealth regulators, FSANZ, Industry bodies such as State Bivalve shellfish industry bodies, ACA, SRL, TSGA, TBOA, SFM, ABFA, Marron and Yabby Growers, etc. | Incident response network, expert working groups, promote research, into high priority hazards, promotion of risk assessment approach so that food safety regulation is effective and the cost is commensurate with risk, and trade risk is minimised. | <u>Direct:</u> Wild catch commercial fishers and aquaculture farmers. <u>Other:</u> Industry and sector bodies, suppliers (e.g. agents and ship builders, investors, insurers, fuel suppliers etc.), public health systems, through better management and reduced illness burden. |
| 2. Seafood Processing per ANZSIC Code 1120 (AFGC, 2013) | Processing /shelling /manufacture (loaf, cake, paste, pate, dried or smoked, canned) /cooking / freezing /bottling /preserving. | Hazard points (in general process order) include thawing, washing, slicing, cutting, salting, curing, brining, steam cooking, ingredients, hot canning, drying on racks, smoking, cooling, packaging, palletising, labelling, cooling /freezing, storage. | State, Territory and Commonwealth regulators, FSANZ, TSGA, Large processors (e.g. De Costi, Kalls Brothers, Raptis, Angelakis, and Muirs), Abalone processors, bivalve industry, QA managers for processing businesses, and Coles, Woolworths, Aldi, etc. | Promote research into high priority hazards, and provide information on risk reduction. Input into the development of domestic and international standards. | <u>Direct:</u> Seafood receivers / processors, seafood manufacturers, co-product / byproduct processors, and seafood waste managers. <u>Other:</u> Food processing and manufacturing peak bodies. |
| 3. Transport, Storage & Packing | Management of product integrity in storage and transit, over time and temperature, and risk of cross contamination | Loss of direct supply (and consequential loss of reputation and returns) due to failure of chain integrity. | UTAS, Curtin University, SARDI, other university and state government agencies. | Work with selected stakeholders nationally to improve seafood safety along supply and distribution channels. | <u>Direct:</u> logistics / transport / storage companies reliant on seafood flows. <u>Other:</u> Testing laboratories / companies. |
| 4. Wholesale and Trade 2012-13 | Imports: Live, fresh, frozen and processed seafood accounted for \$1.428 Bn. Exports: Live, fresh, frozen and processed seafood accounted for \$1.002 Bn. | Loss of direct supply (and consequential loss of reputation and returns) due to failure of chain integrity. Imported product contaminated or incorrectly labelled product, or product not used in accordance with label. | DoA, SFM, MFM, Seafood Importers Association, QA managers, other seafood wholesalers and major retailers. | Work with trade stakeholders to target major risk points in the trade chain. Input into the development of domestic and international standards to reduce trade risk. | Direct beneficiaries include Seafood Wholesalers / Central Markets, Seafood Trade and Export/Import Associations. Other beneficiaries may include broader food merchandising and trade operators. |
| 5. Food service / retail | Receipt, storage, preparation, presentation and service of seafood to consumers. | Loss of direct supply (and consequential loss of reputation and returns) due to failure of chain integrity. | Supermarkets, local government, fish mongers and State regulators . | Identification of priority hazards and consumer perceptions. | Indirect beneficiaries include seafood restaurants, fishmongers, supermarkets and retailers, take away outlets and other food service establishments. |
| 6. Consumers | Transport and storage. | Unsafe seafood consumption. | Government health agencies maintain an overall responsibility for public food safety. | Education, identification of consumer priority issues. | Direct beneficiaries include seafood consumers. |
| 7. Government Agencies | Domestic & Export: – standard development, certification, changes in policy, policy implementation, risk assessment, and risk management. | Delivery of and public trust in seafood health surveillance and management regimes. # There are two levels of seafood safety risk that need to be integrated into the SafeFish strategy – food safety and market access risk. | State and Commonwealth government agencies. | Identification of priority hazards. Generate risk commensurate standards, both domestic and international to address food safety concerns and trade risks. | Beneficiaries include government agencies, Animal Health agencies, APVMA, seafood trade and export/import associations, etc. |

Seafood export traceback and provenance are emerging global issues. This is currently topical regarding the EU's Sustainability Policy and compliance with fishing methods. These issues will continue to create non-tariff trade barriers for Australian seafood trade, but are not core business for SafeFish.



Seafood Production to Consumption Risks

Where do the major food safety risks arise in the seafood business?

This report (SARDI 2013) updates the work presented in earlier studies, including the development of a comprehensive “Primary Production & Processing Standard for Seafood”, tabled by FSANZ in 2005.

The following figure summarises the collaborations, motivations and beneficiaries along the seafood supply chain. It seeks answers to four questions: who are active parties; what are they doing; what are the gaps that exist; and should **SafeFish** be involved in specific activities?

Risk Tradeoff – Driven by Risk Appetite and Tolerance

Commercial seafood enterprises from harvest to consumption, make judgments and related decisions about which risks they face, and if/how they can mitigate these at least cost. In an increasingly risk sensitive global food market-place the seafood supply chain will face increasing local and global risks and related regulatory scrutiny. Global supermarket chains have become champions of food integrity and embedded food integrity as part of their direct competitive advantage offer to consumers, and indirect environmental offer via NGOs. For an export intensive seafood producer such as Australia, it is in our best interests (for social, trade and commercial reasons) to brand Australian seafood with very high credence attributes, including seafood safety.

Commercial seafood operators and investors have been the beneficiaries of the public investment (by the SCRC and FRDC) in **SafeFish** up to 2014. This public investment option is no longer available - this brief requires that commercial operators and investors increase their contribution to risk mitigation related to seafood and specifically to the viability of **SafeFish**.

Beneficiaries will adopt a private/corporate risk appetite and tolerance which will dictate if/how each seeks to avoid/minimize the rising costs associated with seafood safety, and transfers part or all of these to competitors, public investors, or a non-compliance basket. The option for co-investment in **SafeFish** therefore enables a cheaper



Risk Appetite vs Risk Tolerance

Risk Appetite

Risk Appetite is the amount of risk exposure (or potential adverse impact from an event) that a business is willing to accept/retain to meet its objectives. This is based on stakeholder expectations, organisational strategy and mission, organisational capabilities such as skills and technologies, risk culture of the board and executives, the market and the competitive environment that the business operates in.

Risk Tolerance

Risk Tolerance is a business's readiness to bear the risk, after risk treatment, in order to achieve its objectives.

collaborative investment scenario to resolve risks. The preferred business model is the one that will optimise and motivate this collaborative investment scenario for the bulk of beneficiaries while mitigating the intolerable core seafood safety risks.

What the Risk – Beneficiary Supply Chain Tells Us

From this summary of seafood supply risks and beneficiaries, and the three figures above, it is clear that:

- Risks associated with consumption of unsafe seafood make it life threatening,
- Seafood safety is a global issue, more so for Australia as an intensive seafood trader. The Australian economy and seafood supply industry have much to gain from maintaining a best practice seafood safety regime, and related trade reputation for brand Australia. This includes the development of Risk Commensurate Standards.
- Seafood safety risks arise at all points along the seafood harvest and supply chain and therefore impact all chain activities and investors. Investors at the harvest point in the chain have least opportunity to trade-off the consumption risks associated with unsafe seafood.
- Seafood safety risks arise from all commercial seafood species, but especially at harvest from bivalve molluscs.
- Reputation and brand risk exists when illness or non-compliance with food safety regulation occurs. Experience shows that market access can be impacted significantly.
- All domestic and trade consumers and supply chain parties will benefit from investments in a supply chain that creates and delivers safe seafood. The primary beneficiaries from such an investment are those individuals, businesses and investors who harvest and complete first stage processing of seafood products, and others down-chain whose business model is predominantly reliant on safe seafood supply flows, both real and perceived.



Feedback from Industry

“SafeFish has been immensely useful to SFM by providing much needed knowledge and research into a wide range of topics informing the QA side of our business. The industry need for SafeFish is very clear: it delivers strong near-market research and protects Australia’s export and domestic seafood industries through negotiations and input into international standards. SafeFish gains are achieved through a unique collaboration that brings industry researchers and regulators together, maximising outcomes.”

Mark Boulter, Risk and Compliance Manager, Sydney Fish Markets

“Since the development of SafeFish in 2010, the high level of quality technical support provided to the department regarding seafood issues has been instrumental in driving international market access success.”

Lynda Hayden,
Director, Food & Animal
By-products Market Access,
Dept. of Agriculture

2. Current SafeFish Business Model

Current Status

SafeFish was established and fully funded by the ASCRC in 2010 as the national response to fundamental seafood risks and uncertainties at that time. This motivation to create and deliver safe seafood has not diminished, and will become more important to consumers.

The ASCRC estimates the benefit/cost ratio for investment in *SafeFish* is 11 to 1 with benefits accruing far wider than just to the commercial investors. Ensuring the safety of seafood and sustaining access to markets provides significant public benefit.

In the four years since its inception, *SafeFish* has consolidated its position as the national leader in seafood safety, and commissioned a large volume of work² to the benefit of industry and seafood consumers. *SafeFish* was and remains a “partnership of seafood experts” operating as unincorporated working partnership of industry, agencies, and industry sector interests.

But markets (be it consumer food, investment, regulatory, technology, etc.) are dynamic, in response to global and local economic conditions, consumer trends, and political and regulatory changes. This means that choices about the key elements of the business model will also need to be reassessed over time to ensure the best business model operates at all times to cost-effectively resolve the fundamental risks and issues faced by seafood stakeholders.

As *SafeFish* transitions to a new business model, SARDI’s technical food safety team will continue to manage *SafeFish* day-to-day. Governance will be provided by an expanded Partnership Group which currently includes industry peak bodies such as the Seafood Trade Advisory Group and the Australian Shellfish Quality Assurance Advisory Committee, as well as the Commonwealth Department of Agriculture (DoA), FSANZ, FRDC, and the Seafood CRC. The *SafeFish* national and international technical and scientific expertise networks will also be further developed to ensure that scientific advice provided to industry and regulators is the best available.

How *SafeFish* Creates Value

Managing seafood safety is a challenge – across multiple aquatic environments, species, sectors, harvest procedures, jurisdictions, supply chains, product formats and markets. The need to protect the public, including the safety of recreational and customary fishers, and ensure governments are fully informed, complicates this task even further.

In many cases, the basic knowledge of seafood food safety risks required to underpin appropriate risk management is lean. Furthermore, industries and risk managers have limited resources. By working collaboratively across sectors, and with regulators and researchers, we can leverage the knowledge and resources available and maximise the gains from doing so.

Since its start-up in 2010 the *SafeFish* team has identified many of the core matters the organisation must focus on – engagement and collaboration, risk identification, technical input and advice, investment in research, and facilitation – as well as the processes required to build research and human capacity and leverage these into capabilities that create safer seafood. This task is evolving – it is a work-in-progress business model that the team will actively use to position the organisation to create value for stakeholders.

The collaborative approach has resulted in a significant body of research being conducted on high priority issues. The research has been able to inform *SafeFish* technical advice, improving the quality of

² Refer *SafeFish* Annual Report 2012-13, sections Reports (Tab 3), Technical Codex Briefs (Tab 4), and Meetings, Conferences, Workshops and Presentations (Tab 5).

this advice and having positive impact on international standard development, resolution of trade and market access issues, and food safety incident management. The value of the *SafeFish* model is that the collaborative approach encourages the research outputs to be directly converted to outcomes with benefit for industry and regulators alike. This then encourages more input into the collaborative process.

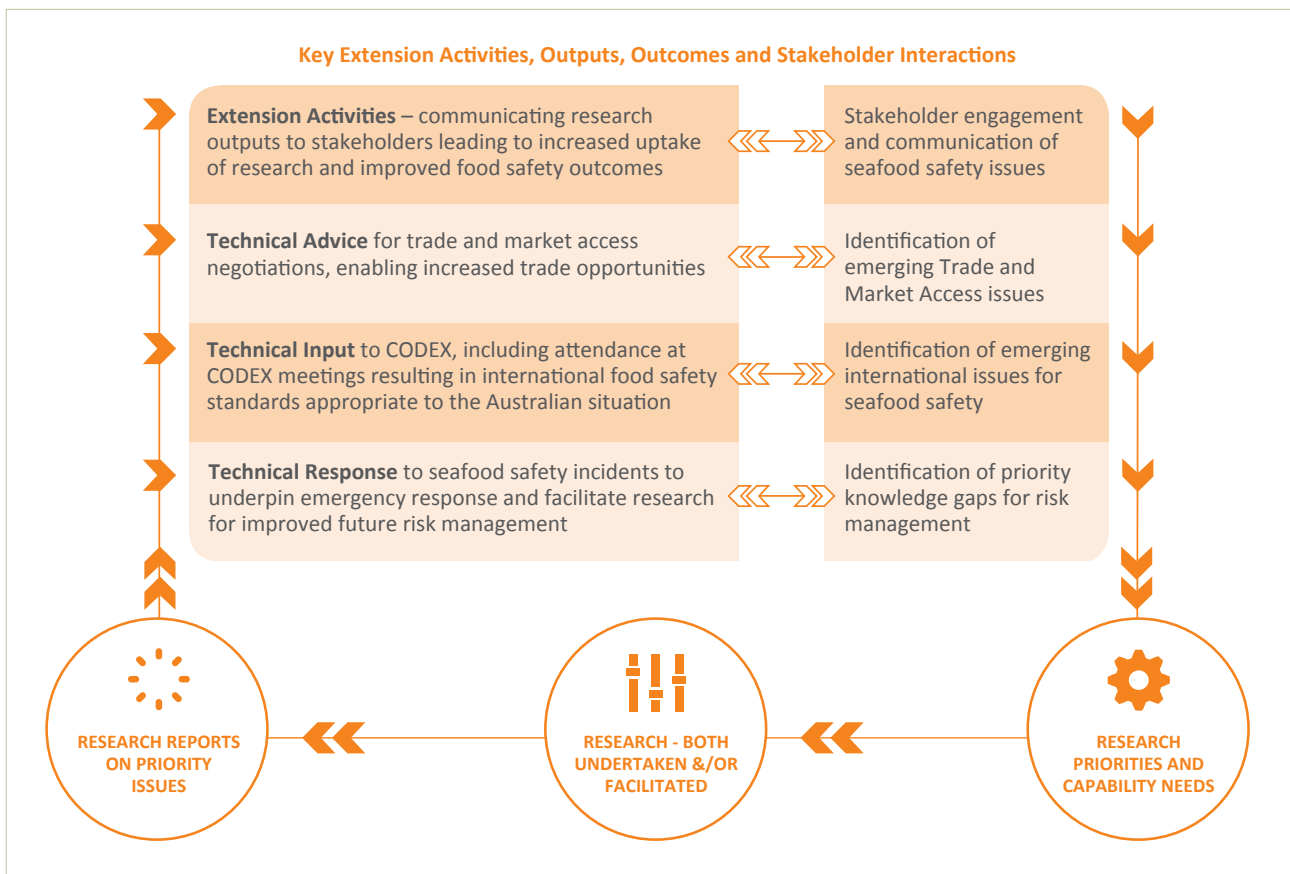
The success of *SafeFish* is (and will continue to) emerge via an iterative process that generates synergistic benefits from engagement, research and collaboration. Tomorrow's capability to create safe seafood depends heavily on collaboration today to prioritise and invest in research that targets current issues, and then goes beyond these R&D outputs to facilitate uptake and reveal new innovative ideas. The *SafeFish* Mission is grounded in attracting resources that will build shared capacity and capability over time.

Figure 4 illustrates the elements and synergist process that *SafeFish* is creating to build value for its stakeholders.

The figure summarises how impacts are created, as follows:

- Extension Activities such as industry fact sheets, workshops, masterclasses and expert working groups,
- Technical Advice for trade and market access negotiations, for example, assisting in the re-opening of the European abalone export market by providing an information package on the results of research into marine biotoxins in abalone,
- Technical Input to CODEX through direct representation at Codex meetings, collating and adding to industry input prior to meetings and during out-of-session working groups, convening technical and

Figure 4. *SafeFish* Process to Create Value



expert working groups, facilitating additional research to fill knowledge gaps where necessary, and providing the Government diplomatic representative with a comprehensive technical dossier on issues arising at the upcoming meetings,

- Technical Response to food safety incidents involving seafood ranging from distribution of fact sheets to support of risk management and facilitation of research. Examples of past involvement include marine biotoxins in a range of seafoods, norovirus in oysters, scombroid fish poisoning, Hepatitis A in food.

Where is Change Coming From?

While the fundamental need for a national safe seafood approach has not changed, the service offer and delivery channels employed to key stakeholders will change. Some of the drivers for these arising needs are:

1. Emerging issues that have been identified through recent processes, including:
 - Pathogens that are advantaged by the new packaging formats,
 - Contamination from novel packaging materials, and
 - PCBs, PAHs, dioxins, pesticide and antibiotic residues.

2. Climate change will likely see an increase in Vibrios (associated with warmer waters) and shifts and potential increases in marine biotoxins, in particular Ciguatoxins as there is potentially more damage to reef systems, and a southern movement of the causative organism, Cyanotoxins in seafood (from blue-green algae).

3. Traceability and integrity – international regulations are increasing in the area of food traceability and integrity throughout the whole supply chain and companies are looking for ways and means to distinguish and prove provenance.

A detailed study by *SafeFish* in 2014 (SARDI, 2014) has recently documented a number of potential food safety and market access issues raised by the *SafeFish* partnership members and the Seafood Access Forum, since 2011. The report created

Figure 5. Sectoral Balancing and Implications for *SafeFish*

| | | ← NO | Is Issue or Risk Common Across Industry Sectors? | YES → |
|----------------------------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Size of Industry or Sector | SMALL | <ul style="list-style-type: none"> • Need for <i>SafeFish</i> to work with small sectors to lead risk assessment, guide industry investment, and provide commensurate support | | <ul style="list-style-type: none"> • Need for <i>SafeFish</i> to boost collaboration and provide capacity to assist many small sectors facing common risks • Opportunity for <i>SafeFish</i> to facilitate joint cost-effective risk management strategy |
| | | | <i>SafeFish</i> to also: <ul style="list-style-type: none"> • Lead • Collaborate • Act as clearing house • Build capacity • Communicate | |
| | LARGE | <ul style="list-style-type: none"> • Opportunity for <i>SafeFish</i> to work with large sectors to support risk assessment and leverage support | | <ul style="list-style-type: none"> • Opportunity for <i>SafeFish</i> to facilitate collaborative risk assessment and encourage support activities across large sectors facing common risks |



a priority listing of issues and risk ranking of hazards affecting Australian seafood, both seafood captured or grown in Australian waters and imported seafood. The ranking (based on risk severity and likelihood) was and is intended to assist **SafeFish** and its partners to allocate investment funds to a future Work Program for **SafeFish**. One element of this study is to consider whether the work program proposed is what is required moving forward, following the structure of the Program established by **SafeFish** under the SCRC. The Work Program options and rankings are summarised in Figure 7 and discussed in more detail below.

Sectoral Investment Implications

Prior to consideration of a work program, it is important to reflect on risk management approaches involving both issues and sectors.

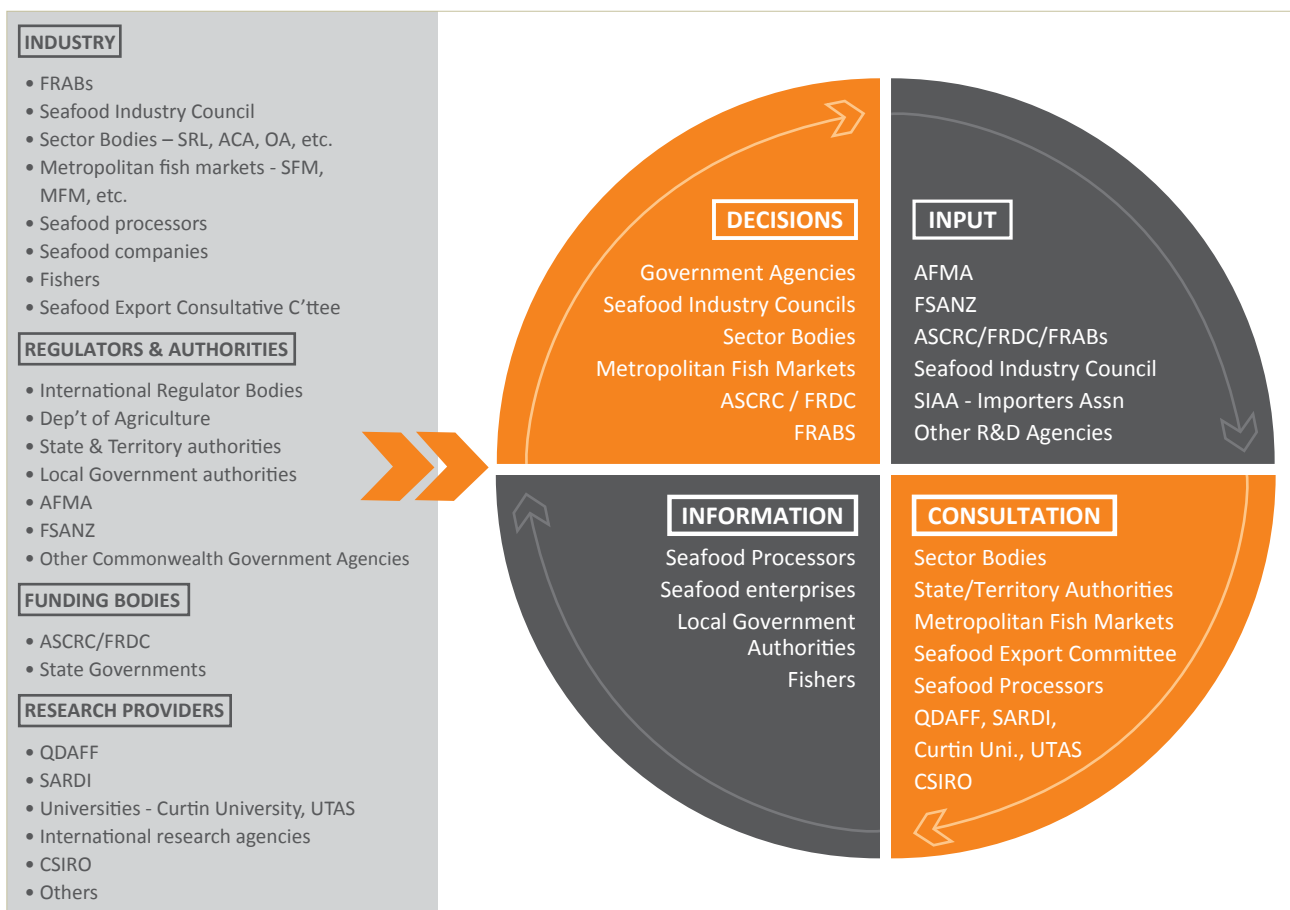
Seafood sectors are fundamental to the management of seafood safety. Sectors enable us to segment, conceptualise, quantify, communicate, and manage risks and returns across the seafood industry by species, geographic

location, type of production activity or harvest method, or supply chain function. It follows that any approach chosen to manage seafood safety must understand, engage with and respond to sectoral needs and concerns.

The **SafeFish** approach to seafood risk management integrates both a sectoral strategy and an issues based strategy, to managing seafood safety risks on a national scale across large and small sectors.

Why is this important? Efficient, timely and cost effective resolution and/or mitigation of seafood safety risks to industry and consumers saves scarce resources, and may

Figure 6. SafeFish Stakeholder Engagement



save lives. For some seafood risks, a sectoral strategy will deliver the best results sooner, and in others an issues based strategy will be best. In all cases close and ongoing collaboration with industry sectors, risk managers, regulators and investors is critical. Achieving the right strategic balance between these sectoral V issue extremes is a critical and unique role that *SafeFish* plays on behalf of all Australian stakeholders. In the Fisheries and Aquaculture Industry this challenge is further complicated by the need to protect non-seafood marine resource users – recreational and customary fishers.

Figure 5 presents a simplified illustration of the sectoral strategy approach that *SafeFish* employs.

Current Stakeholders of *SafeFish*

Figure 6 lists the current *SafeFish* stakeholders and their relevant engagement in related *SafeFish* processes.

Work Program

SafeFish provides technical advice to support the resolution of issues and challenges relating to the export, import and domestic trade of Australian seafood products. The *SafeFish* Work Program addresses priority food safety issues through a process coordinated by the Secretariat every 12 to 18 months that entails the following:

- An independent risk ranking of issues identified and their impact (nature and quantum) on trade,
- Liaison (Secretariat, Technical and Industry Expert) to scope the issue and establish whether it is feasible that technical input could assist in resolution of the problem,
- Secretariat shortlisting issues that could be addressed by technical work,
- A workshop of key stakeholders to discuss short listed issues and Work Program priorities.

Following the prioritisation workshop, *SafeFish* will generate a technical research program containing the food safety issues to be resolved and the technical advice required.

Figure 7 identifies emerging issues to be considered for the *SafeFish* Work Program 2015-16. At the heart of these emerging issues, *SafeFish* needs a business model that embraces two new outcomes:

- **Need for innovation** in the program. *SafeFish* covers three main risk areas: Public Good + Industry nominated risk areas + Fee for Service activities. The *SafeFish* Business Model must evolve to actively position the organisation to address these three areas, as well as:

- be pro-innovation,
- be flexible, to the extent that innovation may be simply adopting existing science/technology/process from elsewhere,
- integrate and leverage the pipeline of Seafood Safety R&D that has been established/is underway.

Such Innovation must be directly linked to a defined output/outcome and have real value to end-users in industry or government.

- How **Outputs** will be better defined. The FRDC, as primary sponsor and investor, requires *SafeFish* outputs to be better defined, and to be of value for a specific use (e.g. as input to DoA /Codex meetings, or in response to an incident or risk, etc.) The Corporation also requests that *SafeFish* consider options to link specific outputs to elements of a *SafeFish* Communication strategy.

The *SafeFish* Secretariat works collaboratively with industry, government and science providers to secure resources to support the progression of short listed high priority issues through the technical work programme.

Figure 7. SafeFish Research Work Program: Complete, Underway and Future

Various project activities have been undertaken collaboratively performed, and or outsourced by **SafeFish** to date. Services have been provided on a Fee-for-Service basis by both private and public sector suppliers.

| | 2008-2013 Program | Program Underway 2014-15 | EMERGING ISSUES |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Risk ranking | <ul style="list-style-type: none"> Report in Hazards in Seafood 2011 | <ul style="list-style-type: none"> Report in Hazards in Seafood 2014 | |
| Heavy Metals | <ul style="list-style-type: none"> Report completed: Mercury in Australia Seafood: An Exposure Assessment | <ul style="list-style-type: none"> An exposure assessment in arsenic in bivalves Transfer of Mercury report into publishable form and an industry ready summary document. | <ul style="list-style-type: none"> National project to verify aspects of SFM ciguatera management strategies/ proof testing screening technique Traceability of products along seafood chains |
| Ciguatoxins | <ul style="list-style-type: none"> Ciguatoxins in Finfish Program incomplete Sampling program designed Project proposal developed Funding source not yet defined | | <ul style="list-style-type: none"> Residue testing programs such as Antibiotics in imported aquaculture, EU market access |
| Other marine biotoxins | | <ul style="list-style-type: none"> Consumption patterns of abalone and rock lobster in China A review of marine biotoxin regulation in Australia, and submission to FSANZ | <ul style="list-style-type: none"> Prevalence of antibiotic resistant microbes Contaminants from new forms of packaging |
| Viruses | <ul style="list-style-type: none"> Viruses in Bivalve Shellfish. Report completed: Improving management of risk of human enteric viruses in shellfish at harvest | | <ul style="list-style-type: none"> Novel diagnostics for pathogens and contaminants |
| Parasites | <ul style="list-style-type: none"> Parasites in Finfish. Report completed: A semiquantitative risk assessment of harmful parasites in Australian Finfish | | <ul style="list-style-type: none"> Listeria in ready-to-eat seafood |
| Vibrios | <ul style="list-style-type: none"> Vibrios in Bivalve Shellfish. Project proposal developed and submitted to FRDC. Not funded. | | <ul style="list-style-type: none"> Clostridium (botulinum) in packaged seafood |
| Cyclic Imines | <ul style="list-style-type: none"> Cyclic Imines in Bivalve Shellfish – not completed | | <ul style="list-style-type: none"> Safety risk and management of clear smoke technologies. |
| Additional work externally funded | <ul style="list-style-type: none"> A risk assessment of sulphites in Australian canned abalone (2011) A report on food safety risks associated with prawns consumed in Australia (2011) An exposure assessment on Marine Biotoxins in Rock Lobster (2012) A review of the non-compliance biotoxin event in Tasmania (2103) Paralytic Shellfish Toxins in abalone: improved management strategies (2014) A risk assessment of marine biotoxins in abalone (2014) Establishment of the Market Access Database (now hosted by FRDC) which provides on line easy access to the trade requirements of key export destinations for Australian seafood Super-seafood: Nutritional compositional profiles of Australian seafood to support dietary guidelines and marketing (2013) Exposure assessment for cadmium in prawns (2014) Improved strategies for examining Vibrio spp in prawns(2014) A guide to the Identification of Food Safety Hazards and Determination of Shelf-Life of packaged Seafood. | | <ul style="list-style-type: none"> Nutrition Health Star Ratings in the seafood industry Additional marine biotoxin risk management options. |

Building on the discussion above, Figure 8 teases out the Work Program priorities.



Figure 8. Priorities for *SafeFish* Work Program – Current and 5 Years Ahead

| Hazard | Findings and Recommendations (drawn directly from the report) | Priority |
|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Mercury | <ul style="list-style-type: none"> FSANZ review their current advice, with a view to aligning with the NZ approach. <i>SafeFish</i>, in association with or by application to FSANZ, should implement a detailed review of current regulatory stances towards seafood consumption and Hg intake. 5 Year Context: Submission made to FSANZ in 2014. FSANZ will incorporate into 2015 work plan. Completion likely 2016. | High |
| Ciguatera | <ul style="list-style-type: none"> <i>SafeFish</i> promotes a national approach to research and risk management in this area. This should involve enhanced testing to validate both known and unknown 'hot spots' as waters continue their southerly warming, as well as verification of the size and species limits contained in the SFM management strategy. <i>SafeFish</i> should keep track of international developments, take opportunities to work with other countries in the Pacific region and be involved in development of consumer advice and promotion of awareness through recreational fisher groups. 5 Year Context: Scheduled pilot study in 2015/2016. Ongoing work required in this area well into future | High |
| Screening test kits for marine biotoxins to reduce business risk | <ul style="list-style-type: none"> In the UK, the Food Safety Authority is currently reviewing commercially-available kits. <i>SafeFish</i> will liaise with the FSA and inform them of the findings identified from work scheduled to take place in Tasmania in August, 2014. Based on these studies it is recommended that <i>SafeFish</i> work in conjunction with ASQAAC and other stakeholders to resolve the range of issues needed before test kits can be used both for on-farm screening and for regulatory purposes. 5 Year Context: High priority topic, <i>SafeFish</i> work starting in 2015 to set up validation database, continuing work for at least 5 years to maintain and verify screening techniques. Promotion of screening techniques for Ciguatoxin also high priority. | High |
| Sulphites in canned abalone | <ul style="list-style-type: none"> In order to conduct robust and accurate risk assessments around food safety issues it is recommended that data gaps be eliminated re The proportion of the EU and Chinese populations that consume abalone, The abalone tissues consumed by EU and Chinese populations, Serving sizes of abalone in the EU or China, and Frequency of abalone consumption by EU or Chinese consumers. Given differences in preparation and use of products in Australia compared with other export markets such as China and Hong Kong there is a need to also identify this information for different target markets. 5 Year Context: Research project in 2014 to examine consumption rates. Could then be used to update sulphite risk assessment in 2015. | High |
| Marine biotoxin in non-traditional vectors | <ul style="list-style-type: none"> <i>SafeFish</i> should keep abreast of international developments in this area, as well as concurrent national work on Cyanotoxins and Ciguatoxins. The Australian Marine Biotoxin Partnership that was pulled together by <i>SafeFish</i> to encourage a marine biotoxin analytical laboratory capability in Australia should be further developed to address these national issues in a collaborative manner, involving all stakeholders. 5 Year Context: AMBP was convened as an expert working group in 2014. Currently <i>SafeFish</i> is seeking an appropriate organization to take on the running of this network. | High |
| Arsenic | <ul style="list-style-type: none"> Further investigation be undertaken to determine whether high inorganic Arsenic in (28/30; 92%) samples of Queensland scallops are a representative sample 5 Year Context: Identified through current work. Future work needs to be planned with relevant state authorities and funding found. | Medium |
| Norovirus & Hepatitis A Virus in bivalves | <ul style="list-style-type: none"> <i>SafeFish</i> should keep abreast of the international debate currently occurring around potential regulations for norovirus and hepatitis A virus in oysters. Once finalised the viral survey should inform discussions in Australia around the appropriate level of risk management require. 5 Year Context: Norovirus and Hepatitis A virus are ongoing risks and policy is continuing developing internationally around these. The survey for viruses in shellfish will be completed in 2015 which will better inform the Australian position. | Medium |
| Clostridium botulinum in long-term stored products | <ul style="list-style-type: none"> A survey be undertaken to identify at-risk products, both imported and domestically-produced currently in the Australian market. The survey should determine processing details for each product type. Based on the foregoing a risk assessment be undertaken of seafood products at risk of C. botulinum growth and toxin formation under the market conditions. 5 Year Context: Risk of C. botulinum increases with the increased uptake of packaging formats. Currently unfunded work. | Low to medium |
| Listeria in ready-to-eat foods | <ul style="list-style-type: none"> <i>SafeFish</i> maintain a watching brief 5 Year Context: New legislation brought in during 2014. Likely to continue to be an issue for several years. | Low to medium |
| Cyanotoxins in seafood | <ul style="list-style-type: none"> <i>SafeFish</i> follow up with the Victorian Department of Health to adduce whether there is a prospect of their enforcement, and how this may be managed. <i>SafeFish</i> should also keep abreast of the results of the current FRDC project on the accumulation of Cyanotoxins in seafood. 5 Year Context: Emerging issue for seafood, prompting effort in traceability of seafood. Cyanotoxin research project to be completed in 2014 – <i>SafeFish</i> to keep ongoing monitoring of the issue internationally. | Low to medium |
| Allergens in seafood | <ul style="list-style-type: none"> Maintain a watching brief through Codex, EFSA and OzFoodNet on developments in regulation and control of allergens. It is noted that EFSA have recently undertaken an expert opinion on allergens for labelling purposes (EFSA, 2014). 5 Year Context: Ongoing low priority | Low |
| Parasites in seafood | <ul style="list-style-type: none"> <i>SafeFish</i> maintain a watching brief 5 Year Context: Ongoing, low priority | Low |
| Histamine uncertainty factor in seafood | <ul style="list-style-type: none"> <i>SafeFish</i> convene a panel comprising regulators, scientists and industry experts to provide input to the CCFFP process. 5 Year Context: Completed 2014 | Completed |



SafeFish as a Positive Credence Expert

Is there an additional emerging, relevant and viable advocacy role for **SafeFish** as an expert voice and opinion leader for safe seafood consumption?

Our brief review of the long-established Meat, Horticulture and Dairy models (see Figure 11), demonstrates opportunity and need to actively endorse the food safety credentials of the target food supply chain. As a critical transitional step in **SafeFish**'s evolution, it is appropriate to consider briefly now, what role **SafeFish** may define and move towards over the next five years.

Discussion with staff in the respective meat, and seafood units confirms that, more and more, the food safety message is not only risk management but risk-benefit management. In the case of **SafeFish** this could be, for example, in managing positive professional scientific advice regarding mercury in seafood. And if there is to be a broader and larger role for **SafeFish** (to be determined by the **SafeFish** Board), then what additional skills and resources are required to manage the message, and how will those resources be secured and available to **SafeFish**?

SafeFish will never, nor should it, become the Marketing Department for the seafood industry. However there is real potential for **SafeFish**'s role over the next 20 years to expand regarding risk benefit management, telling the story about how risk is managed. There are budget implications from such an expanded role – both SafeMeat and the dairy food safety programs retain/access staff in Meat and Livestock Australia (MLA), and Dairy Australia (DA), respectively, which enable and underpin their credentials with Codex, agencies, markets, and stakeholders. In MLA's case these additional staff costs are not included in the ~\$200,000 that the SafeMeat Secretariat receives each year. One estimate given for **SafeFish** to achieve a similar level of capacity as SafeMeat, is in the order of \$1.5-2 million/year. The question of independence of the advice then becomes important.

SafeMeat employs a small secretariat located at DoA in Canberra, with funding and strategy driven totally by industry. The Dairy Australia model is corporatised and "virtual", and also directly funded by industry, with the national dairy safe-food partners only meeting on an as

needs basis. Both the red meat and dairy food supply chains are "cultured" production systems and supply chains dominated by corporate investors/processors. In contrast the Australian seafood sector has an undeveloped corporate processing sector (unlike New Zealand for example) and the wild resource is shared with other users who also face food safety risks (Recreational and Customary Fishers). The top line strategic purpose and direction for **SafeFish** must therefore be informed and guided by advice from the Seafood Industry and the FRDC.

The level of in-kind industry advice and scientific skills is also a business model issue. If **SafeFish** had to pay commercial rates for this advice (that is subsequently used to service Codex, general enquiries, building research applications, etc.) the business models would be unsustainable financially. The DA model avoids this in-kind pricing issue, as the front line responsibility for managing dairy food risk sits within commercial relationships between the dairy processors and farmers - DA only gets involved when dairy food safety issues go beyond an entity or single transaction and become industry food safety issues.

Current SafeFish Business Model

In this context the following discussion summarises **SafeFish**'s Model (Figure 9), then presents a critique of the current status of the **SafeFish** Business Model (Figure 10), and finally summarises alternate industry models for Red Meat, Dairy and Horticulture (Figure 11).

Figure 9. Current Business Model Elements

| Element | Current Status |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Vision & Purpose | <p>Vision: <i>SafeFish</i> as a partnership of seafood experts will assist the industry to address technical trade impediments, especially in relation to food safety and hygiene.</p> <p>Purpose: The purpose of <i>SafeFish</i> is to:</p> <ol style="list-style-type: none"> 1. Provide rapid technical response to maintain free and fair access to key markets 2. Underpin the safety and integrity of seafood sold commercially |
| 2. Structure | <p><i>SafeFish</i> is an unincorporated working partnership of seafood safety interests. It comprises four elements:</p> <ol style="list-style-type: none"> 1. Partnership Members, with current representatives: <ul style="list-style-type: none"> • Elected Chair of <i>SafeFish</i> (Dr Anne Astin, the first independent chair to be appointed) • Representative, Food Division, Federal Dep't of Agriculture (Ms Lynda Hayden) • Market Manager, Australian Seafood CRC (Ms Jayne Gallagher) • Executive Director, FRDC (Dr Patrick Hone / Mr Peter Horvat) • Chief Scientist, Food Standards Australia and New Zealand (FSANZ) (Mr Glenn Stanley / Ms Marion Healey) • Chair of Australian Shellfish Quality Assurance Advisory Committee (ASQAAC) (Mr Clinton Wilkinson) • <i>SafeFish</i> Program Manager (Ms Alison Turnbull) • Seafood New Zealand (Mr Alistair McFarlane) – currently an observer • Sydney Fish Market (Mr Mark Boulter) • Dover Fisheries (Mr Spiro Markantonakis representing Seafood Trade and Advisory Group) • Seafood Importers Ass's (Mr Norm Grant) 2. A Technical Experts Pool that provides scientific advice to the Secretariat to resolve technical barriers to trade and assist in providing input into the development of Codex standards. The experts hold advanced knowledge and skills in relevant disciplines. 3. An Industry Experts Pool that provides advice to the Secretariat regarding industry perspectives, and practical implementation advice to technical barriers to trade and Codex standards under development. The Pool consists of experts from each of the "key seafood industry sectors" in addition to other representatives with industry experience. 4. A Secretariat (Ms Natalie Dowsett) |
| 3. Offer | <p><i>SafeFish</i> offers nine core services to customers (initially listed as functions in the <i>SafeFish</i> Governance Document 2012-13):</p> <ol style="list-style-type: none"> 1. Communication of high priority food safety and hygiene issues between industry, regulators and scientists and elicitation of technical input. 2. Undertaking or facilitating research to address technical issues identified. 3. Development of technical advice for trade negotiations to assist in the resolution of market access and food safety issues. 4. Development of technical briefs on high priority Codex issues to encourage risk commensurate standards. 5. Facilitation of technical attendance at high priority Codex meetings and specific working groups. 6. Dissemination and assistance with uptake of <i>SafeFish</i> outputs and outcomes to key stakeholders and other relevant parties. 7. Identification of emerging market access issues. 8. Technical assistance to support incidence responses. 9. Other services. <p>These service 'products' are offered in four main areas – see "Value Configuration" in the next section.</p> |
| 4. Infrastructure | <p><i>SafeFish</i> has established (and continues to develop) formal infrastructure in three areas:</p> <ol style="list-style-type: none"> 1. Core Capabilities - <i>capacity (governance, Secretariat, human skills, experience, communication) to interrogate, enable, and deliver professional food safety advice,</i> 2. Partners Networks – <i>mapping of the Food Safety/Trade and Market Access landscape and development of alliances and collaborations for Expert Pools (Technical & Industry) and related constituent networks.</i> 3. A Value Configuration – <i>SafeFish has assembled and created four main "products" that embed the unique value it creates: Scientific and technical reports and databases; Capacity to enable technical input/output with Codex; On-demand rapid technical and advisory responses; Targeted capacity and expertise development.</i> <p>The organisation's informal culture continues to emerge and mature, in general terms moving from reactive and regulatory, to proactive leadership by experienced professionals in risk management and industry development.</p> |
| 5. Operating Processes & Procedures | <p>Operating processes/procedures are in place and managed under a Work Program to do two things: create knowledge and communicate.</p> <p>When developing its technical advice, the <i>SafeFish</i> Secretariat facilitates an 8 step internal process flow: Baseline Objective – Data collection – Prioritisation – Advice – Review – Modification – Dissemination – Decision.</p> <p>Knowledge creation processes include: Identifying emerging issues, Prioritising emerging issues, Progressing Technical Works, Engaging Codex issues and representing Australian fishing and seafood interests, and Undertaking peer reviews</p> <p>Communication processes are undertaken at two levels:</p> <ul style="list-style-type: none"> • Internal communications include: Letters of Exchange (LoE) to formalise stakeholder participation and commitments; Letters of Information (LoI) to formalise requests for advice between <i>SafeFish</i> and each of the Expert Pools; Meetings and related Records thereof; Reports of <i>SafeFish</i> activity (e.g. Annual Report) and other bodies (e.g. Seafood Trade Advisory Group (STAG)), • External Communications include: Technical outputs, <i>SafeFish</i> website, <i>SafeFish</i> Updates and Articles, Workshops and seminars. |
| 6. Customers | <p><i>SafeFish</i> has two customers: Australian seafood industry, and Australian governments responsible for public safety (including recreational and customary fishers).</p> |
| 7. Funding | <p>Startup funding provided by the FRDC, ASCRC and the various precursors to <i>SafeFish</i>. The planned closure of the ASCRC has directed new funding requests to the FRDC.</p> <ul style="list-style-type: none"> • To enable and support the ongoing evolution the <i>SafeFish</i> entity, • To describe and present an attractive value proposition to Governments seeking to invest in the public good outcomes related to safe seafood, • To describe and present an attractive value proposition to Industry and related stakeholders and partners, to invest in safe seafood. |

Figure 10. Top Line Review of *SafeFish* Business Model 2010-2014

HOW SAFEFISH DOES BUSINESS

SafeFish is an unincorporated working partnership of seafood experts collaborating to meet a specific gap in the seafood safety and hygiene /trade and market access infrastructure. From inception (2010) it has been the primary national advisor re seafood safety matters. It has used its start-up resources to build infrastructure in three areas:

- **Core Capabilities** - capacity in governance, Secretariat, human skills, experience, communication,
- **Partners Networks** - alliances and collaborations and networks,
- **A Value Configuration** - four main "products" that embed the unique value it creates.

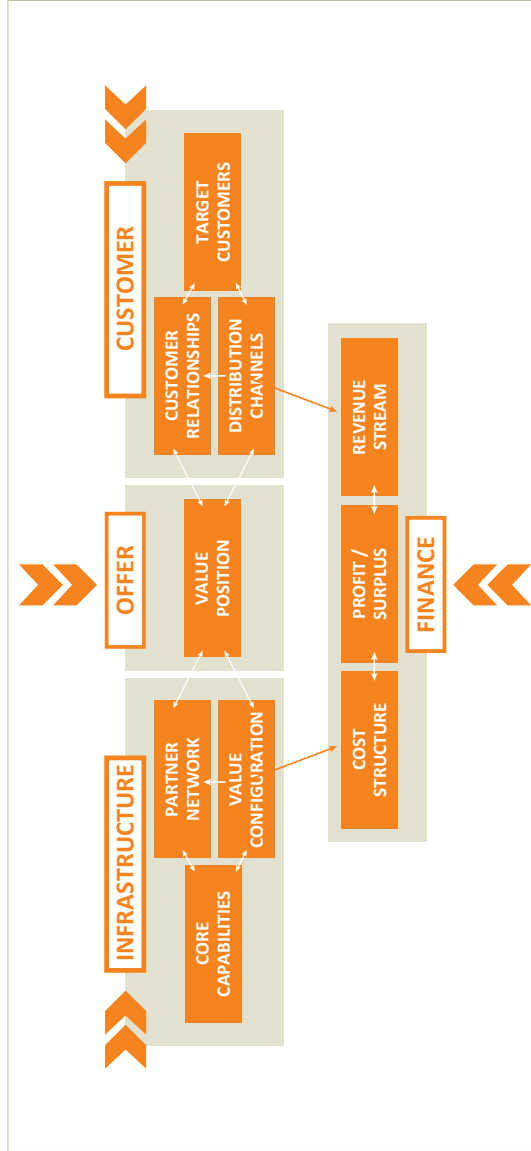
These three infrastructure elements are detailed under "Infrastructure" in Figure 8. The Business Model has established appropriate base-line infrastructure and a trusted national "brand".

WHAT DIFFERENTIATED PRODUCTS AND SERVICES SAFEFISH OFFERS

SafeFish is purpose-built, in response to defined needs in 2010. The *SafeMeat* Model has been a valuable template. Nine core services are identified in *SafeFish*'s differentiated product & service "Offer" in Figure 8. As the *SafeFish* partnership matures, the Work Program and outputs and outcomes are being refined, enhanced and integrated into a Value Proposition to front-line customers.

There is scope (and motivation) to integrate additional capacities that could: 1. Promote seafood safety and integrity to markets, 2. Oversight and objectively monitor seafood safety systems effectiveness, 3. Scan broader TMA risks/trends and assess emerging issues and food safety impacts, and 4. Provide advice re seafood safety costs by market, sector, location etc.

A current gap is the lack of a risk management market signalling/pricing measure to confirm what customers want and will pay for themselves.



There is need to articulate and enhance the **cost structure** of services, and the leverage of **revenue streams** in a commercial environment. The start-up SCRC/FRDC funding model is now under review. ASCRC wind-up is imminent and legislative change prompts closer assessment of Fee-for-Service / sustainable financing models. After a solid launch, Members now need a strategic view powered by a sustainable and viable Business Model.

FOR HOW MUCH

TO WHOM WE OFFER

SafeFish has:

- Identified its core **Target Customers** as Seafood Industry members that seek access to seafood markets, and Govt.
- Established **Customer Relationships** and links to these front-line customers (Industry and Government agencies). This element offers considerable new leverage to *SafeFish* in service delivery.
- Established initial **Distribution Channels** (e.g. Papers register, databases, website) and is promoting same. As a semi-statutory service provider distribution flexibility can be somewhat limited, but needs exploring.

The core principle is accepted that if you invest in *SafeFish* you are eligible for a seat at the *SafeFish* table.

Note re Business Models Many Business Model options exist to service enterprises. The model presented here comes from work by John Kaperleris, Deputy CEO, Australian Institute of Commercialization (AIC), <http://www.ausicom.com/>. Dr Kaperleris is General Manager of the AIC with 20 years' experience in biotechnology and commercialisation having held diverse roles including R&D Mgr., Quality Mgr., Business Development Mgr., VP Sales and Marketing, and Deputy CEO. This model offers simplicity and universality, to entities driving innovation and knowledge management in a pseudo regulated environment.

Figure 11. Comparison of Business Models for Other Industries

| Element | SafeMeat | Office of Horticultural Market Access | Dairy Food Safety System |
|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Role</p> | <ol style="list-style-type: none"> 1. Work with the objective of establishing world best practice in ensuring the safety of meat. 2. Ensure each industry sector implements sound management systems to ensure safe and hygienic product is delivered to the market place. 3. Ensure adequate and nationally consistent government standards and regulations relating to meat safety and hygiene. 4. Ensure that effective crisis management strategies are in place by the appropriate industry sectors and, to this end, ensure that there is a fully integrated and effective communications network. 5. Monitor industry meat safety performance. | <p>OHMA is an advisory committee to HAL (Horticulture Aust. Ltd) and the federal government.</p> <ul style="list-style-type: none"> • Coordinates industry advice and support to the official access negotiation process. Delivery of market access outcomes is via three pillars: <ol style="list-style-type: none"> 1. raising the profile of Australian horticulture by developing industry relationships in the target market to stimulate commercial market access drivers 2. strongly supporting and contributing to official negotiations; and 3. strongly supporting and guiding science inputs (R&D) into market access. | <p>DFSS is based on international Codes and Food Standards. Aust. Dairy Farmers (farmers), Dairy Aust. (levy investments) and Aust. Dairy Products Federation (~25 manufacturers, marketers, traders) coordinate and support the DFSS with specific investments at 6 levels:</p> <ol style="list-style-type: none"> 1. Prefarm – animals, water, feed, chemicals 2. Farm – animals, water, feed, inputs, equipment, storage, skills, traceability 3. Transport – milk, traceability 4. Manufacture – milk, ingredients, packaging, equipment, skills, traceability 5. Distribution – product, traceability 6. Markets – product, traceability. |
| <p>Membership (in this context Membership refers to a formal legal right and responsibility under the constitution)</p> | <ul style="list-style-type: none"> • The Secretary, Commonwealth Dep't of Agriculture. • A CEO of an Ag/Primary Industries agency to represent states and territories. • The Chair of a State/NT Meat and Livestock Authority to represent State /NT Meat and Livestock Authorities. • The Chair of each of the 6 red meat peak bodies – Cattle Council, Sheepmeat Council of Aust., Aust. Lot Feeders Assn, Aust. Livestock Exporters Council, Aust. Dairy Farmers, Aust. Meat Industry Council; • One Member appointed by AMIC, responsible for hygienic and safe product throughout industry sector. • Commonwealth Chief Veterinary Officer. | <ul style="list-style-type: none"> • OHMA comprises 10 skills-based industry Members: <ul style="list-style-type: none"> • seven industry members from exporting industries, • two members of the Australian Horticultural Exporters Association, • one Horticulture Aust. Ltd representative, • OHMA committee works with Government representatives from Biosecurity Australia, the DFAT, Dep't of Agriculture, • HAL (including OHMA) are currently being reviewed by Australian Government. | <ul style="list-style-type: none"> • DFSS is an integrated network / system comprising federal and state agencies, farmers, companies and DA, • Framework comprises: <ul style="list-style-type: none"> • Federal Gov't in export certification (AQIS/DoA), standard development (FSANZ), and Veterinary Medicine (APVMA). and traceability, • State Gov'ts in implementation (State Dairy Food Authorities / Dep'ts of Agriculture and Primary Ind.), • National and regional Industry (DA, ADF, Regional dairy organisations, Animal Health Aust., MLA, NLLIS, Aust. and NZ Dairy Authorities Committee). |
| <p>Structure</p> | <ul style="list-style-type: none"> • A "working partnership of agencies, industry and industry sector interests" with each participant responsible for reporting to their respective government or industry sector and ensuring that outcomes required of them are delivered. • Established in 1998. | <ul style="list-style-type: none"> • OHMA builds on the work of the Horticultural Market Access Committee (HMAC – now defunct) which was responsible for prioritising market access applications for Australian Government negotiations with international governments in target markets, • Established in 2009. • Meetings as required, • An Independent Chair is appointed by members, • Secretariat is provided by HAL and resides in Sydney. | <ul style="list-style-type: none"> • Functions as a working partnership between farms and companies with each party responsible for performance, • Issues of market access are a company matter. DA gets involved if the impact is broader. The partners in the network meet as necessary. |
| <p>Meetings, Chair & Secretariat</p> | <ul style="list-style-type: none"> • Meetings at least twice per year. • AMIC nominates a yearly chair for Members' ratification, • Secretariat is selected by competitive tender and resides at DoA, Canberra. | <ul style="list-style-type: none"> • Meetings as required, • Bodies within the DFSS Framework make their own arrangements re Chairs, Secretariat and location. | <ul style="list-style-type: none"> • Meetings as required, • Bodies within the DFSS Framework make their own arrangements re Chairs, Secretariat and location. |
| <p>Meetings</p> | <p>Half yearly or more frequently as necessary</p> | <p>As necessary</p> | <p>As necessary</p> |

| Element | SafeMeat | Office of Horticultural Market Access | Dairy Food Safety System |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Operations</p> | <p>The SafeMeat partnership is supported by the Executive Group.</p> <p>The Executive Group meets regularly to drive the business plan work program. It includes Cattle Council of Australia, Australian Meat Industry Council, Australian Lot Feeders' Association, Sheepmeat Council of Australia, Australian Dairy Farmers Ltd, Dairy Australia, Australian Livestock Exporters' Council Ltd, State/Territory meat industry authorities, State/Territory departments of agriculture, federal Dept of Agriculture.</p> <p>Observers of the Executive Group include: Animal Health Australia, Australian Livestock and Property Agents Association, Livestock Sale yards Association of Australia, Red Meat Advisory Council, Meat & Livestock Australia, Australian Pork Limited, Australian Renderers Association, Australian Pesticides and Veterinary Medicines Authority, Wool Producers Australia.</p> <p>The SafeMeat Executive also uses sub-committees to progress specific activities. Current sub-committees include NLIS, National Vendor Declaration Working Group, Bobby Calves Residue Solutions Taskforce, Endosulfan Technical Working Group, Specified Risk Material Steering Committee, Stockfeed Working Group, Targeted Testing Working Group, SafeMeat Communication Group, SafeMeat Administration Committee, and SafeMeat Program Review Committee.</p> <p>SafeMeat is regarded by governments (Federal and State) as a useful forum to 'test the water', seek guidance on, or assist development of relevant government policy because it has all of the peak industry councils around the table (rather than consulting with each on an individual basis).</p> <p>SafeMeat reports to AGSOC (Agriculture Senior Officials Committee-previously PLISC) and into AgMIN (previously SCoPl) as required (e.g. when national legislative enactment required).</p> <p>Generally, it could be said that SafeMeat has survived well since commencement in 1998 with active involvement /enthusiasm from its member base. There are a number of programs (critical to market access) that hang off it – National Livestock Identification System (NLIS), National Vendor Declarations (NVD) and Livestock Production Assurance (LPA) – each with their own committee/sub-committee structures.</p> | <p>In 2013-14 OHMA operations will focus around:</p> <ul style="list-style-type: none"> • supporting bilateral and multilateral phytosanitary and non-phytosanitary negotiations, • supporting and guiding science inputs (R&D) against market access priorities, • raising the profile of Australian horticulture via target market relationships for commercial market access, • work with industry and government to improve the process and timeframes for applications for market access. | <p>Decentralised and managed by farmers associations and processors.</p> |
| <p>Funding</p> | <ul style="list-style-type: none"> • Four levy streams (RD&E, Marketing, Animal Health and Residue Testing) are paid by the Red Meat Industry (Growers, Sale Yards), Exporters (Livecorp), and processors (Aust. Meat Processing Corp.). Two of these streams (RD&E, Marketing) make contributions to fund SafeMeat. MLA coordinates all streams and funding of SafeMeat. • MLA annual payment of ~\$350,000 is in two parts: ~\$200,000 to fund Secretariat based at DoA, plus additional funds for projects in the order of \$150,000 p.a. • Canberra base for SafeMeat is not 'mandatory', however it is seen to be desirable in terms of 'direct connect' with government. • SafeMeat Partnership and Executive Chairs are appointed by industry and are also recompensed through MLA) for their time input. • All other individual member involvement is at their individual organisations cost. | <ul style="list-style-type: none"> • \$30,500 over 4 years, • OHMA is funded from the Across Industry Program (AIP) and multi-industry projects, using levy funds and matched funding from the Australian Government. The funding model is moving to user pays and in 2014 will be 80% from industry and 20 from AIP/ HAL levies. | <ul style="list-style-type: none"> • Unspecified funding, from dairy farmers' associations and dairy food processors and manufacturers. |
| <p>Sources</p> | <ul style="list-style-type: none"> • Report to ASCRC <i>Assessment of Infrastructure and Priority Needs for the CRC Technical Market Access Support Program</i>, Shiell K. Dec. 2007, • SafeMeat Annual Report 2012-13 and Secretariat advice from Peter Merrell, • Red Meat Industry MOU - Version 4 (October 2010), • MLA advice. | <ul style="list-style-type: none"> • Report to ASCRC <i>Assessment of Infrastructure and Priority Needs for the CRC Technical Market Access Support Program</i>, Shiell K. Dec. 2007, • HAL Operating Plan 2013-14, • OHMA Submission to the Agricultural Competitiveness White Paper 24April 2014. | <ul style="list-style-type: none"> • Report to ASCRC <i>Assessment of Infrastructure and Priority Needs for the CRC Technical Market Access Support Program</i>, Shiell K. Dec. 2007, • DA Annual Report 2012-13, • Dairy Food Safety – the Australian Approach, Dairy Australia, 2010. |



Figure 12. SWOT Analysis

| Where we need to BUILD & LEVERAGE | Where we Need to DEFEND & MITIGATE |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>INTERNAL</p> <p>STRENGTHS</p> <ul style="list-style-type: none"> Existing available cost effective model and industry support structure, Strong support from small number of commercial industry collaborators and sectors via Expert Panel, Strong support from seafood industry research providers via Technical Panel, Strong support from relevant Federal Agencies (DoA, FSANZ) and selected state/territory jurisdictions, SafeFish representatives are well respected by international agencies / CODEX, Database of scientific/technical reports, Existing communication channels and website tools, Capacity to quickly engage high level experts and industry in response to Seafood safety issues, Close collaborative networks with NZ seafood industry and researchers, SafeFish works under a national model, bringing all state/territory parties together to improve outcomes, The collaborative model between researchers, industry and regulators results in targeted research and rapid uptake of research results, Service provision to governments and industry. | <p>WEAKNESSES</p> <ul style="list-style-type: none"> Limited awareness of the “SafeFish” brand and capability across Australian seafood supply chains and businesses, Lack of engagement with many seafood sectors and supply chains, Lack of engagement with some state and territory jurisdictions, Lack of funding from industry to date, Seafood risk issues specific to a sector (e.g. SO2 in Abalone) are able to attract investment funding, but many cross sectoral risks (e.g. Mercury and Ciguatoxins) are always underfunded, Demands for seafood food safety exceed current resources, Lack of input from industry to Codex issues, Good funding for core work, but not for innovation and additional research into priority issues, Under-resourced communications. |
| <p>EXTERNAL</p> <p>OPPORTUNITIES</p> <ul style="list-style-type: none"> Greater engagement and collaboration with State and Territory agencies, Leverage the SafeFish brand name across Fishing and Aquaculture industry, Establish a forward looking SafeFish Strategy and Work Plan (over next 5 years) that demonstrates the priorities for industry and risk management, Higher involvement in incident management, Food safety and security is currently a national focus, Trade and market access is an important aspect for developing higher value trade, FTA with China leading to increased export and the need for high level of food safety as a basic requirement. | <p>THREATS</p> <ul style="list-style-type: none"> Loss of funding from governments, Budget uncertainty from 2015/16 onwards, Loss of goodwill to industry – If SafeFish (or similar national seafood safety entity) is not available, a lot of baseline seafood safety research will not be prioritised /commissioned, and collaborative communication and investment from DoA, FSANZ key sectors, would be lost to the seafood industry, Any forward looking plan from SafeFish will be seen by some elements of industry as a grasp for cash with little likely return to industry, Once capability lost, it is hard to rebuild, While there are no current direct competitors to SafeFish, this may change as the business evolves in response stakeholder needs. |

3. Future Business Model Options

Figure 13. SafeFish Business Model Options

| | OPTION 1 Wholly Owned Entity of Government | OPTION 2 Commercial Partnership Business Model | OPTION 3 Full Commercial Fee-For-Service |
|--------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ROLE | | <p>The current role of <i>SafeFish</i> is a strategic decision of the Industry, FRDC and the Board. The current role, Vision and purpose are appropriate in the near term.</p> <p>Vision: <i>SafeFish</i> as a partnership of seafood experts will assist the industry to resolve technical trade impediments, especially in relation to food safety and hygiene.</p> <p>Purpose: The purpose of <i>SafeFish</i> is to: Firstly provide rapid technical response to maintain free and fair access to key markets; and Secondly ensure the safety and integrity of seafood sold commercially.</p> | |
| MEMBERSHIP (in this context refers to a formal legal right and responsibility under the constitution) | <p><i>SafeFish</i> performs a role that is central to the leadership and management of national seafood trade risk.</p> <p>The direct beneficiaries of <i>SafeFish</i> activities are primarily the suppliers and traders in seafood.</p> <p>The Australian public benefits from an assured supply of safe seafood, but also as a significant public good benefit – via recreational and customary users of the aquatic resources and retained catch for home consumption.</p> <p>A 100% public funded model for <i>SafeFish</i> does not equitably balance the risks of unsafe seafood consumption across the Australian community, and is not appropriate.</p> | <ul style="list-style-type: none"> The current SCRC based model of <i>SafeFish</i> must expand and strengthen its membership to better represent and commercially capture the seafood safety/trade issues for stakeholders. Membership currently comprises a mix of select skill based individuals, and representatives of agencies (DoA, FRDC) or organisations (Seafood NZ, Seafood Importers). Both skills and representation are desirable, but the direct participation of wild catch and aquaculture clients (on a tiered risk assessment basis) is now desirable. Tier 1 will include those sectors most at risk including Abalone, Rocklobster and Oyster (edible). Current public agencies must continue as essential members of the <i>SafeFish</i> partnership. This collaborative risk investment approach will expand and strengthen the consortium of engaged sectors and investors in <i>SafeFish</i>. Industry advisory panels are relatively strong but need to link these to motivated investment by main industry funders/risk takers, including FRDC as the public good investor. | <p><i>SafeFish</i> is a young organisation with an emerging role, culture and value proposition.</p> <p>Industry (harvesters, processors, distributors) is increasingly aware of the value to it from investing in safe seafood, both for its niche market overseas customers, and for domestic seafood consumers.</p> <p>The full fee-for-service model is not currently viable nor equitable for the emerging <i>SafeFish</i> organisation.</p> <p>A more commercial model may best balance the needs of both industry and the Australian public at some time in the future.</p> |
| STRUCTURE | | <p>Retain existing structure as a partnership of seafood experts, industry collaborators and agencies. But there is a need to refresh the <i>SafeFish</i> Governance framework including the appointment process for Membership and Panels. Need to confirm the observer/Member status of New Zealand Seafood Industry.</p> <p>Work Program will continue to focus on technical and research Papers on high priority industry issues, including input to Codex.</p> | |
| OUTPUTS | | <p>There is proposed below (see Figure 14) a tiered, sustainable funding mechanism that includes all major private and public stakeholders.</p> <p>The next <i>SafeFish</i> Work Program is yet to be ratified by the <i>SafeFish</i> Partners. Industry will co-invest with transition over 3 years. The main investors are the risk-exposed sectors at harvest, and other supply chain partners</p> | |
| FUNDING | | <p>The proposed budget below introduces new Sector Partners (AAGA, TSGA, ACPF, TBOA, SIAA) and anticipates additional technical work will be undertaken by <i>SafeFish</i> on their behalf. Fixed annual FRDC amount assumed for public good.</p> | |

Funding

The following table presents the budget (source and use of funds) for *SafeFish* for the 3 year transition period to June 2018.

Figure 14. Proposed *SafeFish* Budget 2016-2018

| SUMMARY | 2015-16 | 2016-17 | 2017-18 |
|-------------------------------------------------------------|-----------------|------------------|------------------|
| USE OF FUNDS Total funds required by <i>SafeFish</i> | | | |
| Salaries | 182,500 | 186,150 | 189,873 |
| Admin & Office | 0 | 0 | 0 |
| Governance | 9,500 | 9,690 | 9,884 |
| Publications | 5,000 | 5,100 | 5,202 |
| Technical Network | 10,000 | 22,200 | 10,404 |
| Codex | 12,000 | 12,240 | 12,485 |
| Communications | 10,000 | 10,200 | 10,404 |
| Technical Reports | 30,000 | 30,600 | 31,212 |
| TOTAL FUNDS REQUIRED | \$259,00 | \$276,180 | \$269,464 |

| SOURCE OF FUNDS | 2015-16 | 2016-17 | 2017-18 |
|------------------------------------------------------------------------------------------|----------------|----------------|----------------|
| SOURCE OF FUNDS Total funds contributed to <i>SafeFish</i> | | | |
| TIER 1. High Risk Industry Members - Unmatched Industry Funds | 37,500 | 38,625 | 39,784 |
| SRL, Rocklobster (IPA) | 12,500 | 12,875 | 13,261 |
| ACA Abalone (IPA) | 12,500 | 12,875 | 13,261 |
| OA Oyster (IPA) | 12,500 | 12,875 | 13,261 |
| Other (including current discussions with WRL) | 0 | 0 | 0 |
| TIER 2. Medium Risk Industry Members - Unmatched Industry Funds | 13,500 | 13,905 | 14,322 |
| AAGA Farmed Abalone (IPA being developed) | 500 | 515 | 530 |
| AMIA Blue Mussel | 2,000 | 2,060 | 2,122 |
| TSGA Salmon Aqua (IPA) | 10,000 | 10,300 | 10,609 |
| ACPF Prawn Wild Catch | 500 | 515 | 530 |
| TBOA Tuna Aqua (IPA) | 500 | 515 | 530 |
| APFA Prawn Aqua (IPA) | 0 | 0 | 0 |
| Other sectors that <i>SafeFish</i> is yet to engage | 0 | 0 | 0 |
| TIER 3. Importers - Unmatched Industry Funds | 3,000 | 3,090 | 3,183 |
| SIAA Seafood Importers | 3,000 | 3,090 | 3,183 |
| TIER 4. Chain Partners - Processors Unmatched Industry Funds | 12,000 | 12,360 | 12,731 |
| SFM Sydney Fish Market | 12,000 | 12,360 | 12,731 |
| MFM Melbourne Fish Market | 0 | 0 | 0 |
| Other processors, manufacturers and chain partners that <i>SafeFish</i> is yet to engage | 0 | 0 | 0 |
| Total Australian Industry Funds contributed | 66,000 | 67,980 | 70,019 |
| TIER 5. Agencies + NZ | 63,500 | 64,760 | 66,527 |
| SARDI | 62,500 | 63,730 | 65,466 |
| NZ Industry (yet to be discuss potential input and contribution) | 1,000 | 1,030 | 1,061 |
| TIER 6. FRDC | 129,500 | 143,440 | 132,923 |
| Matching funds for Tier 1 IPAs | 37,500 | 38,625 | 39,784 |
| Matching funds for Tier 2 IPAs (some have no current IPA) | 10,500 | 10,815 | 11,139 |
| Public Good Investment for Fishing and Aquaculture Industry | 78,000 | 77,000 | 76,000 |
| Transition Funds from FRDC | 3,500 | 17,000 | 5,994 |
| TOTAL FUNDS CONTRIBUTED | 259,000 | 276,180 | 269,464 |

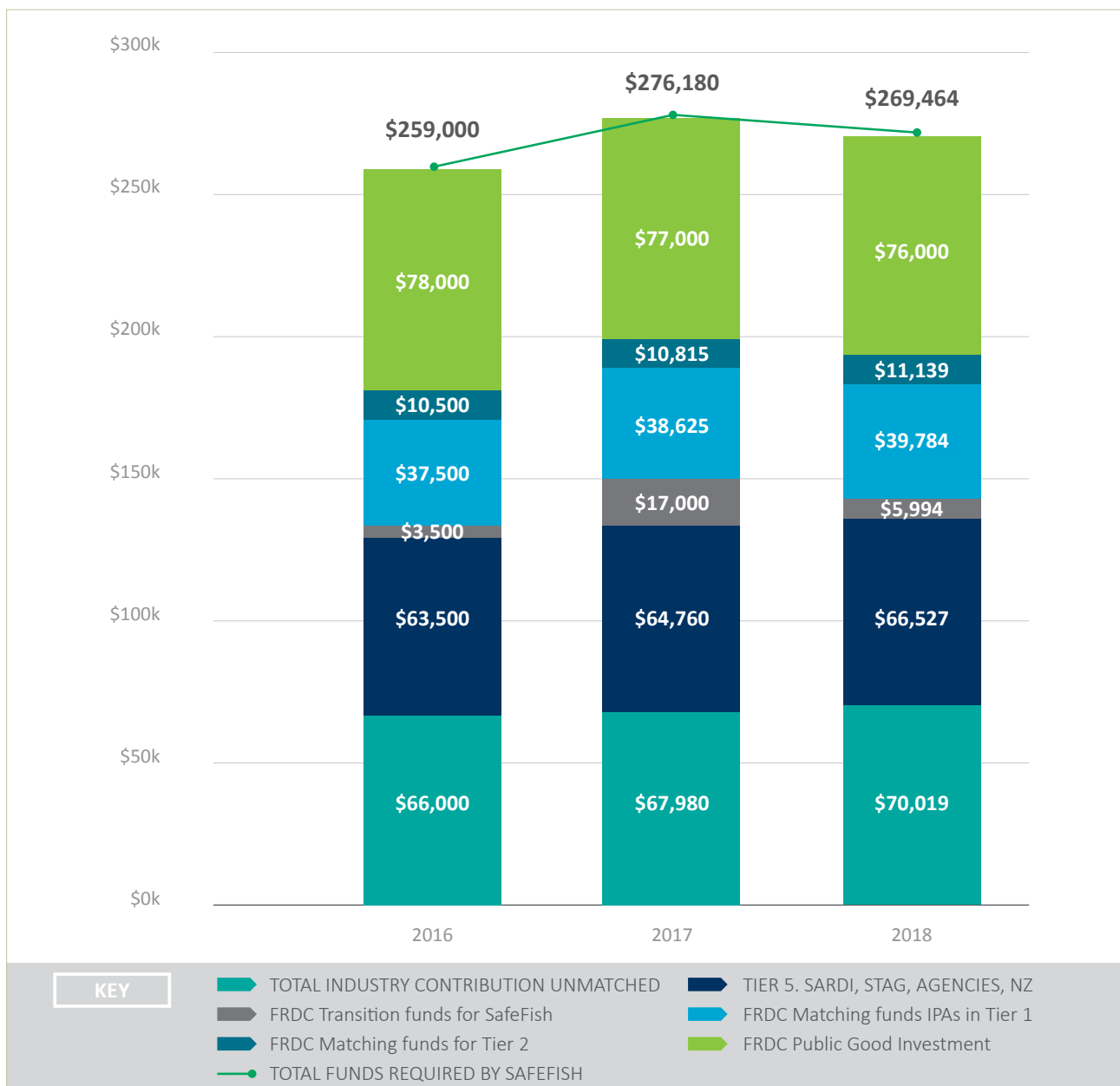
The table above presents a balanced budget that includes funding contributions from industry based on a comprehensive tiered risk assessment approach, plus matched RD&E funds via FRDC, plus Public Good contributions from FRDC, plus a small Transitional Contribution from FRDC.

The budget enables *SafeFish* to:

- Increase its communications and extension (both Publications and Communication) with stakeholders, including a number of new seafood sectors (e.g. AAGA), and large existing sectors (e.g. TSGA) that have to-date had no direct access to the *SafeFish* program although they have been beneficiaries of work done in the last two years.
- More fully and more often engage its Technical Network and Industry Expert Panels,
- Undertake in 2016-17 (Year 2) an appropriate Priority Setting Process with its broader list of client industries and agencies.

The budget proposal is presented in summary format in Figure 15.

Figure 15. Summary of *SafeFish* Budget Proposed for 2016-18





Appendices

Terms of Reference - Business and Operations Model for *SafeFish* 2015-2020

The Chairman of *SafeFish* seeks independent written advice regarding possible and preferred long term business and operations models for the organisation.

The advisor will review reports, consult key stakeholders and undertake brief structural and financial analysis before submitting formal advice in October 2014.

Context

SafeFish is a partnership of seafood experts. It provides technical advice to support Australia's seafood trade and market access negotiations and helps to resolve barriers to trade. It does this by bringing together experts in food safety and hygiene to work with the industry and regulators to agree and prioritise technical issues impacting on free and fair market access for Australian seafood.

The key functions of *SafeFish* are to:

1. Develop technical advice for trade negotiations to assist in the resolution of market access and food safety issues.
2. Develop technical briefs on high priority Codex issues.
3. Facilitate technical attendance at high priority Codex meetings and specific working groups.
4. Identify emerging market access issues.

SafeFish members include:

- Food Division of the Department of Agriculture, Fisheries & Forestry (DAFF)
- Australian Seafood Cooperative Research Centre (ASCRC)
- Seafood Services Australia (SSA)
- Seafood Access Forum (SAF)
- Food Standards, Australia and New Zealand (FSANZ)
- Australian Shellfish Quality Assurance Advisory Committee (ASQAAC)
- South Australian Research and Development Institute (SARDI)
- Fisheries Research and Development Corporation (FRDC).

Two Advisory Groups and a Secretariat, support *SafeFish* and its Members:

- A Technical Experts Pool provides scientific advice to resolve technical barriers to trade and assist in providing input into the development of Codex standards.
- An Industry Technical Pool provides industry perspective and practical implementation advice on technical barriers to trade and Codex standards under development. The Pool consists of members from each key seafood industry sector, in addition to other representatives with industry experience.



Terms of Reference

Objectives

This project will implement a methodology that achieves 6 objectives:

1. Summarise **SafeFish's** current business model –core aspects of **SafeFish**, including where appropriate purpose, process, target customers, offerings, strategies, infrastructure, organizational structures, trading practices, and operational processes and policies.
2. Describe the operations of other similar / industry based initiatives e.g. Safemeat,
3. Identify existing and potential investors, beneficiaries and alliances, and **SafeFish's** value offer to each cohort,
4. Describe a shortlist of business models and operational options for the period 2015-20,
5. Canvass industry & **SafeFish** partners to determine models that may be acceptable to them,
6. Submit a formal brief report of recommendations to the Chair of **SafeFish** in October 2014.

Contact

The Chair and Secretariat of **SafeFish** will be the contact point for the consultant. Contact details for Members, Technical Experts and Industry Experts will be made available to the consultant at commencement of the project.

Data and Reports

On mobilisation, **SafeFish** will provide relevant advice and documents to the consultant, including:

- **SafeFish** Annual Report 2012/2013 (including governance document),
- Current list of **SafeFish** partners,
- Cost/benefit Analysis from Seafood CRC,
- EOI of FRDC,
- FRDC response to EOI.

Methodology

The consultant will undertake a five stage process:

1. Desk review and analysis in response to Objectives 1, 2 and 3 above,
2. Consultation with key industries and **SafeFish** partners by phone,
3. Analysis and development of Business Models and Operational Options,
4. Attend, present and discuss options with **SafeFish** in a meeting week beginning Sept 22
5. Submission of a final Report that addresses all objectives in the Terms of Reference.

Commercial Terms

A contract for \$10,000 + GST will be established with the consultant prior to project mobilisation. A single payment for the whole contract will be made on acceptance of the Final Report by **SafeFish**.

Confidentiality

All material made available by **SafeFish** during the project, or developed by the consultant as part of the methodology, remains confidential and is the property of **SafeFish**.

Glossary

| | | | |
|--------|------------------------------------------------------------------------------|-------|-----------------------------------------------------|
| AAGA | Australian Abalone Growers Association | IPA | Industry Partnership Agreement |
| ABFA | Australian Barramundi Farmers' Association | MFM | Melbourne Fish Market |
| ACA | Abalone Council of Australia | MLA | Meat and Livestock Australia |
| ACPF | Australian Council of Prawn Fisheries | NGOs | Non-Government Organisations |
| ADF | Australian Dairy Farmers | NLIS | National livestock Identification System |
| AFMA | Australian Fisheries Management Authority | OA | Oysters Australia |
| AMBP | Australian Marine Biotoxin Partnership | OHMA | Office of Horticultural Market Access |
| AMIA | Australian Mussel Industry Association | PAH | Polycyclic aromatic hydrocarbons |
| AMIC | Australian Meat Industry Council | PCB | Polychlorinated biphenyls |
| ANZSIC | Australian and New Zealand Standard Industrial Classification | SARDI | South Australian Research and Development Institute |
| APFA | Australian Prawn Farmers' Association | SFM | Sydney Fish Market |
| APVMA | Australian Pesticides and Veterinary Medicines Authority | SIAA | Seafood Importers Association of Australia |
| AQIS | Australian Quarantine Inspection Service (agency recently absorbed into DoA) | SRL | Southern Rocklobster |
| ASCRC | Australian Seafood Cooperative Research Centre | STAG | Seafood Trade Advisory Group |
| ASQAAC | Australian Shellfish Quality Assurance Advisory Committee | TBOA | Tuna Boat Owners Association |
| CCFFP | Codex Committee on Fish and Fishery Products | TMA | Trade and Market Access |
| CODEX | CODEX Alimentarius | TSGA | Tasmanian Salmon Growers Association |
| DA | Dairy Australia | UTAS | University of Tasmania |
| DFSS | Dairy Food Safety System | WRL | Western Rocklobster |
| DoA | Commonwealth Department of Agriculture | | |
| EFSA | European Food Safety Authority | | |
| EU | European Union | | |
| FRDC | Fisheries Research and Development Corporation | | |
| FSA | UK Food Safety Authority | | |
| FSANZ | Food Standards Australia New Zealand | | |
| HAL | Horticulture Australia Ltd | | |



www.SafeFish.com.au

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