

Seafood Trade and Market Access Portal

**Natalie Dowsett, Damian May,
Catherine McLeod and David Padula**

Project No. 2008/906



**AUSTRALIAN
SEAFOOD
COOPERATIVE
RESEARCH CENTRE**

May 2012



This project was completed by:

SARDI Seafood Program
GPO Box 397, Adelaide SA 5001
Ph: 08 8303 9623

Seafood Services Australia
PO Box 2188, Ascot, QLD 4007
Ph: 1300 130 321

ISBN: 978-0-9756045-0-2

Copyright, 2012: The Seafood CRC Company Ltd, the Fisheries Research and Development Corporation and [Insert other organisations here].

This work is copyright. Except as permitted under the Copyright Act 1968 (Cth), no part of this publication may be reproduced by any process, electronic or otherwise, without the specific written permission of the copyright owners. Neither may information be stored electronically in any form whatsoever without such permission.

The Australian Seafood CRC is established and supported under the Australian Government's Cooperative Research Centres Program. Other investors in the CRC are the Fisheries Research and Development Corporation, Seafood CRC company members, and supporting participants.

Office Mark Oliphant Building, Laffer Drive, Bedford Park SA 5042
Postal Box 26, Mark Oliphant Building, Laffer Drive, Bedford Park SA 5042
Tollfree 1300 732 213 Phone 08 8201 7650 Facsimile 08 8201 7659
Website www.seafoodcrc.com ABN 51 126 074 048

Important Notice

Although the Australian Seafood CRC has taken all reasonable care in preparing this report, neither the Seafood CRC nor its officers accept any liability from the interpretation or use of the information set out in this document. Information contained in this document is subject to change without notice.



Australian Government
**Fisheries Research and
Development Corporation**



An Australian Government Initiative



Contents

Non-Technical Summary	2
1. Introduction and Background	4
1.1 Need	4
1.2 Objectives	5
2. Methods	6
3. Results and Discussion	8
3.1 Database Structure and Maintenance	8
3.2 Stakeholder Uptake	8
3.3 Cost Recovery and Feasibility Assessment.....	9
3.4 The Seafood Access Forum and SafeFish.....	10
4. Benefits and Adoption	11
5. Further Development	12
6. Planned Outcomes.....	13
7. Conclusion	14
Appendix 1: Intellectual Property	15
Appendix 2: Staff.....	16

Non-Technical Summary

Project Number: 2008/906. Seafood Trade and Market Access Portal

PRINCIPAL INVESTIGATOR: David Padula

ADDRESS: SARDI Food Safety and Innovation
South Australian Research & Development Institute
GPO Box 397
Adelaide SA 5001
AUSTRALIA

Phone: +61 8 8303 9767

Fax: +61 8 8303 9424

Email: david.padula@sa.gov.au

PROJECT OBJECTIVES:

1. Establish a web portal service on technical food safety and trade rules of countries importing Australian seafood (existing and future potential markets) - information will include residue and contaminant standards, export certification requirements and tariff/customs information for international markets of importance to Australian Seafood CRC members.
2. Inform the Seafood Access Forum (SAF) on current and emerging technical trade issues affecting international trade of Australian seafood products.

OUTCOMES ACHIEVED

1. Increased industry and government efficiency in locating overseas technical market access requirements and import tariff/duties.
2. Improved industry knowledge of market requirements and compliance with international food safety and trade standards.
3. Reduced cost to industry in complying with overseas market access requirements due to enhanced efficiencies and higher compliance rates.
4. Supported the Seafood Access Forum and SafeFish, primarily through identification of current and emerging seafood technical trade issues and provision of trade data.
5. Contributed to the resolution of key technical trade access issues (e.g. abalone/EU market).

LIST OF OUTPUTS PRODUCED

1. The Seafood Trade and Market Access Database has been established and provides on-line access to residue and contaminant standards, microbiological standards, preservative standards, tariff and import duties, export certification requirements, rejection and detention notification reports, and trade volume statistics.
2. A series of electronic and hard copy 'country' based files have been established that underpin the technical integrity of the database. These files contain baseline information on country specific standards and are required to be reviewed on a regular basis to ensure the on-going accuracy of the database.
3. Promotional material (pamphlets etc) describing the Seafood Trade and Market Access Database.

ACKNOWLEDGEMENTS

Base funding for this project was provided by the Australian Seafood Cooperative Research Centre (ASCRC). Additional funding to enable the collation of microbiological and preservative data was kindly provided by the Joint Australian Fish Industry - Australian Quarantine Inspection Service (AQIS) Ministerial Taskforce (MTF) in 2011.

The following agencies are also gratefully acknowledged for their advice and input:

- Australian Government Australian Quarantine and Inspection Service (AQIS)
- Australian Government Department of Agriculture, Fisheries and Forestry (DAFF)
- Australian embassies and diplomatic missions in Tokyo (Japan), Beijing (China), Guangzhou (China), Hong Kong, Hanoi (Vietnam), Seoul (South Korea), Bangkok (Thailand) and Brussels (Belgium).
- The Australian Commerce and Industry Office, Taipei. Australian Embassy Tokyo, Japan.
- Australian Government Australian Pesticides and Veterinary Medicines Authority (APVMA).
- Food Standards Australia New Zealand (FSANZ).

1. Introduction and Background

The value of Australian seafood exports now exceeds \$1 billion per annum and products are dispatched to various countries around the world (> 20 markets). To ensure Australian seafood can gain access to these markets it is necessary to demonstrate compliance with each country's food safety and trade standards. Ensuring product compliance with overseas market requirements is a complicated task for seafood companies for a number of reasons:

- Port of entry requirements are not globally consistent.
- English versions of some countries market access standards are not readily available.
- There are a myriad of technical requirements for microbiological hazards, chemical residues and preservatives and these are all located in different agencies.

The *Seafood Trade and Market Access Database* is an online database that has been developed by a team of technical and regulatory experts to support the Australian seafood sector to easily identify overseas market access requirements. The database provides information for key overseas markets on residue and contaminant standards, microbiological standards, preservative standards, tariff and import duties, export certification requirements, rejection and detention notification reports, and trade volume statistics. This information is provided in a searchable database located on the Seafood Services Australia website. The establishment of this database is contributing to increased industry and government efficiencies in locating country standards, enhanced compliance of Australian seafood with port of entry requirements and reduced overall export compliance costs to industry.

The Seafood Trade and Market Access Database has become a critical supporting component of several key Australian Seafood Cooperative Research Centre (ASCRC) initiatives which have been developed to resolve technical barriers to trade and increase the profitability of the Australian seafood sector – specifically *The Seafood Access Forum* and *SafeFish*. The database is being actively used by these peak committees to identify national trade issues (particularly through the collated 'rejection/detection' reports section of the database). The issues are consequently discussed and prioritised by the Seafood Access Forum, which is directing valuable government and research resources (through SafeFish) to assist in the successful resolution of high priority issues. Key examples of the success of the ASCRC market access platform are:

- The re-opening of the EU market for Australian abalone.
- Ensuring that international standards are commensurate with risk and appropriate for the Australian industry (e.g. foodborne viruses, abalone, bivalve mollusc standards, marine biotoxin methods, vibrio risk management proposals etc).
- Ensuring that marine biotoxin limits are appropriate, resulting in the maintenance of harvesting from two Tasmanian oyster production areas.
- Demonstrating safety of Australia prawns and providing outputs that can be used to negotiate reduced costs through decreased compliance testing.

1.1 Need

In recent years, the Australian seafood sector has been subject to several international trade disruptions related to the detection of various chemical, microbiological and physical hazards. Recent examples of trade disruptions include:

- Thirty nine individual trade notifications relating to the detection of cadmium in

prawns at levels exceeding the EU maximum level; and

- The discovery of paralytic shellfish toxins at levels exceeding maximum limits in Tasmanian abalone.

The latter discovery affected live export of abalone from Tasmania for seven months with an estimated cumulative loss to industry of >\$1 million AUD. Thus, trade disruptions have a significant negative economic impact on the seafood sector. This is accrued at the enterprise level through immediate financial loss related to the implicated product and at the sector level through loss in consumer and purchaser confidence in the safety and quality of the food. Further secondary economic losses can be attributed to increased regulatory costs due to heightened border control requirements and increased business preventative monitoring costs. A reduction in trade disruptions is, therefore, highly desirable to reduce these economic losses to industry and government alike.

To assist the seafood sector in reducing economic losses the ASCRC has supported a significant program of work to:

- (a) identify emerging and current trade and market access issues;
- (b) recognise systemic factors which have contributed to these issues arising; and
- (c) undertake technical work to assist in resolving these issues.

As part of the ASCRC's market access program, several reviews were commissioned shortly after the inception of the ASCRC to provide an overview of key trade issues and give recommendations on future work (Projects 2007/709 and 2007/712). These reviews identified that exporters were having significant difficulty in locating overseas market access requirements and that this was contributing to trade failures. To resolve this, it was recommended that trade access information be collated and located in a central database for quick and convenient use by industry and government stakeholders. The Seafood Trade and Market Access Database has therefore been established in response to this identified need and to assist in reducing economic losses to seafood companies, sectors and government.

1.2 Objectives

The major objectives of this project were to:

1. Source, collate and verify 'port of entry requirements' for Australia's key export destinations for seafood.
2. Establish an online database containing: residue and contaminant standards, microbiological standards, preservative standards, tariff and import duties, export certifications requirements and rejection and detention notification reports.
3. Inform the Seafood Access Forum (SAF) of current and emerging trade issues affecting international trade of Australian seafood products.

2. Methods

A review was undertaken of Australian seafood export data (provided by the Australian Bureau of Agricultural and Resource Economics and Sciences) to identify the key export markets for the period 2005-2010. Markets were then ranked in terms of value and tonnage and the following information was collated for the top 20 countries (Appendix 1), covering approx. 98% of exported seafood:

1. Residue and contaminant standards known as Maximum Residue Limits (MRLs), Maximum Levels (MLs), Extraneous Residue Limits (ERLs)
1. Microbiological standards
2. Preservative standards
3. Tariffs and import duties
4. Export certification requirements
5. Rejection and detention notification reports.

The development of the database involved the following steps:

2. Trade standards for each major importing country were identified (covering the topics listed above).
3. Translation of standards into English was undertaken as needed.
4. Electronic (Excel) spreadsheets were created for each country and the specified limits (residue, microbiological etc) were entered.
5. The limits contained in the spreadsheets were compared to the base standards (by a different person) to ensure that transcription errors had not occurred.
6. The limits contained in the spreadsheets were then checked by AQIS and amendments made if required.
7. The limits were uploaded to an 'off-line' version of the database on the Seafood Services Australia (SSA) website and data entry was re-checked by key staff.
8. Following this, the data was made 'live' and made accessible to registered users.

The database can be accessed through a secure area (*Trade and Market Access*) on the Seafood Services Australia website (www.seafoodservices.com.au) (Figure 1). Access is password protected and is only available to members of the Australian seafood sector who have applied to and been approved by SSA. To ensure the accuracy of the information contained in the database the project team undertook twice yearly audits of each country's food regulatory standards during the course of the project and updated the limits in the database as needed.

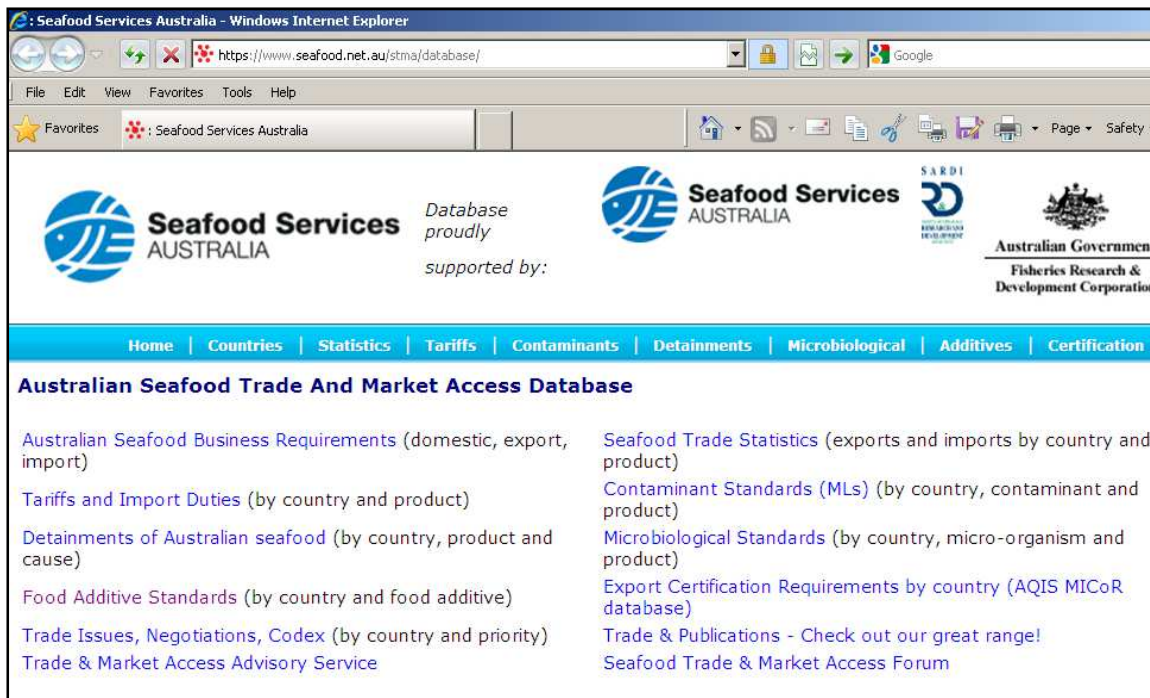


Figure 1. Screenshot of the Seafood Trade and Market Access Database web portal.

3. Results and Discussion

3.1 Database Structure and Maintenance

The database structure allows for users to undertake interactive searches by 'Country', 'Product' and 'Topic' (Figure 2). This search function enables users to quickly locate the specific information they require without reading through large amounts of superfluous data. It also allows users to undertake side by side comparisons of port of entry standards between countries and products of interest.



Figure 2. Screenshot of the microbiological data search engine on the Seafood Trade and Market Access Database web portal.

A system of electronic and hard copy 'country' files hold the 'raw' data and this information underpins the database. It is recommended that this system is kept current and updated on a regular basis (at least every six months). This will ensure that international changes in port of entry standards are incorporated into the database and will provide a backup system should the database infrastructure fail. Any changes made due to amendments of overseas market access requirements should also be verified through the current system of checks, including a final check by government regulatory authorities.

3.2 Stakeholder Uptake

In June 2011, a user survey was conducted to assess the uptake and usefulness of the database to the seafood sector. Of the 405 registered users at that time, responses were received from 70 individuals. The survey identified the following points:

- 64% of respondents noted that the database was either 'very useful' or 'extremely useful'.
- 47% of respondents stated that they use the database at least once a month.
- 44% of exporters who responded use the database to source information for port of entry standards for overseas markets (Figure 3).
- 92% of respondents stated that they would use the database again in the future.

The survey provided a good indication that the database is being utilised by a wide range of Australian seafood industry and government stakeholders and that the information provided is valuable to the sector.

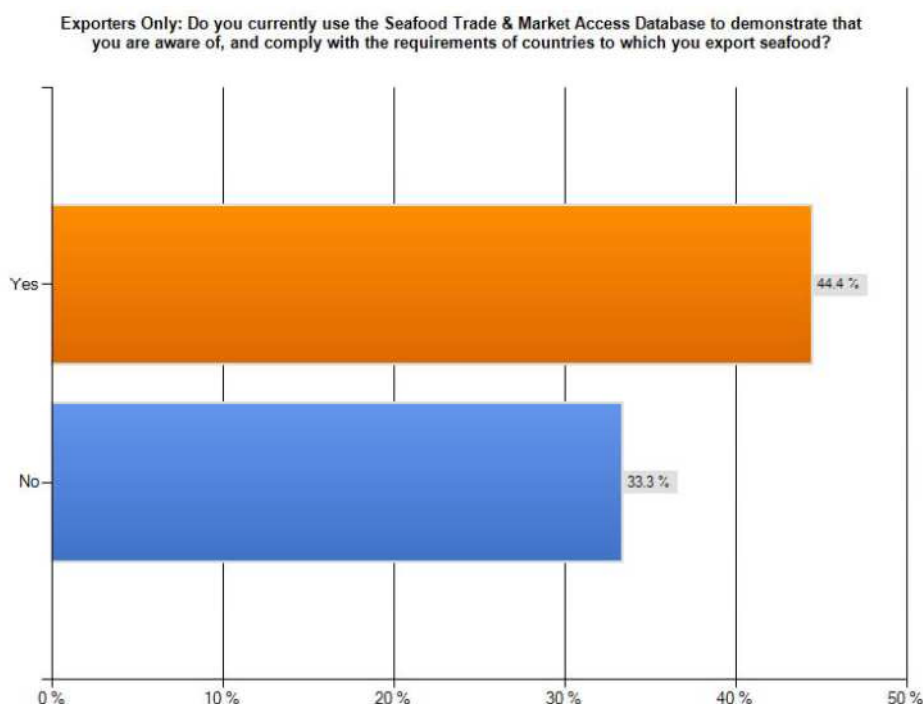


Figure 3. Percentage of exporters (respondents) that use the database to source information on port of entry standards.

3.3 Cost Recovery and Feasibility Assessment

To maintain the database there are on-going costs that need to be met. These costs are primarily associated with the need to maintain the on line infrastructure of the database and to check the validity of the data and update it on a regular basis (twice a year). Various cost recovery options have been discussed by the Project Team with a range of seafood sector stakeholders (including DAFF, ASCRC and industry representatives). The cost recovery options identified by stakeholders include:

1. Transfer of the database to a Commonwealth Government agency with responsibility for trade and market access;
2. Further 'project' based funding from the ASCRC or FRDC; and
3. Establishment of a 'fee' for database usage.

Option One (Transfer to Commonwealth Government):

The Department of Agriculture, Fisheries and Forestry maintain a system called MICoR (Manual of Importing Country Requirements) which sets out the known importing country requirements. MICoR currently refers users (has a direct link) to the Seafood Trade and Market Access Database (SSA website) and there does not currently appear to be any plan to replicate or incorporate this database into MICoR. Merging the two systems together remains a potential long term option, but will not support the continuance of the database in the short term.

Option Two (Project Based Funding):

Funding provided by the FRDC and ASCRC have enabled the development and implementation of the database. It is possible that a small level of funding could be provided through an FRDC/ASCRC project to support infrastructure needs and integrity of the data in the **short term**.

Option Three (Fee for Service):

Given the high level of stakeholder usage and positive feedback regarding the database (as detailed in Section 3.2), it seems feasible that end-users may be agreeable to a subscription charge. To trial this approach, Seafood Services Australia has recently implemented a 'trial' subscription which aims to cover the costs associated with maintaining the database infrastructure. The subscription cost is \$50 and enables users to access the Seafood Trade and Market Access Database, the online industry directory and the fish names database. The subscription trial has been in place for one week and to date ~100 people have paid subscriptions. Given the success in the first week it is promising that this approach will meet the on-going costs associated with infrastructure. However, this does not address costs associated with ensuring integrity of the data e.g. technical review and updating the data on a biannual basis. Future consideration could be given to increasing this fee to cover costs associated with technical review of the data.

3.4 The Seafood Access Forum and SafeFish

The Seafood Trade and Market Access Database provides invaluable information on current trade detentions and market impediments. These issues are now being actively 'fed' into the prioritisation processes that have been established by the SAF and SafeFish. This enables potential resolutions to be identified and followed up by technical experts, the outputs of which can be utilised by trade negotiators to overcome market failure. The ASCRC market access platform delivered through the Seafood Trade and Market Access Database, SAF and SafeFish has resulted in favourable market outcomes on several issues to date:

- The re-opening of the EU market for Australian abalone.
- Ensuring that international standards are commensurate with risk and appropriate for the Australian industry (e.g. foodborne viruses, abalone, bivalve mollusc standards, marine biotoxin methods, vibrio risk management proposals etc).
- Ensuring that marine biotoxin limits are appropriate, resulting in the maintenance of harvesting from two Tasmanian oyster production areas.
- Demonstrating safety of Australia prawns and providing outputs that can be used to negotiate reduced costs through decreased compliance testing.

Further technical work is currently underway through this ASCRC platform to assist in resolving the following key trade related issues:

- Cadmium in Australian prawns
- Marine biotoxins in Australian abalone
- Vibrios in prawns
- Parasites in Australian seafood
- Virus risk management procedures for the bivalve sector

The outcomes from this suite of technical projects will assist in overcoming key barriers to trade and enhancing market access for key Australian seafood products.

4. Benefits and Adoption

Benefits

1. Increased industry and government efficiency in locating overseas market access requirements and import tariff/duties.
2. Improved industry compliance with international food safety and trade standards.
3. Reduced cost to industry in complying with overseas market access requirements due to enhanced efficiencies and higher compliance rates.
4. Underpinning the Seafood Access Forum and SafeFish, primarily through identification of current and emerging seafood trade issues and provision of trade data.
5. Contribution to the resolution of key trade access issues (e.g. abalone/EU market).

Adoption

1. In June 2011 there were 405 registered users of the Seafood Trade and Market Access Database. In February 2012 a registration fee was introduced and within one week 105 users have subscribed. This indicates a significant level of adoption by stakeholders.
2. A survey undertaken in 2011 indicated a high level of end user satisfaction with the database and that a significant % of seafood exporters are utilising the database to support trade access into key markets.
3. It is apparent from the survey results and individual company feedback to the Project Team that the database is being used to support a range of sector functions, including:
 - a. Industry knowledge of market access requirements to directly support trade
 - b. Company decisions to access new markets
 - c. Research provider and government knowledge of trade requirements
 - d. Identification of technical barriers to trade
 - e. Improved sector understanding of export and import volumes/values.

5. Further Development

There are several areas of work recommended to ensure the currency of information provided and ongoing adoption and benefits to the Australian seafood sector.

1. Global food safety and trade standards are in a state of continual improvement and import requirements are frequently revised to reflect current science and food safety thinking. To maintain the integrity of the database there is an ongoing need to ensure that the database information is accurate. Without this, there is a risk that the trade standard information is inaccurate and this could jeopardise the 'right of entry' of Australian seafood into overseas markets. It is recommended that the database information be technically reviewed on a six monthly basis to ensure that the port of entry data provided (residues, microbiological, and preservative standards) is correct.
2. It is recommended that the Seafood Access Forum and SafeFish routinely review the 'trade detention and rejection' section of the database and this information is considered in the priority setting process for technical work in the future. It is also recommended that further consultation with industry and regulatory agencies be undertaken to streamline the process for capturing trade detection/detention information and to ensure that all trade notifications are represented in the database.
3. Inclusion of the following information in the database could be considered in future upgrades:
 - a. Nutritional profiles of Australian seafood generated in ASCRC project 2008/905
 - b. Technical outputs produced by SafeFish, including submissions to Codex Australia
 - c. WTO SPS notifications
 - d. Retail food safety and hygiene standards
 - e. Aquaculture feed standards.
4. Further promotional and training activities to support usage of the database by industry.

6. Planned Outcomes

Public Benefit Outcomes

At the completion of the project, the following public benefit outcomes have been generated:

1. Improved provision of trade data and information to support market access negotiations.
2. Increased government efficiency in locating overseas market access requirements and import tariff/duties.
3. Development of technically robust food safety positions for Australia to support implementation of Codex standards and guidelines that are appropriate/risk commensurate.
4. Underpinning the Seafood Access Forum and SafeFish, primarily through identification of current and emerging seafood trade issues and provision of trade data.
5. Contribution to the resolution of key trade access issues (e.g. abalone/EU market).

Private Benefit Outcomes

At the completion of the project, the following private benefit outcomes have been generated:

1. Increased industry (company and sector) efficiency in locating overseas market access requirements and import tariff/duties.
2. Improved industry (company and sector) compliance with international food safety and trade standards.
3. Reduced cost to industry in complying with overseas market access requirements due to enhanced efficiencies and higher compliance rates.
4. Enhanced industry access to new markets.
5. Increased ability of ASCRC participants to attract premiums for traded products through demonstrating food safety credentials.

Linkages with CRC Milestone Outcomes

Through undertaking and delivering this project, the following ASCRC Milestone Outcomes have been achieved: Milestone 2.6.2 - Market access database expanded to cover additional elements relevant to market access and available on secure website.

7. Conclusion

The establishment of the Seafood Trade and Market Access database has contributed to increased industry and government efficiencies primarily through enhanced compliance of Australian seafood with port of entry requirements and reduced overall export compliance costs to industry and government. The database has also become a critical supporting component of the ASCRC trade and market access platform, which aims to resolve technical barriers to trade and increase the profitability of the Australian seafood sector. The database is being actively used by the 'Seafood Access Forum' and 'SafeFish' to identify national trade issues (particularly through the collated 'rejection/detection' reports section of the database). The issues are consequently discussed and prioritised, and valuable government and research resources are being targeted (through SafeFish) to assist in the successful resolution of high priority issues. Key examples of the success of the ASCRC market access platform are:

- The re-opening of the EU market for Australian abalone.
- Ensuring that international standards are commensurate with risk and appropriate for the Australian industry (e.g. foodborne viruses, abalone, bivalve mollusc standards, marine biotoxin methods, vibrio risk management proposals etc).
- Ensuring that marine biotoxin limits are appropriate, resulting in the maintenance of harvesting from two Tasmanian oyster production areas.
- Demonstrating safety of Australia prawns and providing outputs that can be used to negotiate reduced costs through decreased compliance testing.

Appendix 1: Intellectual Property

The key intellectual property developed in this project is the content and infrastructure of the database. The table below provides an overview of the database content.

Export Destinations	1. Hong Kong	2. Japan	3. United States of America	4. Taiwan, Chinese Taipei	5. Singapore	6. China	7. European Union	8. Malaysia	9. New Zealand	10. Thailand	11. Vietnam	12. Codex Alimentarius	13. India	14. Canada	15. Russia	16. Brazil	17. Chile	18. Indonesia	19. South Korea	20. Australia
Tariffs & Import Duties									*											
Export Certification Requirements (through Micor)																				
Rejection & Detention Notices**																				
Residue																				
Microbiological ***																				
Preservatives ***																				
Key																				
Information provided to SSA, pending upload ****																				
Available																				
Not Available ***																				
Not Applicable																				

* Free trade agreement exists between Australia and New Zealand

** Note, these only exist for countries where there have been trade and detention notices issues due to non-compliant product detections

*** Due to restrictions in the availability of data some countries do not have microbiological or preservative data collated for them

**** At the time of this report, the Seafood Services Australia website 'trade' section could not be accessed. SARDI provided SSA with this information however, it is unknown if the website has yet to be updated.

Appendix 2: Staff

Dr. David Padula

Research Scientist

Phone: +61 8 8303 9767

Email: david.padula@sa.gov.au

Natalie Dowsett

Senior Research Officer

Phone: +61 8 8303 9399

Email: natalie.dowsett@sa.gov.au

Dr. Damian May

Research Scientist

Phone: +61 8303 9764

Email: damian.may@sa.gov.au

Dr. Catherine McLeod

Sub-program Leader, Seafood

Phone: +61 8 8303 9623

Email: cath.mcleod@sa.gov.au

Ted Loveday

Seafood Services Australia

Phone: +61 7 3633 6777

Email: tedloveday@seafoodservices.com.au

Simon Liu

Seafood Services Australia

Phone: +61 7 3633 6777

Email: SimonLiu@seafoodservices.com.au