

Science Strategy Implementation Plan

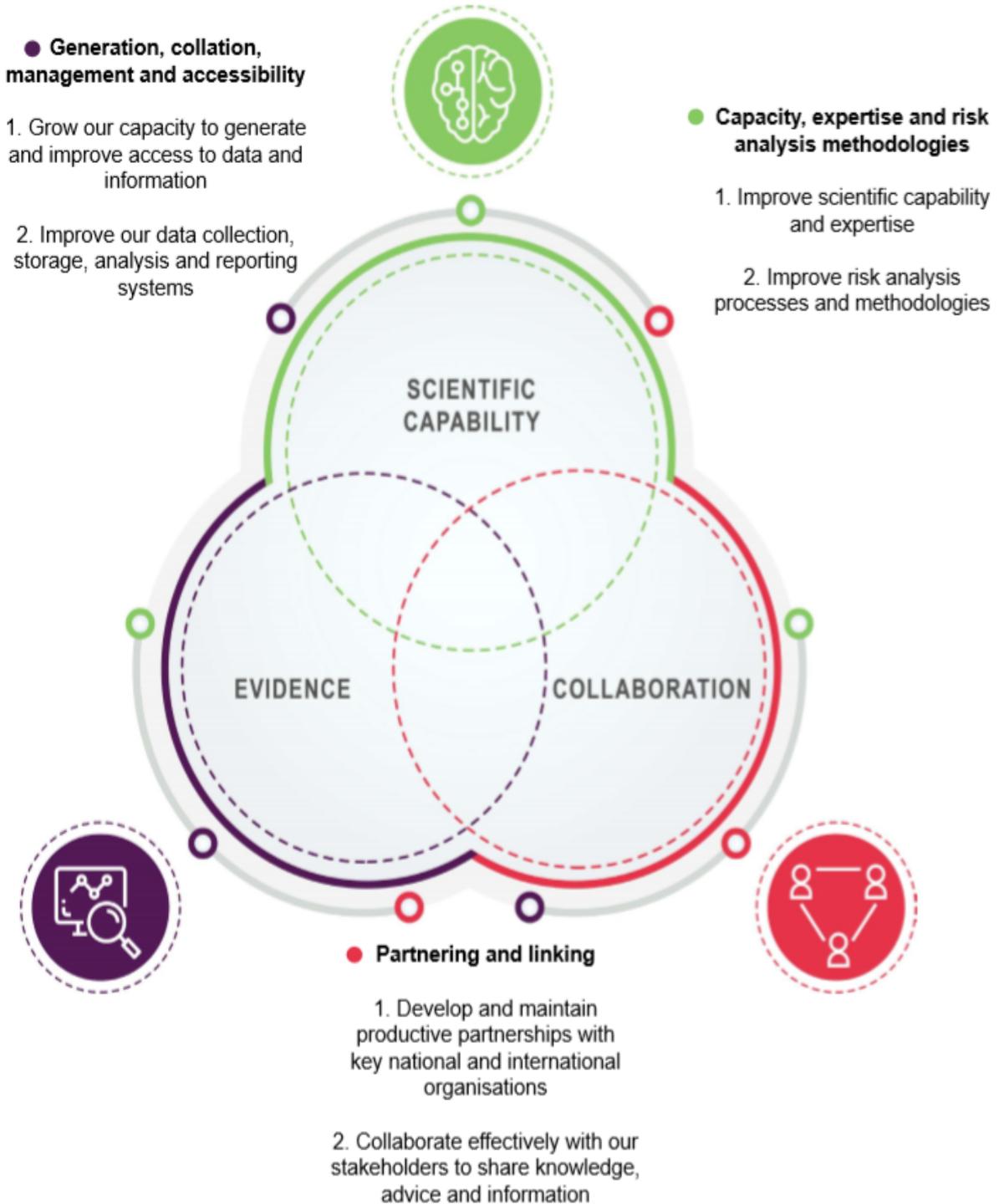
2018-19



Overview of FSANZ Science Strategy 2018–2022

AIM

Developing and enhancing our scientific capabilities, tools and partnerships to meet our current and future needs



Strategic Area: Scientific capability Aim 1: Improve scientific capacity and expertise	Timeframe
Initiative: Develop scientific capabilities and better utilise expertise in key scientific fields:	
<i>Identify potential roles for external consultant(s), support professional development, in-house training and work experiences in key scientific fields. May include:</i>	Ongoing
Key scientific field: Data science	
<ul style="list-style-type: none"> Undertake an in-house workshop to clearly articulate FSANZ’s needs in relation to engaging externals with expertise in the area of <i>Data Science</i> 	December 2018
<ul style="list-style-type: none"> The Government Open Data Community Forum and other Government forums as opportunities as arise and as applicable 	Ongoing – approx. every 6 weeks
<ul style="list-style-type: none"> In-house training on the use of the data registry systems (by the in-house Data Custodians Reference Group), and update standard operating procedures relating to these as required 	December 2018
<ul style="list-style-type: none"> In house-training related to the Electronic Data Records Management System and SharePoint 	Ongoing
<ul style="list-style-type: none"> In-house seminars and training on the use of Silo, for relevant and interested staff 	November 2018
<ul style="list-style-type: none"> In-house training/seminars on Epidemiology 	Ongoing
<ul style="list-style-type: none"> Identify opportunities to visit and undertake secondments between FSANZ and other relevant organisations such as: Australian Bureau of Statistics, Australian Institute of Health and Welfare, Australian Pesticides and Veterinary Medicines Authority 	Ongoing
Key scientific field: New methodologies in chemical risk assessment	
<ul style="list-style-type: none"> Engaging current FSANZ Fellows with expertise in area of toxicology to provide in-house training or seminars to FSANZ staff 	July 2019
<ul style="list-style-type: none"> Staff attendance at the International Liaison Group on Methods for Risk Assessment Chemicals in food (ILMERAC) face-to-face meeting 	September 2018
<ul style="list-style-type: none"> Staff visit to the European Food Safety Authority in relation to chemical risk assessment methods 	September 2018
<ul style="list-style-type: none"> Staff attendance at The Australasian College of Toxicology & Risk Assessment (ACTRA) meeting 	September 2018

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<ul style="list-style-type: none"> Support staff achieving certification by the American Board of Toxicology 	October–December 2018
<ul style="list-style-type: none"> Conduct Part 2 of in-house pharmaco- and toxico-kinetic workshop, including participant’s from other regulatory authorities 	March 2019
<ul style="list-style-type: none"> Continued skill development in benchmark dose modelling post staff visit to the European Food Safety Authority 	Ongoing
Key scientific field: Health economics	
<ul style="list-style-type: none"> Engagement through the Social Science and Economics Advisory Working Group and FSANZ Fellows 	Ongoing
<ul style="list-style-type: none"> Engagement through the International food safety regulatory economics working group - possible face-to-face meeting May 2019 	Ongoing
<ul style="list-style-type: none"> Engagement through Australian Government Behavioural Insights Practitioner Network 	Ongoing
<ul style="list-style-type: none"> Targeted professional development for staff on health economics (conference, workshop) 	2 nd & 3 rd quarter 2018-19
Key scientific field: Nutrition science	
<ul style="list-style-type: none"> Staff attendance and presentations at the 5th International Vitamin Conference, Sydney Australia 	August 2018
<ul style="list-style-type: none"> Internal secondment of staff working across nutrition risk assessment and risk management sections 	1 st quarter 2018-19
<ul style="list-style-type: none"> Staff attendance and presentations at the Nutrition Society of Australia 42nd Annual Scientific Meeting 	November 2018
<ul style="list-style-type: none"> In-house seminars relating to nutrition science by FSANZ Fellow and external expert, and derivation and operation of the Nutrient Profiling Scoring Criterion (NPSC) algorithm 	1 st quarter 2018-19
<ul style="list-style-type: none"> Finalise in-house guidance on nutrition risk assessment and contribute to development of guidance on benefit assessment 	1 st and 2 nd quarter 2018-19
<ul style="list-style-type: none"> Engage as needed with FSANZ Fellows with expertise in nutrition science and epidemiology 	Ongoing
<ul style="list-style-type: none"> FSANZ-CSIRO¹ Nutrition Forum (one-day meeting) 	2 nd quarter 2018-19

¹ The Commonwealth Scientific and Industrial Research Organisation

Strategic Area: Scientific capability Aim 1: Improve scientific capacity and expertise	Timeframe
Key scientific field: Emerging technologies	
<ul style="list-style-type: none"> Engagement of FSANZ Fellows and other experts to hold a seminar relating to nanotechnologies 	4 th quarter 2018-19
<ul style="list-style-type: none"> Finalise Biotechnology Strategy and develop implementation plan 	1 st quarter 2018
<ul style="list-style-type: none"> Update the FSANZ Handbook on Applications related to nanotechnology, and involve the Scientific Nanotechnology Advisory Group (SNAG) as appropriate 	July 2019
Other activities	
<ul style="list-style-type: none"> Participate in interagency professional development activities in regulatory science through the Regulatory Science Network, including staff attendance at annual seminar, the topic for the 2018 seminar being Risk Communication 	November 2018
Initiative: Ensuring internal and external peer review of our scientific outputs, systems and practices	
<i>Seek formal peer review of key scientific risk assessments, reports and other outputs. Anticipated reviews include:</i>	
<ul style="list-style-type: none"> External peer review of the updated Principles and Practices Dietary Exposure Assessment (DEA) for Food Regulatory Purposes document. Following peer-review, the updated version will be published on the FSANZ website. 	June 2019
<ul style="list-style-type: none"> External peer review for analytical program reports, with specific focus being to review the methodology and data generated by the laboratory. 	Ongoing
<ul style="list-style-type: none"> Anticipated external peer review of social science literature reviews: <ul style="list-style-type: none"> P1028 – Infant Formula Call for Submissions P1044 – Plain English Allergen Labelling Call for Submissions 	2 nd quarter 2018-19 (both)
<ul style="list-style-type: none"> External peer review of Anti-Microbial Resistance (AMR) risk assessment framework 	June 2019
Activity: Progress activities in support of the performance measure established relating to this strategic aim.	
<i>Anticipated activities include:</i>	
<ul style="list-style-type: none"> Undertake the second assessment for this performance measure. Includes mid-term assessment of key areas identified for improvement following the baseline of key scientific fields in 2016-20 Strategy, and the baseline assessment of new scientific fields included in 2018-22 Strategy. 	December 2018

Strategic Area: Scientific capability Aim 2: Improve risk analysis processes and methodologies	Timeframe
Initiative: Implementing a graduated approach to risk analysis	
<p>Continue to embed the recommendations that were identified during 2015-16 for a graduated risk analysis approach for the agency into the work undertaken at FSANZ, including:</p> <ul style="list-style-type: none"> • Develop guidance for risk assessors on risk-benefit analysis to streamline assessment processes. 	<p>Ongoing</p> <p>July 2019</p>
Initiative: Developing and refining the tools and methodologies used to undertake risk analysis	
<p>Continue to improve the use of Harvest, to enable us to better assess dietary exposure to foodborne hazards and report on the composition of the Australian food supply.</p>	<p>Ongoing</p>
<p>Complete development of Silo (phase 1), our in-house system for food composition data.</p> <ul style="list-style-type: none"> • Commence a second phase of development of Silo to enhance features and allow closer linkages with Harvest. As part of Phase 2 review, finalise the product backlog and prioritise future Silo development work. This phase of development will most likely focus on implementing FoodEx2 as a means of classifying foods and enabling the storage, compilation and reporting of non-nutrient scientific datasets identified for incorporation. 	<p>Ongoing</p>
<p>Improve tools to support regulatory economic analysis.</p> <ul style="list-style-type: none"> • Improve/update the Cost of Illness Model – to enable FSANZ to efficiently produce estimates of the cost of foodborne disease on best available evidence. This model is being developed by a collaboration of microbiologists and economists and could be extended to other food-related diseases in the future. • Review and revise the Label Cost Model – to standardise the quantification of costs involved in changing food and beverage labels. 	<p>Ongoing</p> <p>2nd & 3rd quarter 2018-19</p>
<p>Further explore methodologies for the collection of data on consumer and producer behaviour and regulatory analysis.</p> <ul style="list-style-type: none"> • Compile scoping report outlining the case, methods and design for a potential ongoing future FSANZ consumer monitor. Project involves an evaluation of FSANZ requirements for consumer information and the means by which it may be obtained. Final scoping report to be presented to FSANZ executive for adjudication as to whether to proceed to establishing/implementing a consumer monitor. 	<p>Ongoing</p>
<p>Review and refine the FSANZ Emerging issues Framework, including:</p> <ul style="list-style-type: none"> • Finalise revisions to the Emerging issues framework and how they are publically communicated. • Convene workshop on relevant drivers for emerging issues in the remit of FSANZ. 	<p>2018-19</p> <p>3rd & 4th quarter 2018-19</p>

Strategic Area: Scientific capability Aim 2: Improve risk analysis processes and methodologies	Timeframe
Initiative: Identify and evaluate additional sources of scientific evidence to help inform risk management decisions	
Exploring methodologies and further improving tools to support consumer and regulatory economic analyses. <ul style="list-style-type: none"> • Scope feasibility of using expert elicitation to inform FSANZ's economic regulatory analysis 	Ongoing

Strategic Area: Evidence Aim 1: Grow our capacity to generate and/or improve access to data and information	Timeframe
Initiative: Using external data sources, critiquing, validating and incorporating data to the FSANZ evidence base	
Microbiological metadata project – determine consistent definitions through the states and territories. FSANZ can build on this to allow States and Territories to provide data. The first step applicable to micro data but will also be applicable for chemical and other data into the future.	December 2018
Further work on the key foods analytical program.	December 2018
Continued use of a systematic approach to the identification of relevant scientific data/studies, including systematic reviews where appropriate. This is particularly relevant for chemical/nutrient risk assessment and benefit assessment.	Ongoing
Obtain nutrient data from the food industry for incorporation into FSANZ food composition databases, in a format which meets FSANZ's requirements for data and metadata quality.	Ongoing call for data
Depending on the availability of resources, FSANZ will undertake dietary exposure assessments of mercury in fish/seafood for the Australian and New Zealand populations using updated concentration data and food consumption data from the latest national nutrition surveys.	July 2019
Initiative: Prioritising surveillance activities using collaborative partnerships where possible	
Work collaboratively with other agencies to identify priority areas for generating surveillance data, in particular, with:	
<ul style="list-style-type: none"> • New Zealand Ministry for Primary Industries (NZ MPI), under the NZ MPI Food Safety Operational Research Programme. Includes collaboration in relation to ongoing projects, and collaboration on proposed projects for funding under the 2019-20 round. 	Feb-May 2019
<ul style="list-style-type: none"> • Jurisdictions, as part of the Implementation Subcommittee for Food Regulation Surveillance Evidence Analysis Working Group Co-ordinated Food Survey Plan. 	Ongoing

Strategic Area: Evidence	
Aim 1: Grow our capacity to generate and/or improve access to data and information	
	Timeframe
<ul style="list-style-type: none"> International liaison groups, to discuss potential need for surveillance in relation to identified emerging issues/areas. 	Ongoing
<ul style="list-style-type: none"> Drafting criteria for in-house use to assist FSANZ in decisions to undertake a survey. 	Ongoing
Initiative: Strengthening a microbiological evidence base for use in microbiological risk assessments	
Hold cross-agency Microbiology Discipline Group meetings to share information, identify any gaps and opportunities for collaborative microbiological work in relation to the Forum priority areas.	Ongoing, at least 2 per calendar year
The FSANZ Microbiological Evidence Base Plan 2015–2019 identifies a range of activities to be undertaken to support the development of a robust and contemporary microbiological evidence base. These are:	
<ul style="list-style-type: none"> Working collaboratively with existing mechanisms such as Implementation Subcommittee for Food Regulation Surveillance Evidence Analysis Working Group 	Ongoing
<ul style="list-style-type: none"> Develop guidelines and principles for microbiological data for incorporation into the FSANZ Data Management Strategy 	December 2018
<ul style="list-style-type: none"> Continued involvement with the Implementation Subcommittee for Food Regulation Data Sharing Working Group. 	Ongoing
Initiative: Working toward making data more accessible in the public domain	
<i>Data anticipated to be published publically during the 2018-19 period include:</i>	
<ul style="list-style-type: none"> Publish summary raw commodity consumption data for 2011–12 National Nutrition and Physical Activity Survey on the FSANZ website including a guide for use. FSANZ also plans to publish consumption based on food additive classifications. 	March 2019
<ul style="list-style-type: none"> Identify other datasets that FSANZ would like to publish, and develop a plan for the publication of these data sets. May include food consumption data for processed food groups, recipe datasets and other relevant data. 	July 2019
<ul style="list-style-type: none"> Update the dataset that supports the online labelling tool, the Nutrition Panel Calculator with all analytical data generated since its last release in 2011. 	December 2018
<ul style="list-style-type: none"> Summaries of surveillance data to be published, including 25th Australian Total Diet Study and Mineral oils survey. 	December 2018
<ul style="list-style-type: none"> FSANZ to publish the NUTTAB reference database, which includes all analytical data generated since its last release in 2011. 	October 2018

Strategic Area: Evidence Aim 2: Improve our data collection, storage, analysis and reporting systems	Timeframe
Initiative: Implementing our Data Management Strategy	
Continue to implement the Data Management Strategy 2016–2020. Anticipated activities include:	
<ul style="list-style-type: none"> Develop the 2018-19 Data Management Strategy Implementation Plan 	September 2018
<ul style="list-style-type: none"> Register FSANZ's existing scientific data into the data registry system, update and communicate standard operating procedures for internal data management across the agency 	December 2018
<ul style="list-style-type: none"> Identify gaps and enhancements required to the Silo database to determine its suitability for incorporation of microbiological data 	June 2019
<ul style="list-style-type: none"> Commence project to improve processes relating to the in-house processing of Maximum Residue Limit data. 	Commence September 2018; Complete June 2019
Other: Progress activities in support of the performance measure established relating to this strategic aim	
<i>Anticipated activities include:</i>	
<ul style="list-style-type: none"> Work together with the Data Custodians Reference Group, the Project Manager for the Data Management Strategy and other relevant staff to identify how to progress work in this area. 	Ongoing
<ul style="list-style-type: none"> Undertake the second assessment for this performance measure. 	December 2018

Strategic Area: Collaboration Aim 1: Develop productive partnerships with key national and international organisations	Timeframe
Initiative: Leverage expertise, information and resources on food regulatory issues from key national and international organisations	
Food regulatory issue: Genetically Modified (GM) food safety assessment	
<p>Continued focus on GM food safety assessment sharing conducted by FSANZ and Health Canada. Activities include:</p> <ul style="list-style-type: none"> • Continue to map out and refine an administrative process for safety assessment sharing. • Undertake a joint review of a complex, nutritionally modified GM food • Prepare for implementation of the safety assessment sharing system, includes identifying suitable products in the pipeline. 	<p>Ongoing</p>
Food regulatory issue – Maximum Residue Limit (MRL) harmonisation across the Asia Pacific Economic Cooperation (APEC) countries	
<p>Continue to support the work of the co-chairs of the APEC Food Safety Cooperation Forum (FSCF):</p> <ul style="list-style-type: none"> • On behalf of Australia as the lead economy, organise, co-ordinate and facilitate the following scheduled events: <ul style="list-style-type: none"> ○ 2nd Expert workshop ‘Trade facilitation through harmonization of maximum residue limits for pesticides – development of two implementation tools Phase 3’ (Brisbane) ○ 3rd Expert Meeting Trade facilitation through an ‘APEC Framework on Food Safety Modernisation’ (Shanghai) • On behalf of Australia as a co-sponsor, contribute to the following scheduled events: <ul style="list-style-type: none"> ○ Workshop on ‘Building Competence in Antimicrobial Resistance Surveillance among APEC Economies’ (Chile) ○ MRL Survey on ‘APEC FSCF PTIN² Workshop on Maximum Residue Limits Harmonization’ (Brisbane) ○ Workshop on ‘APEC FSCFS PTIN Workshop on Expert Certificate’ (Brisbane) • Continue to perform Secretariat duties for the FSCF co-chairs and act as an information channel for FSCF members and provide input to the whole of Australian Government position in relation to food safety in the APEC region. 	<p>October 2018</p> <p>November 2018</p> <p>October 2018</p> <p>Ongoing</p>
Food regulatory issue – Risk assessment of botanicals	
<p>Continue to collaborate with Health Canada:</p> <ul style="list-style-type: none"> • Discuss with Health Canada a science-based framework for the safety assessment of botanicals and the potential for assessment sharing. 	<p>Ongoing</p>

² Partnership Training Institute Network which is managed by the US

Strategic Area: Collaboration	
Aim 1: Develop productive partnerships with key national and international organisations	Timeframe
<ul style="list-style-type: none"> Co-lead and participate in face-to-face workshops of the International Social Science Liaison and Food Safety Regulatory Economics Liaison Group. 	3 rd -4 th Quarter 2018-19
<ul style="list-style-type: none"> Continue Science Forum series with CSIRO and (separately) with the Institute of Environmental Science and Research (ESR) and the New Zealand Ministry for Primary Industries. 	Ongoing
<ul style="list-style-type: none"> Pursue collaboration on horticultural research projects with Sydney University Fresh Produce Safety Centre. 	Ongoing

Strategic Area: Collaboration	
Aim 2: Collaborate effectively with our stakeholders to share knowledge, advice and information	Timeframe
Initiative: Build collaborative relationships with key stakeholder groups including:	
Stakeholder group: Food industry	
<ul style="list-style-type: none"> FSANZ NZ organising another field trip to engage with industry stakeholders in Nelson, New Zealand. 	October 2018
Stakeholder group: Universities, research agencies and other academic institutions	
<ul style="list-style-type: none"> Host two University of Sydney Food and Agriculture students for an 11-week placement at FSANZ. The students will undertake literature reviews in the area of Foodborne illness/Nutrition science. 	Sept-Nov 2018
<ul style="list-style-type: none"> As part of the student project and placement program, FSANZ may host students from the Nutrition and Dietetics undergraduate program at University of Wollongong and/or University of Canberra. 	2 nd quarter 2018-19
<ul style="list-style-type: none"> Continuing to build our relationship with University of Adelaide through P1028 – Infant formula social science research. In 2018-19, an online survey project will be completed. FSANZ will work with the main researcher, Dr Lenka Malek, to disseminate the findings of the research through the preparation of journal articles. In addition, FSANZ will promote the research through meetings with P1028 stakeholders. 	Ongoing
<ul style="list-style-type: none"> University of Technology Sydney and Australian National University through the project to update the annual cost of foodborne illness in Australia, circa 2010. 	Ongoing
<ul style="list-style-type: none"> New Zealand Food Safety Science and Research Centre 	Ongoing
<ul style="list-style-type: none"> Flinders University – continue to provide high level input to trust related research projects – including publications from previous work. 	2018-19

Strategic Area: Collaboration		Timeframe
Aim 2: Collaborate effectively with our stakeholders to share knowledge, advice and information		
<ul style="list-style-type: none"> University of Tasmania - Discuss with Professor Mark Tamplin about a possible student project to incorporate the FoodEx2 food classification into Combase predictive microbiology database to improve its search function. 	Ongoing	
<ul style="list-style-type: none"> Develop a proposal for an honours student / PhD project on establishing the safety of a priority list of Australian bush foods. 	2 nd quarter 2018-19	
Under the FSANZ Microbiological Evidence Base Plan 2015–2019		
<ul style="list-style-type: none"> Establish and strengthen links with expert groups including the Peter Doherty Institute, Melbourne University and, internationally, the Global Coalition on Regulatory Science Research researching the use of genomic sequencing and bioinformatics 	Ongoing	
<ul style="list-style-type: none"> Collaborate with Australian National University, NSW Food Authority and other health/regulatory agencies on the National Health and Medical Research Council research project to attribute causes of campylobacteriosis in Australia. FSANZ is providing expert risk assessment advice relative to food safety standards and policy development within the food regulatory system. 	4 th quarter 2019	
Other stakeholder groups		
<ul style="list-style-type: none"> FSANZ will continue to host a staff member from the Republic of Korea, Ministry of Drug and Food Safety (10 months in total). 	1 st quarter 2018-19	
<ul style="list-style-type: none"> Continue to represent Australia at Codex meetings and at joint expert group meetings (JECFA) 	Ongoing	
<ul style="list-style-type: none"> Continue to liaise with jurisdictions regarding food standards and other matters, particularly with Queensland Health and safe Food Production Queensland. 	Ongoing	
<ul style="list-style-type: none"> Pending resources, continue to build our relationship with Department of Health, New South Wales Food Authority, University of Technology Sydney and Australian National University through the project to update the annual cost of foodborne illness in Australia, circa 2010. 	July 2019	
<ul style="list-style-type: none"> As part of updating the FSANZ dietary exposure principles and practices document, collaborate with World Health Organization (WHO) and Food and Agricultural Organization (FAO) in relation to the revision of the dietary exposure chapter of Environmental Health Criteria (EHC) 240. 	June 2019	
Other: Progress activities in support of the performance measure established relating to this strategic aim		
<i>Anticipated activities include:</i>		
<ul style="list-style-type: none"> Undertake the second assessment of this performance measure. Includes re-consideration of some aspects of this measure. Work collaboratively to determine an approach for improving on the baseline assessment. 	December 2018	