Review of CSIRO's Science Prioritisation and Implementation Process

Final Report

29 August 2016

EY

Building a better working world

EY
**Building a better
working world**

Dr Larry Marshall
Chief Executive Officer
CSIRO
CANBERRA ACT 2600

29 August 2016

Dear Dr Marshall

Attached is our report, commissioned by CSIRO, about the governance, process, capability, and organisational culture that contributed to the planning, management, delivery and communication of the investment decisions taken last financial year in relation to funding for FY16-17.

CSIRO is an iconic Australian organisation, and one of the world's most significant scientific and industrial research bodies.

Over many decades, thousands of highly skilled and dedicated scientists and technical, administrative and support staff have helped drive scientific and industrial innovation. This has benefited all Australians, as well as countless people around the world. Numerous inventions developed by CSIRO and its partners have made our lives healthier and easier and our industries more productive, assisted our understanding of and interaction with our physical and natural world, and helped many businesses grow and prosper.

CSIRO is a complex organisation, with over 5,000 people based at over 50 facilities and installations around Australia and overseas. It is a major recipient of core public funding, but also attracts additional funding from governments and industry. It works in concert with many organisations including governments, higher education institutions, industry, and overseas partners. It thus has numerous, significant, stakeholder relationships. What it does is of considerable public, parliamentary and media interest.

CSIRO regularly reviews and adjusts its scientific and industrial focus, and operational activities. This is due to changing core funding, scientific advances, partners' and external stakeholders' priorities and funding, and assessments of future priorities.

Our review has considered aspects of the 2016-17 internal priority-setting and funding allocation process. As provided for in our terms of reference, we have not examined the eventual position the organisation adopted in May 2016, or the documentation associated with it. Rather, we have focused on the governance, risk methodology and processes leading up to your 4 February 2016 announcement; together with the management of the response to the concerns that were raised both within and outside the organisation about aspects of that announcement. We note that decisions taken in relation to most of the Business Units were not the subject of major concern or criticism, but those relating to the Land & Water, and the Oceans & Atmosphere Business Units in particular attracted significant internal and external criticism.

The investment decision process was also occurring at a time when there was a particularly strong national focus on science and innovation, through the Government's National Innovation and Science Agenda (NISA). The Prime Minister launched NISA at CSIRO's Black Mountain site in Canberra on 7 December 2015.

It is a truism that reviewing matters after they have occurred is easier than actually having to work through the issues in the first place. It is a sign of a mature organisation, one that is dedicated to continuous improvement, that looks back to see what happened, what lessons can be learned, and what can be done to improve future processes.
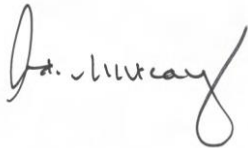
To that extent, we note the strong values, commitment and regard for the overall success of CSIRO very evident in our discussions with the Chair of the CSIRO Board, you, your senior leaders, and other staff members.

Our review has been detailed and extensive. We have been given access to all of the documents and materials that related to our terms of reference. We have conducted interviews with you and your senior leaders as well as the Chair of the Board. We conducted two workshops with a number of your staff, and all staff were invited to confidentially contact us if they wished to share their views and perspectives. Many did.

Our report makes a number of observations about where we believe that lessons should be learned. We have made recommendations which we believe, if adopted by you, will strengthen aspects of CSIRO's governance arrangements, risk methodology and mitigation, change management, elements of organisational culture, crisis management and associated process.

We would like to thank the Chair of the Board, you and your leadership team, and our EY colleagues who assisted us with this review.

Yours sincerely

Andrew Metcalfe AO   Bruce Hunter
Partner   Partner

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Disclaimer

This report was prepared at the request of the Commonwealth Scientific and Industrial Research Organisation (hereafter "the Client" or "CSIRO") solely for the purposes of assisting CSIRO in identifying improvements to its Science Prioritisation and Implementation process. It is not appropriate to be used for any other purposes.

Any party other than the Client who accesses this report shall only do so for their general information and this report should not be taken as providing specific advice to those parties on any issue, nor may this report be relied upon in any way by any party other than the Client. A party other than the Client accessing this report should exercise its own skill and care with respect to use of this report, and obtain independent advice on any specific issues concerning it.

In carrying out our work and preparing this report, Ernst & Young (EY) has worked solely on the instructions of the Client, and has not taken into account the interests of any party other than the Client. The report has been constructed based on information current as of 29 August 2016, and which have been provided by the Client and other interviews. EY also accessed media articles from external sources. Since 29 August 2016, material events may have occurred, which are not reflected in the report.

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1. Executive Summary

1.1 Context

In 2015, the Commonwealth Scientific and Industrial Research Organisation (CSIRO) introduced "CSIRO Strategy 2020" aimed at positioning the organisation as Australia's innovation catalyst. In addition to the introduction of the new strategy and organisation-wide reforms, 2015 also saw changes to CSIRO's leadership and management teams.

Following the strategy launch in July 2015, CSIRO introduced a revised science planning and budgeting process in time for the FY16-17 planning cycle. The new process had two major objectives: ensure financial sustainability; and ensure strategically aligned investment decisions. The revised process included an updated investment decision framework. EY identified three phases to the process:

I.   Science Prioritisation: the application of the investment decision framework and six investment criteria to make investment decisions in relation to research and development priorities

II. Implication Assessment: socialise and test preliminary decisions with BUs and there key stakeholders; undertake a risk assessment of preliminary decisions; revise decisions based on feedback and assessment; and communicate preliminary decisions to the Board

III. Delivery: Develop clear implementation and change plans; communicate decisions; and implement decisions.

For the purpose of this review, EY has collectively named these three phases the 'Science Prioritisation and Implementation' (SPI) process. The SPI Process determines the allocation of CSIRO's revenue, which is derived from a combination of sources including government appropriation and the private sector.

The application of the SPI commenced in September 2015 and led to investment decisions that required changes in funding allocations for some science Business Units (BUs); the re-prioritisation of research for some BUs; and the disaggregation of one BU (Food and Nutrition) into two other existing BUs. While the decisions were not expected to affect the total size of CSIRO's workforce (i.e. there was no planned net loss of staff), the changes were expected to result in some redundancies.

Shortly after endorsing the preliminary decisions, for several reasons (including transparency with staff and stakeholders) the CSIRO Executive Team (ET) determined that it would be necessary to communicate these decisions prior to a scheduled Senate Estimates Committee Hearing on 11 February 2016. This expedited the timeline to communicate the preliminary decisions, and resulted in an all staff email being prepared over approximately a 72 hour period. Further consultation, implementation, and change management planning had been scheduled to continue into February and March 2016, however this was significantly curtailed when the announcement was bought forward to 4 February.

Following the announcement of the preliminary decision and planned changes to the CSIRO Leadership Team (CLT) on 3 February 2016, and then to the wider organisation on 4 February 2016, there were many negative reports and criticism from staff, stakeholders, international and domestic interest groups and government/political stakeholders. This was particularly focused on staff from the Oceans & Atmosphere and Land & Water BUs, who faced the largest proposed staff impact. The issue also attracted significant media, public and Parliamentary interest, including through a number of hearings by a Senate Committee. The impact of this scrutiny was significant and wide reaching.

New elements of the SPI were introduced with the intent to allow greater input and empowerment for BU Leaders into the decision-making process. However, this assumed a consistent level of organisational maturity that was not present across all areas, resulting in inconsistent understanding and application of the SPI process amongst the CLT and varied levels of engagement and outcomes amongst BUs.

In the spirit of continuous improvement, CSIRO commissioned EY in May 2016 (following a competitive tender process) to conduct a review of the governance, process, capability and organisational culture that contributed to the planning, management, delivery and communication of the FY16-17 science investment decisions. The review was not to examine the final decisions reached by CSIRO in May 2016 or the information provided to inform those decisions; but rather to identify and understand the major lessons to be learned from the process that was undertaken.

EY's review of CSIRO's application of the SPI involved extensive stakeholder consultation (including twenty four interviews, two focus groups and fifty three email submissions) and a review of 326 documents related to or stemming from the SPI process. Observations and recommendations were then developed and validated through a series of workshops with key CSIRO stakeholders. Finally, this report and attached implementation roadmap was developed to be used to guide action aimed at improving the existing SPI process for FY16-17 and beyond.

The review found that, while the revised SPI process was more robust and evidence based than in previous years (see Section 6.2 of this report for more details), many of the issues and challenges that flowed from the 2015-16 experience were a consequence of seven interdependent domains: governance, process, risk management, change management, external stakeholder engagement, culture, and crisis management. Given their interdependence and limited interaction, they had a compounding impact on one another.

At the heart of all seven domains were governance and risk management oversights. Limited external stakeholder engagement and an organisational culture that had at times been permissive of behaviour that breaches the CSIRO code of conduct in turn further amplified these issues.

The seven major domains identified, and the high-level recommendations to address them, are summarised next. A full discussion of these domains and recommendations can be found in Section 6 of this report.

1.2   Observations and Recommendations

1.2.1 Governance

Observation:
The Executive Team (ET)[1] should have tailored its operating practices to cater for the varied background and management styles of the Board, and CLT. Not performing this tailoring limited the ET's ability to effectively govern the new elements of the SPI process and manage events that subsequently unfolded as evidenced via stakeholder consultations.

Recommendation 1A: Strengthen and better communicate the existing governance practices, including accountabilities, responsibilities, and sponsorship needed to support all phases of the SPI.

Recommendation 1B: Reassess the existing organisational structure and practices (including lines of reporting and distribution of corporate functions) to provide appropriate management and coordination to all phases of the SPI process.

1.2.2 Process

Observation:
Although elements of the SPI process were robust and were successfully navigated by most BUs, it could have been better defined and documented from the outset. The intent was to allow greater input and empowerment for BU Leaders into the decision-making process. However, this assumed a level of organisational maturity that was not universally present, resulting in inconsistent understanding and application of the SPI process amongst the CLT. In addition, the Science Prioritisation phase evolved during the period which led to other new activities (i.e. Deep Dives), resulting in inconsistent expectations and/or approaches taken by different BUs.

Recommendation 2A: Update and improve the documentation of policies, processes and procedures that underpin the SPI for greater clarity of purpose and consistency of approach (e.g. protocols around recording decisions), and ensure they are widely communicated and commonly understood.

1.2.3 Risk Management

Observation:
Risks were identified but not formally assessed and documented during the Science Prioritisation phase (except in the October BU plans); were not considered during the Implication Assessment phase; and consequently risk management was mostly unplanned and reactive during the Delivery phase. There

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was insufficient discipline in applying CSIRO's existing Risk Management Framework throughout the SPI process. This resulted in the lack of consideration of risk priorities and adequate resourcing in response, consideration of which could have reduced the impacts that arose during implementation.

Recommendation 3A: Formally integrate CSIRO's existing Risk Management Framework into the SPI process so that risks are optimally identified, monitored and treated, and investment opportunities appropriately resourced, particularly at the Implication Assessment stage.

Recommendation 3B: Improve existing risk management practice and culture (through, for example, training and assigning risk owners) to ensure that, at each of the Investment, ET and BU levels, decisions are made and resourced that are risk-based and proportionate, using the best capability (including the CSIRO risk team) and internal and external information.

1.2.4 Change Management

Observation:
Given the magnitude and impact of the changes, there should have been greater support to enable BU Leaders to effectively manage the change process via a common platform. An individualised BU change management approach was deliberately emphasised over a structured, co-ordinated delivery of enterprise-wide change. The intent was to empower BU Leaders in decision-making and to accommodate the unique culture and communication forums of individual BUs. However, this led to varied levels of engagement and different outcomes amongst BUs.

Recommendation 4A: Ensure that an enterprise-wide view of change management is undertaken for any change affecting either a significant part of, or the whole organisation (as determined by, for example, pre-determined thresholds).

Recommendation 4B: Ensure timely engagement and responsiveness of the relevant Corporate BUs (e.g. Organisational Development & Change) at the start of the Implication Assessment phase; and especially when proposed changes are likely to have a material impact on CSIRO's staff or reputation.

Recommendation 4C: Establish protocols and guidance principles for the development of all staff messaging and communications, informed by approaches that have proven effective in the past. Protocols and guidance should be in relation to topics such as communicating the drivers of change, and communicating preliminary and final decisions.

1.2.5 External Stakeholder Engagement

Observation:
Given that its activities impact on many external stakeholders, CSIRO should have engaged external stakeholders early to take input and inform the decision first; and then subsequently to signal the direction ET was minded to take, in order to rally support, and when necessary, explain potential funding change decisions.

In this instance, such discussions would have increased stakeholders' confidence that decisions were well informed; and alerted CSIRO to the potential risks and implications of their consideration of investment decisions in the SPI process.

As a result, some external stakeholders (e.g. government partners) felt they could have been better engaged during the process, especially when decisions directly affected their investments and projects.

It should be noted that CSIRO's capacity for such early engagement in this instance was somewhat restricted by the compressed timeframe resulting from the second round of BU presentations to ET (i.e. the Deep Dives) and the leaking of confidential discussions.

Recommendation 5A: Continue the work started to develop an external stakeholder engagement strategy (ESES) - including target stakeholder groups and protocols for engagement - to build trust in external stakeholders and support robust decisions or decision-making.

Recommendation 5B: Improve the understanding of the CLT in engaging Ministers, external government officials and other key external stakeholders, including through strengthening CSIRO's senior leadership presence in Canberra.

1.2.6 Culture

Observation:
Some staff (especially those from particularly sensitive areas of the organisation) indicated the ET and CLT could have been more transparent early on in relation to the decision-making deliberations and drivers of change; and further considered feedback during the SPI process, and vice versa.

Apparent disregard of the internal CSIRO code of conduct and public comments policy by some staff, further amplified the issues that emerged during the SPI process. This significantly hampered CSIRO's ability to engage internally.

Recommendation 6A: Develop a long-term strategy to change aspects of CSIRO's culture by resetting expectations and reinforcing behaviours that enable greater trust and transparency, linking in with the existing Culture Alignment Program.

Recommendation 6B: Increase awareness and enforce a greater emphasis on CSIRO's code of conduct and the values and behaviours expected of CSIRO staff.

1.2.7 Crisis Management

Observation:
CSIRO's initial response to the issues that emerged following the 4 February 2016 all-staff announcement did not utilise its Crisis Management Framework effectively. An ad-hoc issues response team was established instead. However, without the required guidance and relevant experience (including media management), the team was unable to immediately mitigate or reduce the impact of the issues. This resulted in issues being drawn out even further amongst staff, stakeholders and/or the media.

Recommendation 7A: Ensure that the most appropriate levels of the Crisis Management Framework (CMF) are invoked at the Implication Assessment stage, and when announcing major changes to the organisation or a number of BUs.

Recommendation 7B: Improve the understanding of the CLT on the specific triggers that warrant invoking CSIRO's CMF through, for example, training and operational crisis simulation exercises.

2.   Background

CSIRO introduced a new strategy in 2015 – the "CSIRO Strategy 2020" - aimed at positioning the organisation as Australia's innovation catalyst. The strategy extends CSIRO's already transforming operating environment to better position the organisation to be strategically aligned, responsive to customers and accountable for the science outcomes expected by government, customers and the community. CSIRO's revised science planning process investment decision framework was applied in FY15-16 to help prioritise research and deliver on these objectives.

2.1   Science and Research Institution Operating Environment

CSIRO is Australia's national science agency. Its purpose is to carry out scientific research to assist Australian industry, further the interests of the Australian community, contribute to the achievement of Australian national objectives, and to encourage or facilitate the application or utilisation of the results of such research. CSIRO's primary obligations are stipulated in the *Science and Industry Research Act 1949*.

CSIRO derives its revenue from a variety of sources, with the largest of these being government appropriation. The way in which this government appropriation is allocated and used is determined by the organisation itself (aligned with the current priority areas of Government). In addition, CSIRO has a significant public and private sector customer base, and is intending to grow that base into the future. For these customers, the allocation and use of the funding is initially determined by the customer and jointly developed between CSIRO and the customer to meet specific research and project objectives. There is also a minimal level of funding sourced through trusts and bequests to further broaden research into areas that may not currently be in focus or considered a priority area.

CSIRO, like many science and research institutions across Australia and internationally, is under increasing pressure from government and other stakeholders to improve its performance, effectiveness, efficiency and accountability of research outcomes. Consultations with CSIRO staff have indicated that science and research institutions are increasingly being expected to demonstrate improved impact planning, monitoring and evaluation systems of triple-bottom-line impact (i.e. Economic, Environmental and Social).

In response to this imperative, a framework to improve CSIRO's approach to planning for outcomes was developed and implemented for their National Research Flagship Program[2] in 2012 (Flagships have since been re-named Business Units). This was the first time that planning for triple-bottom-line outcomes had been undertaken on this scale and provided an overarching framework to improve both performance and accountability.

2.2   Recent Changes within CSIRO

2.2.1   Integrated Reform Program

Over the course of 2014, CSIRO embarked on an Integrated Reform Program (IRP) aimed at reducing complexity, improving process efficiency, achieving greater clarity of accountability and decision-making, enhancing the customer experience, reducing barriers to collaboration, and contributing to long-term financial sustainability of the organisation[3]. The core aspects of this program included:

▶   Re-defining the operating model used by CSIRO to align the flagship core areas (now referred to as Business Units) to the right pillars, for the long-term future of the organisation

▶   Re-defining capabilities and processes to support the program and designing a targeted set of measures to ensure financial sustainability and a balanced budget for the next four years

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[2] Flagships were large-scale multidisciplinary research partnerships formed to tackle major challenges and opportunities in critical areas of human, environmental and economic significance.

[3] CSIRO Integrated Reform Program document

- ▸ Finding new opportunities within the business and externally to generate revenue
- ▸ Evaluating the journey, lessons learned and the way forward[4].

2.2.2 Research Savings Measures

In the May 2014 budget, CSIRO was impacted by a four-year savings measure totalling $111.4m. Whilst the IRP delivered considerable savings, largely from the non-science areas of CSIRO, these and other savings to general expenditure were not enough to stem the need for job losses in the science areas arising from the appropriation reduction and the constrained capacity to generate external revenue. In 2014-15, CSIRO therefore implemented a significant headcount reduction program which led to over 500 staff leaving the organisation in that year (following on from more than 250 staff leaving in 2013-14 as CSIRO struggled to deliver its bottom line result).

2.2.3 New Corporate Strategy 2020

In July 2015, CSIRO released its new five-year strategy (Strategy 2020 – Australia's Innovation Catalyst). A central theme of the new strategy focuses on ensuring that CSIRO has a sustainable business model through the commercialisation of research and development outcomes. More effective commercialisation of research is expected to not only provide greater revenue and address existing funding constraints; but to enable the organisation to reinvest in new areas of research.

2.2.4 Introduction of a Revised Science Planning Process

In order to implement the strategy, CSIRO introduced a revised science planning and investment process in time for the FY 16-17 planning cycle. This was developed as part of an ongoing project (Supporting the Research Operating Model (SROM)) that is transforming how research projects are managed from the opportunity through to delivery phases.

A major objective in pursuing the new process was to ensure strategically aligned investment decisions between the enterprise, business unit and specific projects.

This review identified that the FY 16-17 planning cycle included three distinct phases as follows:

I.   Science Prioritisation: the application of the investment decision framework and six investment criteria to make investment decisions in relation to research and development priorities
II. Implication Assessment: socialise and test preliminary decisions with BUs and then key stakeholders; undertake a risk assessment of preliminary decisions; revise decisions based on feedback and assessment; and communicate preliminary decisions to the Board
III. Delivery: Develop clear implementation and change plans; communicate decisions; and implement decisions.

For simplicity, EY refers to these three phases throughout this report as the Science Prioritisation and Implementation (SPI) process. Further details on the SPI process; and its execution in FY15-16 (which is the focus of this review), can be found in Section 6 of this report.

2.2.5 Leadership and Management Changes

In addition to the introduction of the new strategy and organisation-wide reforms, 2015 also saw changes to CSIRO's leadership and management teams.

In January 2015, a new CEO joined CSIRO. Over the period of September – November 2015 (which is well into the SPI process), CSIRO also saw changes to the Board with the appointments of three new members, including the Chairman. In addition, a few Executive members took on changes in responsibilities, namely the Executive Director for Energy and Resources had Environment added to their portfolio, as part of a consolidation of the Executive Team in September 2015.

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[4] CSIRO Integrated Reform Program document

2.2.6 Introduction of the National Innovation Science Agenda (NISA)

The National Innovation and Science Agenda (NISA) was launched at CSIRO's Black Mountain site in Canberra by the Prime Minister on 7 December 2016. Worth $1.1B over four years, NISA is focused on fostering greater innovation and science breakthroughs "to deliver new sources of growth, maintain high wage jobs, and seize the next wave of economic prosperity"[5].

As part of NISA, the Government announced it will provide $70M over ten years to a CSIRO-managed innovation fund aimed at bringing to market early stage commercial opportunities based on excellent science. In addition to this, CSIRO has received increased funding of $25M per year dedicated to its data science efforts through Data61.

2.2.7 The Need for an Independent Review of the SPI Process

In line with CSIRO's commitment to continuous improvement, CSIRO undertook a competitive tender process and engaged EY in May 2016 to conduct an independent review of the SPI and ancillary processes that contributed to the planning, management, delivery and communication of the decisions. The review's terms of reference indicated that it was not to examine decisions reached by CSIRO or the information provided to inform those decisions that were made as part of the SPI process.
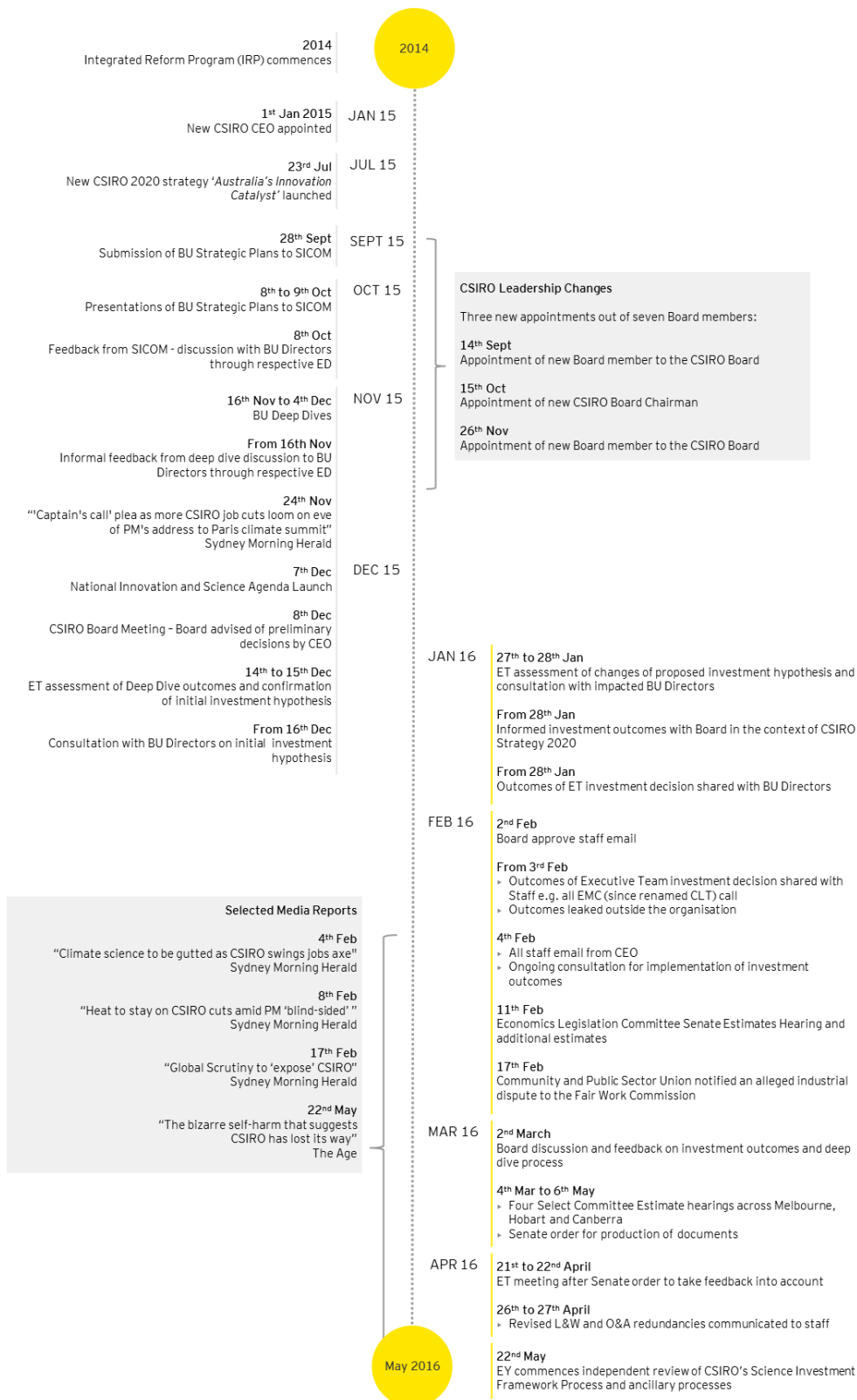
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3.   Timeline

A visual representation showing the series of events leading to this review. The timeline commences in 2014 and concludes on 22 May 2016.

Figure 1: Timeline of events

2014
2014
Integrated Reform Program (IRP) commences

JAN 15
1st Jan 2015
New CSIRO CEO appointed

JUL 15
23rd Jul
New CSIRO 2020 strategy 'Australia's Innovation Catalyst' launched

SEPT 15
28th Sept
Submission of BU Strategic Plans to SICOM

OCT 15
8th to 9th Oct
Presentations of BU Strategic Plans to SICOM

8th Oct
Feedback from SICOM - discussion with BU Directors through respective ED

NOV 15
16th Nov to 4th Dec
BU Deep Dives

From 16th Nov
Informal feedback from deep dive discussion to BU Directors through respective ED

24th Nov
"'Captain's call' plea as more CSIRO job cuts loom on eve of PM's address to Paris climate summit"
Sydney Morning Herald

DEC 15
7th Dec
National Innovation and Science Agenda Launch

8th Dec
CSIRO Board Meeting – Board advised of preliminary decisions by CEO

14th to 15th Dec
ET assessment of Deep Dive outcomes and confirmation of initial investment hypothesis

From 16th Dec
Consultation with BU Directors on initial investment hypothesis

CSIRO Leadership Changes

Three new appointments out of seven Board members:

14th Sept
Appointment of new Board member to the CSIRO Board

15th Oct
Appointment of new CSIRO Board Chairman

26th Nov
Appointment of new Board member to the CSIRO Board

JAN 16
27th to 28th Jan
ET assessment of changes of proposed investment hypothesis and consultation with impacted BU Directors

From 28th Jan
Informed investment outcomes with Board in the context of CSIRO Strategy 2020

From 28th Jan
Outcomes of ET investment decision shared with BU Directors

FEB 16
2nd Feb
Board approve staff email

From 3rd Feb
▸ Outcomes of Executive Team investment decision shared with Staff e.g. all EMC (since renamed CLT) call
▸ Outcomes leaked outside the organisation

4th Feb
▸ All staff email from CEO
▸ Ongoing consultation for implementation of investment outcomes

11th Feb
Economics Legislation Committee Senate Estimates Hearing and additional estimates

17th Feb
Community and Public Sector Union notified an alleged industrial dispute to the Fair Work Commission

Selected Media Reports

4th Feb
"Climate science to be gutted as CSIRO swings jobs axe"
Sydney Morning Herald

8th Feb
"Heat to stay on CSIRO cuts amid PM 'blind-sided' "
Sydney Morning Herald

17th Feb
"Global Scrutiny to 'expose' CSIRO"
Sydney Morning Herald

22nd May
"The bizarre self-harm that suggests CSIRO has lost its way"
The Age

MAR 16
2nd March
Board discussion and feedback on investment outcomes and deep dive process

4th Mar to 6th May
▸ Four Select Committee Estimate hearings across Melbourne, Hobart and Canberra
▸ Senate order for production of documents

APR 16
21st to 22nd April
ET meeting after Senate order to take feedback into account

26th to 27th April
▸ Revised L&W and O&A redundancies communicated to staff

May 2016
22nd May
EY commences independent review of CSIRO's Science Investment Framework Process and ancillary processes

4. Review Approach

EY's review of CSIRO's application of the SPI involved extensive stakeholder consultation and review of relevant documentation related to or stemming from the SPI process. Observations and recommendations were then developed and validated through a series of workshops with key CSIRO stakeholders. Finally, this report and the attached implementation roadmap was developed to be used to guide action aimed at improving the existing SPI process for FY16-17 and beyond.

CSIRO commissioned EY to conduct a review to assess the governance, process, capability and organisational culture that contributed to the planning, management, delivery and communication of the FY16-17 science investment decisions. The review was not to examine decisions reached by CSIRO or the information provided to inform those decisions.

We believe that there are a number of major lessons to be learned from the process that was undertaken.

Insights obtained via interviews, focus groups, workshops, document reviews and staff feedback were assessed against a set of seven key domain areas, which helped shape the observations and final recommendations. The development of the observations and recommendations were guided by an assessment of key components that underpinned and enabled the SPI process.

The seven key domains (illustrated in Figure 2 below) included areas of Governance, Process, Risk Management, Change Management, External Stakeholder Engagement, Crisis Management and Culture. These in turn were supported by enablers such as clarity of roles and responsibilities, engagement of the right resources, readily available documentation and the capability to implement.

Our review process considered and assessed these components in detail, to form the basis of the observations and recommendations.

Figure 2: Domain Areas Guiding the Review

Source: EY

The following diagram (Figure 3 below) highlights the approach that was undertaken for this review.

Figure 3: Tailored engagement approach

	1. Conduct Stakeholder Consultation and Document Review	2. Develop Observations and Recommendations	3. Validate Observations and Recommendations	4. Finalise Report and Implementation Roadmap
Objectives	Gain a comprehensive understanding of the events through interviews and documentation review	Assess appropriateness, effectiveness and efficiency of the process, governance, capability and culture relating to the in-scope activities based on stakeholder consultations and document review	Validate findings and socialise draft recommendations and implementation roadmap for stakeholder feedback	Incorporate stakeholder feedback and finalise final report for issue
Key activities	**1.1 Conduct stakeholder interviews** Consult with representative members of CSIRO's Executive and Board, senior managers and staff to understand the in-scope activities **1.2 Review documentation relating to the events** Understand the timeline of events and associated artefacts relating to the planning; the framework (IDF); risk and issues management; external and internal communication; change management; HR processes; ministerial and parliamentary liaison; executive governance and enterprise agreement; and engagement with the Board	**2.1 Compile findings and benchmark to leading practice process, governance, capability and culture** Consolidate findings and relevant leading practice to inform recommendations	**3.1 Discuss draft findings and validate recommendations** Facilitate sessions with relevant stakeholders to share initial observations and findings, discuss the feasibility of applying new/revised practices and identify any obstacles to successful implementation of the proposed way forward	**4.1 Incorporate stakeholder feedback into final report** Finalise report content based on stakeholder validation sessions **4.2 Develop implementation roadmap** Phase out improvement recommendations based on stakeholder validation sessions
Outputs	Consultation findings Timeline of events for assessment through documentation and interviews	Draft report, including stakeholder consultation findings, recommendations and implementation roadmap	Stakeholder feedback	Final report, including recommendations and implementation roadmap

Source: EY

Details of the specific activities that were undertaken are as follows:

Table 1: Detailed Approach

Steps	Key Activities

Step 1
 	
Conduct Stakeholder Consultation and Document Review
	Interviews
	
	1. 24 interviews were conducted with the senior management team Including:
	  ‣ Chairman of the Board
	  ‣ Chief Executive Officer (CEO)
	  ‣ All members of ET
	  ‣ BU Leaders and General Managers (GMs).
	See Appendix B for the full list of interviewees.
	
	2. Interview questions were designed to seek a greater understanding of the SPI and ancillary processes and to identify pain points and areas for improvement
	
	3. While interviews had specifically tailored questions catered to each interview, these served as guides to provide interviewers the flexibility to pursue particular lines of inquiry that emerged
	
	4. In efforts to encourage open and transparent conversations, interviewees were informed that interviews would be conducted in full confidence
	
	5. Interviewees were also encouraged to provide additional feedback either directly to the interviewer or via the independent EY mailbox if required
	
	Staff Focus Groups
	
	1. Two focus group sessions were facilitated at both CSIRO's Black Mountain and Clayton sites in Canberra and Melbourne respectively
	
	2. Each session invited twelve representatives (with at least one member of every science BU invited) plus representatives from the Communications and Human Resources Corporate BUs. Invitees were chosen by their respective HR Business Partner to ensure an independent and objective selection of representatives. All science BUs (rather than just those that were most affected) were invited to ensure the review was balanced and sought a breadth of insights from across the organisation.
	
	Document Review
	
	1. An extensive review of 326 documents was conducted to supplement the key themes and observations that emerged from the engagement with key CSIRO stakeholders and staff focus group sessions
	
	2. The documents reviewed included:
	  ‣ SPI process documents
	  ‣ Relevant internal and external communications
	  ‣ Parliamentary speeches, public statements, senate estimates and senate inquiries
	  ‣ Media reports.
	See Appendix B for the full list of documents reviewed
	
	Staff Feedback
	
	1. An independent mailbox that was external to CSIRO and managed by the EY review team was established to encourage open feedback. Staff were advised all feedback provided would be treated confidentially and no comments would be directly attributed to any individual
	
	2. 53 emails from staff were received and reviewed

Steps	Key Activities

Step 2
Develop Observations and Recommendations
	1. Established a set of preliminary observations based on engagement with key CSIRO stakeholders, staff focus groups and document reviews which were continuously refined during the review process
	2. These observations were assessed against a set of seven domains to identify strengths and any opportunities for improvement in the following areas:
	  ‣ Governance
	  ‣ Processes
	  ‣ Risk Management
	  ‣ Change Management
	  ‣ External Stakeholder Engagement
	  ‣ Culture
	  ‣ Crisis Management.

Step 3 Validate Observations and Recommendations	1. Facilitated three workshops with relevant stakeholders to discuss initial observations and recommendations, and the feasibility of applying new/revised practices and identified any obstacles to successful implementation of the proposed recommendations
Step 4 Finalise Report and Implementation Roadmap	Co-developed an implementation roadmap for the recommendations with relevant stakeholders to ensure buy-in and ownership of the execution and delivery of the required changes (Note: This is not included in this report but rather was provided as a separate document). 1. Finalised the report content following stakeholder feedback

5. Science Prioritisation and Implementation (SPI) Process

The review identified three distinct phases to science planning at CSIRO for FY16-17: science prioritisation; implications assessment; and delivery. For simplicity, these three phases are referred to throughout this report as the Science Prioritisation and Implementation (SPI) Process. CSIRO utilised an updated investment decision framework and investment criteria as part of the SPI process that contained new elements for FY16-17.

5.1 Overview

Since mid-2014, CSIRO has undertaken significant work to transform its business processes with an aim to better adapt to its changing environment and deliver on its strategic priorities. As discussed earlier, a key segment of this work included updating CSIRO's end-to-end Investment Decision Framework (IDF); from the enterprise level, through Lines of Business and BUs, Programs and to specific Projects.

The revised IDF had sought to provide increased transparency and consistency of decisions made by senior CSIRO staff during the Science Prioritisation phase. Central to the SPI reforms was to ensure that CSIRO's leaders were empowered to make informed decisions on the allocation of resources within their BUs, thereby ensuring traceability and alignment of the investment decisions between CSIRO's overall strategies through to project decisions.

Table 2 below highlights the investment criteria used by the IDF to support the decision- making process throughout the Science Prioritisation phase.

Table 2: Investment Criteria

1. Impact value	‣ The measurable outcomes sought will deliver clear and significant value to Australia's economy, society and/or environment ‣ The activity is consistent with CSIRO's mandate and strategy
2. Customer need / market attractiveness	‣ There is a clear and feasible path to impact for the research including a receptive, attractive market and demonstrated customer and end user application, demand & value ‣ Ability to form commercial relationships with customers to support the research, development and extension activities required for impact ‣ Compelling evidence that supports the identification of the right science and technical challenges to achieve the impact that are both ambitious and plausibly achievable given available resources
3. Competitiveness	‣ The research area has access to science & technology capability and outputs globally differentiated and competitive in its field ‣ CSIRO is the most appropriate organisation to deliver the goal, and no other organisations are better placed
4. Performance	‣ An evaluation of the current performance of the BU against agreed key performance indicators
5. Financial attractiveness	‣ An assessment of the prospective financial value return to CSIRO to be created by the research activities, outputs and pathways
6. Financial investment required	‣ The retrospective and prospective whole of life cost to CSIRO of the research, development and extension activities

Source: myCSIRO (intranet)

5.2   Using the SPI Process

Each year CSIRO undergoes a planning, investment and budget process as part of its Planning and Performance Framework and SPI process. The key inputs to this process includes CSIRO's strategy, annual Corporate Plan, individual BU Strategic Plans, and operational and financial performance information. Investment decisions are assessed against current performance, environmental factors and CSIRO's Science Investment Criteria.

The FY16 -17 science investment process was first informed by CSIRO's Strategy 2020. It was a key pivot point for the organisation in terms of ensuring how the organisation best positions its investments over the next four years to FY 19-20, to focus its attention on areas of strategic importance to the nation, provide sustainable revenue streams, and achieve its strategic objectives and budgets by 2020.

In order to appreciate the challenges, opportunities and performance of each BU to inform investment decisions, each BU's four-year strategic plan is submitted annually to the Science, Strategy, Impact and Investment Committee (SICOM) for review and consideration.

In September 2015, CSIRO commenced its annual planning and budgeting cycle, applying the revised IDF as part of the Science Prioritisation phase of the SPI process for the first time. While the FY15-16 individual BU Strategic Plans had been endorsed by SICOM in FY14-15, BU Leaders were asked to:

▸   Submit updated BU Strategic Plans that responded to and aligned with the new CSIRO Strategy by 28 September 2015

▸   Present these plans to SICOM and other science BU Leaders and General Managers from corporate services for review and feedback on 8 and 9 October 2015. The presentations were requested to focus on the following three key areas:

    i.   BU performance over the past 12 months (against previously endorsed strategies)

    ii.   Key initiatives BUs will adopt to support transition to the key focus areas of the new CSIRO Strategy

    iii.   Proposed four year budgets for SICOM endorsement

Input into investment decision-making to be undertaken by SICOM and ET in Q2 (i.e. what would BU Leaders exit, shrink, maintain, grow or make new investments in?). Upon reviewing the BU Strategic Plans and observing the BU Leader presentations, it was reported that the ET subsequently determined these did not meet the level of detailed evidence based and data-driven analysis they were looking for from these sessions to inform the potential cross-BU level investment decisions.

As a result, the ET requested an additional round of discussions (termed "Deep Dives") with BU Leaders that were not originally part of the Science Prioritisation phase. The Deep Dives were introduced in an attempt to introduce more rigorous, evidence and data-driven discussions to inform investment decisions (thereby remedying the perceived shortcomings of the SICOM presentations). To this end, the Deep Dive discussions focused on research portfolios, growth opportunities, priority shifts in new markets/clients, revenue pipeline and other related matters to inform the science investment decisions for FY16-17 to FY19-20. The approach included brief presentations and then an open dialogue structured around the following themes:

BU Pipeline Health	BU Growth Opportunities	Scenario Response
▸ Performance for FY14-15, including change to budget, pipeline to date and likely outcome for the FY ▸ Overview of outer year performance to FY19-20	▸ Priority shifts in existing or new markets, capability and / or clients ▸ Changes in capability or investment models	▸ 20% increase in appropriation funding over four years ▸ 20% decrease in appropriation funding over four years

In consultation with their leadership teams, each BU submitted a short brief in advance of their Deep Dive structured around the above three themes. The Deep Dive sessions then ran for approximately four hours per BU with the BU Leader and, in most cases, members of their respective leadership teams.

Following the Deep Dive sessions, the ET considered investment options against CSIRO's strategic objectives and investment criteria at their December 2015 ET meeting. During this meeting they developed an investment hypothesis and a preliminary prioritisation of investments across the BUs, which they subsequently shared with each BU Leader for feedback.

The ET identified areas of additional, stable and reduced investment, and some structural changes. The ET conducted consultation sessions with BU Leaders regarding the proposed shifts in investment across the BUs from 16 December 2015 onwards. Consultation with BU Leaders continued into 2016.

Where the change was more significant than what the BU Leader had contemplated, further consideration was given to informal feedback from BU Leaders and members of their staff by the ET at their January 2016 ET meeting. Additional consideration was also given to potential financial and structural impacts. Following this further deliberation, decisions were refined before being endorsed by the ET.

The Deep Dives reprioritisation process led to the following outcomes for selected BUs:

- CSIRO Astronomy & Space Science, Energy, Health & Biosecurity and Manufacturing BUs were given the go-ahead on their plans with no change to appropriation
- Mineral Resources, Agriculture and Health & Biosecurity BUs received additional appropriation funding, some delivered through Data 61
- Food & Nutrition BU was informed that they would merge into existing BUs and there would be no additional funding reductions to science
- Oceans & Atmosphere and Land & Water BUs were directed to make deeper appropriation funding reductions than their initial Deep Dive submission

As indicated in the timeline (Figure 1 on page 10), the CEO consulted with the Board about the proposed investment shifts, and any necessary budgetary impacts were included in the rolling four year CSIRO portfolio budget (March 2016 Board approval, and again in April 2016 with updates, and again in June 2016 with the final solution) and rolling four year Corporate Plan (June 2016 Board approval).

Shortly after endorsing the preliminary decisions, for several reasons (including transparency with staff and stakeholders) ET determined that it would be necessary to communicate these decisions prior to a scheduled Senate Estimates Committee Hearing on 11 February 2016. This expedited the timeline to communicate the preliminary decisions, and resulted in an all staff email being prepared over approximately a 72-hour period. Further consultation, implementation, and change management planning had been scheduled to continue into February and March 2016, however indications that preliminary decisions had been leaked cut this phase short.

The CEO's 4 February 2016 all-staff email signalled the intention to shift investment in some BUs' science portfolios, and provided indicative implications for staff numbers in those BUs. This all-staff email was an important first step in communicating the planned changes stemming from the SPI process. The communication also ensured CSIRO complied with the existing Enterprise Agreement requirements which requires early consultation with staff when there are likely implications to staff employment.

Before sending out the all staff email, BU Leaders and GMs were provided with a formal briefing on the endorsed preliminary decision on 3 February 2016 and an all-staff email was prepared to be sent out (some reported receiving informal briefings of the preliminary decisions prior to this date).

Between this briefing and an all-staff email going out on the morning of 4 February 2016, information in relation to the preliminary decisions stemming from the SPI process was leaked to the media. This led to the Minister's Office receiving numerous enquiries prior to the all-staff email being released by CSIRO at 10am.

There was a broad range of views and feedback received at this time. Some of the responses from stakeholders to the announcement was critical of the decisions, particularly in relation to the Oceans & Atmosphere and Land & Water BUs – who, relative to other BUs, faced the largest proposed staff changes as a result of the reprioritisation process. The communication and decisions attracted significant Parliamentary interest, including through a number of subsequent hearings by a Senate Committee.

The impact of this scrutiny has been significant and wide reaching and includes:

- Complicating the ability to consult openly and transparently with staff and key stakeholders. It also made it difficult to optimise the consultation period with staff in a timely and therefore respectful manner. The environment affected CSIRO's ability to progress the consultations with potentially impacted staff, creating an unwanted hiatus that has caused some distress across the organisation
- A compressed timeframe to plan the implementation of changes and coordinate the resources required to support change management activities
- Diversion of focus and cumulative months of work by CSIRO to provide documentation and prepare for attendance at hearings
- A perceived breakdown in trust in the processes and management.

6.   Key Observations and Recommendations

The review found that while the revised SPI process was more robust and evidence based than previous years, many of the issues and challenges that flowed from the 2015-16 experience were a consequence of governance and risk management oversights. These issues were then amplified by limited external stakeholder engagement and an organisational culture that has at times been permissive of behaviour that breaches the CSIRO code of conduct. Given the interdependency of the seven key domains, these issues then had a compounding impact on the other domains.

6.1   Governance

> **The Executive Team (ET) should have tailored its operating practices to cater for the varied background and management styles of the Board, CSIRO Leadership Team (CLT). Not performing this tailoring limited the ET's ability to effectively govern the new elements of the SPI process and manage events that subsequently unfolded as evidenced via stakeholder consultations.**

6.1.1   Context

The effective application of a process in an organisation is dependent upon the ability of an organisation to support the required attitudes and behaviours needed to effectively execute through its collective knowledge, capability, and culture. Robust governance practices will ensure that the appropriate leadership, with the requisite knowledge and understanding of the SPI process is available at the right phases of the SPI to enact the process as it was intended. Ideally, these governance practices will also cultivate a culture that values and supports new ways of working.

The SPI for FY16-17 incorporated a revised investment decision framework, comprising of a set of six enduring investment criterions; and also introduced Deep Dives as part of the Science Prioritisation phase. These new elements were introduced on the assumption there was a common understanding of the end-to-end process and that there was a level of organisation maturity amongst senior CSIRO staff integral to the process to effectively take responsibility and drive the process as intended to realise the full benefits.

6.1.2   Responsibilities and Accountabilities

A review of the IDF documentation and consultations with stakeholders revealed there was a number of key stakeholders with responsibilities and/or accountabilities in the application of the SPI process as follows:

Table 3: Key Internal Stakeholders

Executive Team (ET)	CEO*	
	Deputy CEO** (also SICOM Chair)	
	Chief Finance Officer**	
	Executive Director for Environment, Energy and Resources**	
	Executive Director for Future Industries**	
	Executive Director for Digital, National, Facilities & Collections**	
	Science Business Units	**Corporate Business Units**
BU	Business Unit Director for Agriculture	General Manager, Finance
	Business Unit Director for Mineral Resources	General Manager, Science & Government**
	Business Unit Director for Ocean and Atmosphere	General Manager, Commercial & Governance

	Business Unit Director for Energy	General Manager, Human Resources
	Business Unit Director for Manufacturing	General Manager, Communications
	Business Unit Director for Health and Biosecurity	Manager, Ministerial & Parliamentary Liaison
	Business Unit Director for Food and Nutrition	General Manager, Organisational Development & Change
	CEO for Data61	Acting General Manager, Strategy, Market Vision & Innovation
	Business Unit Director for Land and Water	General Manager, HSE
	Business Unit Director for CSIRO Services	
	Business Unit Director for CSIRO Astronomy & Space Science	

*The CEO did not have a Chief of Staff to support the management of relevant staff affairs until June 2016
**SICOM member

It was implicit that many of these key stakeholders had a role to play in various phases of the SPI process. For example, the implied role of the CEO, the ET, and SICOM in the Science Prioritisation phase of the SPI process was to evaluate BU Leaders' presentations and Business Strategic Plans and make decisions (in close engagement with BU Leaders) around the BUs' investment priorities for FY17. These plans were informed by analysis supplied by the CSIRO Strategy team, which supplemented their own individual analysis and insights. The SPI process, therefore, assumed a certain level of organisational and process maturity in relation to key tasks.

Based on our review, the SPI process did not prescribe who was responsible for coordinating, actioning or documenting critical phases of the SPI process (i.e. the Science Prioritisation, Implication Assessment and Delivery phases). Furthermore, the SPI process did not explicitly identify critical ancillary processes (e.g. risk management tools and frameworks) that could be used to support individuals in discharging their responsibilities. There was also limited documentation of the role each of these key stakeholders had to play; when they should be involved; or how they should coordinate activity. This issue was exacerbated by the fact some of the individuals who had key roles in implementing the revised SPI process were also working in new or expanded CSIRO operational roles as well (e.g. the Executive Director for Energy & Resources only added Environment to their portfolio in September 2015).

In the absence of a Responsible, Accountable, Consulted and Informed (RACI) matrix or similar method to identify key stakeholders responsibilities and accountabilities, a level of process and organisation maturity is required. Key stakeholders critical to the SPI process would be required to have an intimate understanding of the SPI process and the role they need to play to facilitate that process. However, given the adjustments to science planning that had taken place and some stakeholders being in new or expanded roles since the previous round of science planning, this level of familiarity and understanding could not be assumed.

Furthermore, the lack of proper planning and assignment of responsibility of each phase of the SPI process and the critical ancillary processes (e.g. risk management, change management) led to perceived levels of inadequacy in rigour and consistency of ET decisions. For example, the ET members that attended each Deep Dive were not consistent. Although the SICOM Committee Chair, CEO, CFO, GM (Strategy) and GM (Business Development & Commercial) were consistent attendees throughout these sessions, some stakeholders highlighted that the lack of consistency in the other ET members that attended each Deep Dive cast doubt over the objectivity and consistency of investment outcomes. While this perception existed, it should be noted that the final preliminary decisions were taken collectively by the ET with all members present.

Given there was a level of unfamiliarity around the new elements of the SPI, a clear documented governance structure with robust governance practices should have been developed, especially to account for the varied backgrounds and management styles of the ET. Appropriate documentation of the SPI governance structure would have supported a shared understanding and expectation of the roles and responsibilities of each individual involved as part of the SPI.

It was also noted by several stakeholders consulted that, given the uniqueness of CSIRO's business model and the organisation's accountability to a range of government agencies, it would be beneficial to increase the senior level representation based in Canberra. This would allow CSIRO to maintain and strengthen its existing relationships with the Federal Government, central agencies and public funding entities, which would not only enhance governance but also better facilitate effective external stakeholder engagement (see Section 6.5 'Stakeholder Engagement' more details).

A review of the events that took place clearly indicates that there are lessons to be learned and areas for improvement, including:

- An opportunity to more clearly assign accountabilities and responsibilities in each phase of the SPI process (e.g. engagement with CSIRO stakeholders revealed there was no clear owner of risk planning, monitoring and mitigation, especially in the Implications Assessment phase)

- An opportunity for certain key stakeholders to be engaged, consulted, or included especially across the Implication Assessment and Delivery phases of the SPI process. This limited engagement of key stakeholders, particularly from Corporate BUs, resulted in reduced ability to anticipate and adequately plan for relevant engagement (e.g. Organisation Development and Change was not engaged until after the all-staff announcement was made by the CEO). This coordination, engagement and alignment of key Corporate BUs could be better facilitated by, for example, grouping all those relevant to supporting the SPI process under one Executive Director

- An opportunity for greater coordination of the SPI process by key stakeholders.

While we recognise the difficulty in striking a balance between empowerment and prescription, our observations suggest that the loosely defined SPI governance structure was a significant explanatory factor in some of the subsequent issues that emerged and that are described later in this report. In particular, a lack of governance structure resulted in limited ownership of key activities (e.g. risk management, change management and stakeholder engagement).

Based on our consultations and review, it would seem that the loosely defined governance structure was deemed appropriate for two main reasons:

- First, while the SPI process had new elements, it was not considered to be a significant departure from the previous science planning process and therefore was assumed to remain relatively familiar to the business and key stakeholders. This sense of familiarity may have in turn contributed to limited formalised risk planning (please see Section 6.3 on Risk Management for more details)

- Second, because CSIRO had regularly managed periods of downsizing and reprioritisation before, it was assumed the knowledge to manage such changes effectively was in place. However, a key difference in the case of the decisions taken in FY15-16 (to take effect in FY16-17) was that these were driven by the organisation internally (as a consequence of applying the revised IDF and investment criteria), as opposed to changes imposed on the organisation externally as had occurred in previous years. This contributed to different perception of the investment decisions and demanded very clear articulation of the business drivers for change. This lack of documentation further limited accountability and follow through of key actions (e.g. following up and monitoring risks that were discussed).

6.1.3 Record keeping

Based on our engagement with CSIRO stakeholders and the documents we reviewed, there was found to be a lack of rigour and protocols regarding the documentation of key meetings and decisions (e.g. a decision register was only introduced part way through the process), resulting in the lack of timely documentation being produced. It is likely that this in part stemmed from the limited formal governance and definition of key roles and responsibilities for stakeholders involved in the SPI process.

6.1.4 Recommendations

Recommendation 1A: Strengthen and better communicate the existing governance practices, including accountabilities, responsibilities, and sponsorship needed to support all phases of the SPI.

Guidance: Given the changes within the organisation and the fact that the SPI contained new elements, which were new to the organisation, we suggest that the governance practices:

- Clearly articulate the accountabilities and responsibilities of senior CSIRO staff throughout the process. This includes defining the roles and relationships of the Board, Chairman, CEO, ET, BU Leaders and their leadership teams and Corporate GMs; as well as the membership and terms of reference of relevant committees (e.g. Science, Strategy, Investment and Impact Committee (SICOM))
- Consider the need to assign a senior executive sponsor to provide governance and management of the implementation of consequential changes across the different BUs within the organisation. This senior executive would be accountable for the coordination of required activities that need to be performed
- Consider scheduling regular reviews of governance practices to ensure and monitor their effectiveness in catering for major changes (e.g. new members, management styles etc.), including a formal acknowledgement by senior CSIRO staff that they have read and understood the governance practices and the expectations of them in their respective roles.

Recommendation 1B: Reassess the existing organisational structure and practices (including lines of reporting and distribution of corporate functions) to provide appropriate management and coordination to all phases of the SPI process.

Guidance: CSIRO could consider developing a more integrated organisational structure that enhances the delivery of the SPI process rather than relying on the formation of multiple committees that leads to unnecessary administrative overhead. As such, CSIRO could:

- Review existing lines of reporting and make the necessary changes in terms of requirement, fit and frequency to cater to the varied background and management styles of the Board, ET, BU Leaders and Corporate GMs
- Review the distribution of corporate functions within the organisational structure, and consolidate the reporting lines of those with high interdependencies and need for coordination under a single Executive Director (e.g. Communications, MPLO and Commercial & Governance) to enable a more consistent, efficient and effective delivery process
- Increase its senior leadership presence in Canberra to assist engagement with government stakeholders. This will also assist with external stakeholder engagement (see external stakeholder recommendations for more detail).

6.2 Process

Although elements of the SPI process were robust and were successfully navigated by most BUs, it could have been better defined and documented from the outset. The intent was to allow greater input and empowerment for BU Leaders into the decision-making process. However, this assumed a level of organisational maturity that was not universally present, resulting in inconsistent understanding and application of the SPI process amongst the CLT. In addition, the Science Prioritisation phase evolved during the period which led to other new activities (i.e. Deep Dives), resulting in inconsistent expectations and/or approaches taken by different BUs.

6.2.1 Context

As outlined in Section 5, which described the SPI process since 2014, CSIRO's approach to making investment decisions was revised and updated through the SROM project. Investment decisions made at the enterprise level inform and feed into investment decisions for lines of business, flowing through to BUs, programs and finally to specific project opportunities. The changes made to investment decision-making at CSIRO are being undertaken with the intent of realising greater alignment at all levels so that project opportunity investment decisions are aligned to the objectives and impacts identified in individual BU strategic plans, as well as CSIRO's organisation-wide strategy.

CSIRO's IDF was used as part of the Science Prioritisation Phase of the SPI process. The IDF provides the enduring six criteria and other decision-making guidance by which CSIRO makes its investment decisions.

The newly revised IDF was applied for the first time, as part of the Science Prioritisation phase, at the beginning of FY15-16 when BU Leaders were asked to prepare their FY16-17 BU Strategic Plans for submission and presentation to SICOM. As outlined earlier, the BU Leaders were asked to update their BU Strategic Plans from the previous financial year in response to CSIRO's Strategy 2020 with a focus on key areas: BU performance over the past 12 months; key initiatives to adapt to the new strategy; proposed four-year budgets; and identification of BU areas to enter, maintain, grow, shrink or exit.

6.2.2 BU Presentations to SICOM

The start of the Science Prioritisation Phase was marked by the submission of BU Strategic Plans to SICOM on 28 September 2015, followed by BU Leader presentations to SICOM on 8-9 October 2015. These presentations were attended by the CEO, all members of SICOM, the majority of GMs, and all BU Leaders.

Limitations were reported in relation to these presentations. First, having such a large audience in attendance, including leaders from other BU Leaders, acted as barrier to transparent and honest discussions. Second, some consultations indicated the large audience and short allotted time restricted and constrained two-way dialogue, leading to a marketing style approach to presentations rather than in-depth investment discussions. Overall, the depth of discussion did not allow for the depth of conversations required to inform decisions for Strategy 2020 alignment.

Upon reviewing the BU Strategic Plans and observing the BU Leader presentations, it was reported that the ET subsequently determined these did not meet the level of detailed evidence based and data-driven analysis they were looking for from these sessions to inform the potential cross-BU level investment decisions.

EY's review of the communications to BU Leaders in preparation for the session found that while they did clearly outline the expectations for the BU Strategic Plans and presentations, the communications did not explicitly define what was to be different about the BU Strategic Plans and presentations relative to previous years. Consultations also revealed that BU Leaders only received limited inputs on BU performance or market analysis to inform their preparation for the SICOM meeting (this was subsequently rectified – see Section 6.2.3 for more information). Finally, for at least some members of SICOM, it was only after observing the BU Strategic Plans and presentations that they were clear on the exact level of detail and analysis which they required to make portfolio investment decisions and the inputs and support that BU Leaders would require to deliver that rigour.

6.2.3 BU Deep Dives

The consequence of the SICOM presentation process was that an additional round of BU Plan presentations was requested by ET. These were known as Deep Dives, and took place over the period 16 November 2015 to 4 December 2015. These Deep Dives were never intended to form part of the original Science Prioritisation phase; it was a new remedial activity implemented as part of the FY16-17 process. Some stakeholders indicated that naming these additional sessions as 'Deep Dives' was unhelpful given it was an unfamiliar term that aroused suspicion among some staff in the organisation. This was either due to its unfamiliarity and ambiguity, sounding like business jargon (which does not resonate well with many scientists in the organisation), or because of connotations it holds in the public service as code for 'job cuts.'

Despite these concerns around the name of the session, consultations in relation to the Deep Dives revealed near unanimous agreement that these sessions were far more productive and valuable to science planning for the BU than the earlier SICOM presentations. Furthermore, the majority of stakeholders consulted reported that the Deep Dive preparation and discussions led to far more rigorous, evidence based science planning process than had ever been conducted at CSIRO before, and that the discussions added real value to identifying alternatives to tackling the unique challenges faced by each BU. The Deep Dives were again chaired by the SICOM Committee Chair, who facilitated these sessions to focus on the key questions and objectives.

Likely reasons for this improved feedback and perceived value of the Deep Dives (relative to the SICOM presentations) are as follows:
▸ Clearer and more detailed communications around expectations from both the Strategy, Market Vision & Innovation BU and the SICOM chair, including a clear statement of the objectives, approach and topics for the session
▸ Greater support in the form of detailed BU performance and market data, analysis and insights, and a briefing template and budget template to support further analysis and the development of a suitable presentation
▸ Clear and aligned expectations from ET going into the Deep Dive sessions
▸ Smaller audience, with only the CEO, Deputy CEO, CFO, GM of Business Development & Commercial, Acting GM of Strategy, Market Vision & Innovation and Executive Director responsible for the BU concerned, which reportedly helped to facilitate a more two way dialogue and encouraged a more honest and transparent discussion.

While the Deep Dive sessions therefore remedied several of the issues identified during the SICOM presentations, they introduced several new challenges:

▸ The attendees for each Deep Dive session were not standardised. This led to either a real or perceived sense that there was an inconsistent dynamic for each Deep Dive session, and that not every ET member had the benefit of receiving information first-hand (or complete information) from the Deep Dive sessions to inform investment decisions across the organisation. It was reported that a protocol has since been developed stipulating that all ET members will be required to attend all future BU Strategic Plan presentations for consistency

▸ Some stakeholders reported that, while the communication of expectations and preparation for the Deep Dives were an improvement, the implications of the Deep Dives were not consistently understood:
  – It was reported by some stakeholders consulted that the decisions and consequences that flowed from these Deep Dives was not clear in the minds of some BU Leaders that participated in these sessions. This may have been a product of these sessions being additions to the original SPI process and therefore it would seem some misconstrued their contribution to investment decision-making.
  – High-level descriptions were provided to BU Leaders as to the purpose of the Deep Dive process. However this lacked the clarity and detail to clearly explain how it fits within the context of the overall decision-making process.
  – The lack of an end-to-end definition of the decision-making process, in conjunction with an unplanned round of activity that was subsequently conducted, would explain the observed variable levels of understanding from BU Leaders as to what the outcomes of the Deep Dives

would be. While the guidance and support materials (e.g. detailed 'Investment Decision Making Inputs' analysis and data supplied by CSIRO's strategy team) provided for the Deep Dives resulted in more structured and valuable discussions, some stakeholders consulted felt that the templates provided to BU Leaders did not explicitly link back to the investment criteria, creating a disconnect between the Deep Dive material and the SPI process.

▸ The need for a second round of presentations led to a compressed timeframe for conducting an Implications Assessment (i.e. Phase 2 of the SPI) and planning Delivery (i.e. Phase 3 of the SPI). Activities such as testing decision implications with target stakeholders, adjusting decisions based on risk scenarios, and planning change management and communications were rushed or delayed until later in the Delivery phase

▸ The need for a second round of presentations led to a compressed timeframe for consulting BU stakeholders to provide feedback and discuss preliminary decisions. A perception was expressed by some stakeholders consulted that there was insufficient consultation and two-way dialogue subsequent to the Deep Dives

▸ Some stakeholders consulted reported that there was inconsistency in the timeliness and quality of the feedback provided to BU Leaders following the Deep Dives; and feedback was initially limited to verbal discussions with limited written feedback provided. As a result, some BU Leaders, as well as staff, reported they felt removed from the SPI process as their feedback was not formally taken into account by the ET to arrive at their investment decisions in January. Some contributing factors may have been:
  – Protocols and timeframes for communicating ET feedback and decisions stemming from the Deep Dives were not clearly defined, in some cases resulting in delayed feedback and poor engagement with BU Leaders in some cases
  – Limited documentation of consultation discussions. Engagement with key CSIRO stakeholders revealed that feedback on the Deep Dive presentation was limited to verbal and high level feedback despite requests for written and/or detailed feedback
  – Some CSIRO stakeholders consulted indicated that this initial feedback on the Deep Dives was at times at odds with the subsequent decisions that were taken
  – It was reported by some stakeholders that ET were not in a position to provide more detailed feedback until they had heard all Deep Dives, debriefed as a team and synthesised what this meant for the enterprise as a whole

▸ There was clearly a need for ET to reflect on what had been presented and consider the enterprise-wide view and risk-reward trade-offs between areas before providing further feedback. However, it would seem at the very least this was not communicated to all BU Leaders effectively to help allay concerns and explain any delays As a result, some BU Leaders, as well as staff, reported they felt removed from the SPI process as their feedback was not formally taken into account by the ET to arrive at their investment decisions in January.

▸ The timing of the Christmas and New Year break that followed shortly after the Deep Dives also further compounded the impact of this compressed timeframe. In most cases notification of decisions taken as a result of the Deep Dives was given to the respective BU Leaders either just prior to the holiday break, with greater detail and impacts discussed following the break in late January 2016 with those BUs that were impacted the most

6.2.4 Recommendations

Recommendation 2A: Update and improve the documentation of policies, processes and procedures that underpin the SPI for greater clarity of purpose and consistency of approach (e.g. protocols around recording decisions), and ensure they are widely communicated and commonly understood

Guidance: Based on the level of ambiguity in the understanding of the SPI process, and the decisions and outcomes that flow from it, CSIRO could consider:

▸ Updating and reviewing policies and procedures within the end-to-end SPI process where required. For example, CSIRO could:

- Clearly articulate and communicate the guiding principles for decision-making in the Science Prioritisation phase (to complement existing investment criteria)
- Clarify the purpose and rationale behind each activity in the SPI, including identification of critical steps, likely outcomes from each activity, and their linkages to the overall strategy
- Specify the expectations, key activities, period, and extent of ET, BU Leader, and staff involvement throughout the SPI process (e.g. all ET members to be part of all critical steps in the SPI process)

▸ The SPI process could include an administrative procedure that mandates and guides the documentation of decisions and meetings at each stage of the SPI

6.3 Risk Management

Risks were identified but not formally assessed and documented during the Science Prioritisation phase (except in the October BU plans); were not considered during the Implication Assessment phase; and consequently risk management was mostly unplanned and reactive during the Delivery phase. There was insufficient discipline in applying CSIRO's existing Risk Management Framework throughout the SPI process. This resulted in the lack of consideration of risk priorities and investment in responses, consideration of which could have reduced the impacts that arose during implementation.

6.3.1 Context

The public, political, media and other external stakeholder interest in CSIRO and the SPI process at the time of its application during FY17 was greater than previous years. This meant that CSIRO's Risk Management Framework (RMF) was applied in a new and challenging context. This unique context was due in part to:

▸ The SPI process closely following the release of CSIRO's Strategy 2020
▸ The public and political interest in the impacted areas of climate and environmental science
▸ The culture of environmental science areas of the organisation (see Section 6.6 for further details on culture)
▸ CSIRO being given lead responsibility for a number of NISA innovation initiatives

CSIRO's Risk Guidelines, Policy, Procedure and Standards, available to all staff on the internal myCSIRO intranet page, demonstrate that CSIRO had a clear process to identify, mitigate and control risks arising from the implementation of key business processes. The effective management of risk is a legislated requirement of all Commonwealth Agencies under the Public Governance, Performance and Accountability Act 2013 (PGPA Act).

The 'Risk Procedure' document prescribes mandatory requirements for the assessment and management of risk in CSIRO. Prescribing specific tasks to various ranks of staff, from ET to all staff, these allocate broad obligations and responsibilities as part of the RMF. The 'Risk Guidelines' outline key principles and techniques to identify, evaluate, treat and monitor risks.

CSIRO's Risk Guidelines make clear the need to capture risks at both a BU and Enterprise level. Risk identification must be conducted at both levels to ensure comprehensive assessment, as risks at the BU and Enterprise level can be quite distinct.

6.3.2 Risk Identification

The identification of risks, events that may occur in the future, is critical to ensuring that appropriate steps are taken to prevent, detect or mitigate the outcomes of those risk events. While elements of the SPI contain risk considerations, there was no formal risk identification process undertaken to identify risks posed to CSIRO. According to stakeholders, risk assessments occurred infrequently, informally and were hampered by an absence of representation from across the organisation.

The failure of CSIRO to formally identify risks and issues is attributable to three key factors. First, there was no explicit articulation of the need to engage with risk as part of the IDF - the approach to risk identification within the IDF relied upon a flawed assumption that risk management is integrated into every business process within CSIRO. Second, there was no clear allocation of responsibility for risk management throughout the IDF process. Finally, there was limited and inconsistent use of CSIRO's internal risk resources to assist in the identification of risk posed by the IDF process.

The failure to comprehensively and formally identify risks led to many risks that were informally discussed not having clear owners, mitigation strategies or treatments in place. Further, as risk identification is a necessary precursor to risk assessment (i.e. 'measuring' the risk) and risk treatment (doing something to reduce or otherwise manage the risk) failing to identify risks hampered any subsequent assessment and response to those risks.

BU level Individual BU Strategic Plans presented to the SICOM meetings in October 2015 identified the risks involved with implementation of the BU Strategic Plans. Feedback from consultations revealed

that each BU demonstrated a thorough and rigorous assessment of risk with regard to its strategic plans.

However, it was reported that the risks identified in the BU Strategic Plans presented to SICOM were not taken into account as part of the Science Prioritisation phase for each BU. Further, the assessments by the BUs were about risks associated with BU objectives and were not subsequently collated or considered by ET as possible risks to CSIRO either individually or in aggregate. In addition, the risk-reward trade-off is not obviously incorporated into the application of the investment criteria or the SPI process which suggests that risks were identified in isolation and in one part of the process only and not considered later in the process.

Furthermore, it was noted that the subsequent Deep Dive templates and materials did not include prompts to consider risk in relation to the options being considered.

At an enterprise level, risk assessments were conducted in an informal way only. Consultations with key stakeholders that were involved in the execution of the SPI process revealed that risks were considered and discussed regularly. However, this discussion was primarily about the risks relating to the Science Prioritisation phase and, belatedly, the Delivery phases (e.g. an external agency was engaged to assist with assessing media risk following the all staff email on 4 February).

These risks were identified and informally discussed; there was very limited documentation of these discussions and no risk and issue register was set up or maintained. The lack of a risk and issue register to formally record risks and to monitor their change in profile is likely to be a consequence of two factors:
▸ No explicit mention of the need to engage with and adhere to the risk guidelines and procedures in the IDF process
▸ A lack of governance leading to no clear allocation of risk accountabilities and responsibilities to particular stakeholders involved in the SPI process who could then take the lead on creating and maintaining such a register.

A review of documents reveals that it was not until after several of the issues emerged in February 2016 that an organisational Risk Profile and Executive Risk Radar was produced in March 2016. Further, these documents emphasised internal risks and appear to have underestimated the external risk factors.

The current informal approach to risk identification therefore relies on a level or organisational maturity that these items will be implicitly taken care of, which as evidenced by the experience of the FY16-17 SPI process was not a reasonable assumption to make.

6.3.3 Risk assessment

The incomplete identification of risk was compounded by an informal risk assessment process:
▸ Risks that were identified were not fully considered in terms of their causes, likelihood and foreseeable consequences
▸ Stakeholders reported that risks were discussed at times and there was an understanding that particular risks would need to be managed, but that this remained largely undocumented and accountabilities for risk and their management were not always clearly assigned
▸ Additionally, risks that had been identified in separate processes (outside IDF) by the corporate risk function, such as reputation risk, were not considered or reviewed as part of developing the IDF risk profile, and hence not integrated into it.

The informal risk assessment process meant that, even for those risk that were identified, there was no clear ownership or control actions defined. The subsequent absence of treatment and monitoring led to some of these risks materialising.

6.3.4 Risk treatment

Risk treatment, the taking of action to bring a risk within tolerable levels, was not performed formally and with a focus on actions that were proactive or preventive. Further, accountabilities and priorities for treatment were not documented and were only performed once a risk had materialised. The failure to implement risk treatments had two major consequences for CSIRO:

- The absence of preventive and detective treatment actions during the SPI process led to risks that could have been prevented or reduced in severity materialising as no decision was taken on their acceptability (or unacceptability) in accordance with the CSIRO RMF

- When treatments were implemented, this was only done after the risk had materialised and they were therefore targeted at consequences of the risk (for example the crisis management team response) rather than causes and future prevention.

6.3.5 Risks in Decision Making

Recommendation 3A: Formally integrate CSIRO's existing Risk Management Framework into the SPI process so that risks are optimally identified, monitored and treated, and investment opportunities appropriately resourced, particularly at the Implication Assessment phase.

Guidance: In efforts to ensure a greater emphasis on risk throughout the SPI process, CSIRO could:
- Confirm the organisation's risk appetite at the time the SPI process is executed, to inform decisions and also the level of investment in risk treatments/mitigation
- Ensure that responsibilities for the identification, assessment, monitoring and treatment of risks are assigned and clearly documented at all phases of the SPI process
- Ensure the SPI process clearly articulates when the risk management function is required to support various committees (e.g. SICOM, ET, etc.)
- Ensure consistent and robust risk templates are provided for the BUs to complete (e.g. detailing risks involved with implementation of BU plans) and present at relevant meetings.

Recommendation 3B: Improve existing risk management practice and culture (through, for example, training and assigning risk owners) to ensure that, at each of the Investment, ET and BU levels, decisions are made and resourced that are risk-based and proportionate, using the best capability (including the CSIRO risk team) and internal and external information.

Guidance: In an effort to make better use of and increase the internal capability within CSIRO, the risk team could be consulted to:

- Assist in the identification, assessment and treatment of risks at an enterprise level when there are significant changes to CSIRO's strategy, governance or operations, and to help develop an internal risk management awareness and capability beyond the CSIRO risk team

- Increase the integration between risk and strategic decision-making to ensure that both upside (opportunity) and downside (threat) risks are considered within strategic forums. This can be done at both the ET and BU levels. At the ET level, the Science Prioritisation phase could include specific checkpoints that adequately consider the business and organisational risks with regard to a proposed decision

- Incorporate elements of risk management into relevant training programs provided to CSIRO staff to promote an appreciation and understanding of risks and better embed it into CSIRO's everyday behaviours and culture. In addition, specific risk management training about strategic risk management application and risk governance obligations could be provided to CSIRO Leadership Team (CLT), including the differences between risks related to BU strategy and BU operations

- Ensure comprehensive and ongoing identification and monitoring of Enterprise and BU risks through relevant ET and other committee meetings to ensure that risk is effectively considered as part of the business as usual governance processes (e.g. include members of the Risk function in key meetings and document risk management as a standing agenda item). Consider having risk owners regularly present to ET on how risks are being mitigated, so that the ET have direct access to the people who have the greatest understanding of the key risks and are able to make investment decisions using current information about risks, rather than relying exclusively on (potentially dated) reports

- Going forward, CSIRO may wish to consider integrating data analytics techniques into its BU and Enterprise risk monitoring and reporting processes to provide for "real time" information about its key risks, thereby supporting superior decision-making based on timely and more complete information.

6.4   Change Management

> Given the magnitude and impact of the changes, there should have been greater support to enable BU Leaders to effectively manage the change process via a common platform. An individualised BU change management approach was deliberately emphasised over a structured, co-ordinated delivery of enterprise-wide change. The intent was to empower BU Leaders in decision-making and to accommodate the unique culture and communication forums of individual BUs. However, this led to varied levels of engagement and different outcomes amongst BUs.

6.4.1 Context

CSIRO has invested heavily since 2013 in training many of its people managers and leaders in the Prosci Change Management methodology[6]. BUs are also equipped with Prosci methods and toolkits for change, and are supported by the Organisational Development & Change Corporate Business Unit, to deliver change initiatives in a customised and BU centred manner. CSIRO's approach to change management, therefore, is to deliver change and communications taking a localised, BU led approach.

CSIRO's approach to change management for the SPI process was no different. The intent behind this was to empower BU Leaders and allow them to make important change-related decisions in relation to their respective BUs given their unique areas of research, cultures, and communication forums. While the SPI did not explicitly prescribe this approach to the implementation of decisions, this approach was adopted as the customary approach to managing change at CSIRO.

As touched on in Sections 6.1 and 6.2, the decision to proceed with the all-staff email, a decision taken approximately 72 hours prior to its release, was reported by some stakeholders to adversely impact on the SPI process. First, it was reported by some stakeholders that it rushed change planning and preparation. Second, it was reported by some stakeholders that it made it difficult to make available the required human resources to support the management of change during this critical period immediately following the announcement.

6.4.2 BU level Change Management

Under the revised SPI process, responsibility for dissemination of the changes to the BUs was handed to the respective BU Leaders, in an attempt to empower management as part of the new operating model. There was a consensus amongst stakeholders consulted that a number of BUs did an excellent job in planning and coordinating the change effort, including BUs required to undergo significant change as a consequence of decisions taken (e.g. Food & Nutrition).

BUs that were deemed to have been particularly effective with their BU level change management activities had the following practices in common:

- ▸ Proactive investment planning and change impact assessment/ planning
- ▸ Early identification of key influencers within the BU who could act as change leaders to coordinate and prepare communications and engagement activities
- ▸ Systematic and co-ordinated change management process
- ▸ Clear, consistent and transparent communication with staff on the business drivers for change
- ▸ Repetition of key messages through a range of channels and forums
- ▸ Timely and effective engagement with staff, including site visits and road shows to explain the implications of the decisions, provide the opportunity for staff to give feedback, and gain buy-in
- ▸ Active engagement with external stakeholders, such as key customers.

Whilst consultations revealed some of the BUs demonstrated robust and coordinated change management practices, others were less prepared. For example, it was reported that some BUs had not taken steps to begin adapting to the new CSIRO Strategy prior to the SPI process, and lacked clear understanding and messaging to explain the business drivers for change. It was revealed via the consultation process that the drivers for change were not always clearly communicated or well understood.

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[6] Prosci is a change management research and publishing company that has developed a globally accepted model of change

The likely reasons of the varied sophistication of BU level change management activities levels of engagement could be attributed to the following:

▸ Varied experience and capability among BU Leaders and their management teams in identifying and communicating the drivers for change
▸ Varied experience and capability among BU Leaders and the management teams in utilising a proven change management approach for delivery
▸ Lack of centralised, coordinated enterprise level change management support to facilitate a common approach and provide guidance to the BU Leaders regarding the development of key messages and coordinate staff engagement.

It seems likely the compressed timeframe stemming from the Deep Dives and then the need to communicate decisions to all-staff early due to Senate Estimates further exacerbated these shortcomings where they existed.

6.4.3 Enterprise Level Change Management

The Organisation Development & Change BU was only included in the SPI process at the Delivery phase of the SPI. This severely limited Organisation Development & Change BUs ability to proactively support the science BU Leaders prepare and plan for change. They might also have been engaged to provide input, guidance and support to BU Leaders to implement consistent communications and change management activities across the organisation. Furthermore, had the Organisation Development & Change BU been engaged earlier, they may have been able to work with ET to provide a joined-up, enterprise-wide change and communications narrative to explain where the organisation as a whole was headed and how the change in the different BUs contributed to that broader organisation shift.

The possible reasons reported for the lack of early enterprise-wide change management activities include:

▸ The SPI changes were seen as part of the Business as Usual activities that could be managed locally by individual BUs and change management activities were therefore not seen as critical
▸ The intention to de-centralise and empower BU Leaders to be responsible for managing the change and communication within their respective BUs was seen as sufficient in most cases
▸ A perception by some internal stakeholders that the Organisational Development & Change BU would add limited value to the SPI process.

The review process has not isolated the reason and it is likely that all three contributed to the lack of early engagement with the Organisational Development & Change BUs. The consequence of the decision was the perception that there was the absence of a clear enterprise wide narrative of why the decisions were taken and why the changes were required, how they contributed to the CSIRO Strategy and broader direction of the organisation, and what the enterprise or external drivers were. Further it resulted in limited change and communication support for BU Leaders to effectively engage, communicate and influence their respective BUs.

A review of documentation indicates the SPI process does not clearly define an entry point for either the Communications BU or the Organisational Development & Change BU to be engaged and brought into the process; or how these functions can best support the socialisation of the decisions stemming from the SPI process.

6.4.4 Internal Staff Consultation

For the majority of staff, the first they heard of the preliminary decisions taken by ET was either through the:

▸ Briefing provided to the BU Leaders and GMs on 3 February 2016
▸ Subsequent media reports informed by leaks from the briefing
▸ All-staff email released on 4 February 2016.

Consultations revealed that the all-staff email sent on 4 February 2016 did not translate into staff understanding the rationale for decisions and the drivers for change. This was not helped by media reports being released in parallel.

Subsequent communications of the SPI process to CSIRO staff from the ET and BU Leader were reported to, at times, contain ambiguous language and messaging resulting in different perceptions of the changes. Furthermore, it was reported that staff working as pan-BU researchers received messages from only their primary BU Leader and not from the BU Leader in charge of the BU they were actually working with (which in some cases would have been more relevant).

It was reported that the decision to send out the email in a short timeframe (approximately 72 hours) in order to communicate directly to staff prior to Senate Estimates led to rushed preparation of the messaging. Additionally, the compressed timeframe meant that staff were not provided the opportunity to engage with, and provide feedback on, the potential decisions until late in the process.

Since the initial announcement, CSIRO has been under a high level of public scrutiny by the Parliament, media, and both domestic and international science communities; particularly in relation to the investment decisions in relation to the climate science areas; and also the lack of internal and external stakeholder engagement in the execution of the change.

CSIRO has historically been an organisation that requires significant consultation in order to build buy in and consensus and "win decisions" among its workforce. From time to time the former CEO had issued guidance on strategic changes using varied mechanisms to outline the context for change as part of the SPI process. While this was usually used to confirm a record of change, such a concept could be adapted to provide the organisation with early signals regarding directions the ET was intending to take.

6.4.5 Subsequent Actions

In February 2016, the Organisational Development & Change BU were included in discussions regarding the preliminary decisions, in order to support the change management activities.

In February and March 2016, ET members were working with their BU Leaders to support some staff engagement activities within BUs.

In May 2016, after final decisions had been reached, a number of additional staff engagement activities commenced, including an ET all staff Webinar, ET round table discussions, cross-cutting leadership forums and events (e.g. Group and Team Leader), and state-based staff strategy engagement events. It was reported many of these activities received highly positive feedback and have reportedly begun to mitigate some of the disconnection between CSIRO leadership and staff.

6.4.6 Recommendations

Recommendation 4A: Ensure that an enterprise-wide view of change management is undertaken for any change affecting either a significant part of, or the whole organisation (as determined by, for example, pre-determined thresholds).

Guidance: In an effort to ensure that an enterprise-wide view of change management is taken, CSIRO could consider:

▸ Including thresholds to trigger the activation of an enterprise-wide change management approach. These thresholds (e.g. number of BUs affected by a change, number of proposed staff redundancies, financial impact etc.) would need to relate to any change affecting part of (i.e. individual or multiple BUs) or the broader organisation and have close alignment with the risk and crisis management frameworks. This approach would provide senior CSIRO staff with the ability to communicate a consolidated and joined-up narrative of the change to the entire organisation, whilst understanding the specific needs of the BU

▸ Providing tailored support to BUs to manage the specific levels of change required where there is a major change to the funding or operating environment of BUs (for example, provide a dedicated Change Manager to the impacted BU).

Recommendation 4B: Ensure timely engagement and responsiveness of the relevant Corporate BUs (e.g. Organisational Development & Change) at the start of the Implication Assessment phase; and especially when proposed changes are likely to have a material impact on CSIRO's staff or reputation.

Guidance: Given that an enterprise-wide change management approach would provide a consistent, consolidated, and joined-up narrative for BU Leaders and staff, CSIRO could – to the extent it is not already - involve the Communications, Ministerial & Parliamentary Liaison Office, Commercial & Governance and Organisational Development & Change BUs from the start of the Implication Assessment phase of the SPI process.

This would provide a platform that considers the need for BU led change-management and governance and the need for a consistent enterprise-wide approach. This timely engagement will also foster operating protocols amongst the Communications, Ministerial & Parliamentary Liaison Office and Organisational Development & Change BUs when managing the overall change process.

Recommendation 4C: Establish protocols and guidance principles for the development of all staff messaging and communications, informed by approaches that have proven effective in the past. Protocols and guidance should be in relation to topics such as communicating the drivers of change, and communicating preliminary and final decisions.

Guidance: CSIRO could consider developing guidelines and support materials for how:

▸ CLT communicate business drivers for change, at both the enterprise and BU level (e.g. by providing broad enterprise-wide direction statements linking to the CSIRO Strategy 2020 and by providing drivers for change that are unique to the BU) including the approval process for all staff emails

▸ CLT communicate preliminary and final decisions at each stage of the SPI. The modes and channels of communication are likely to be unique to each BU and could, wherever possible, utilise existing and respected forums for each BU

▸ To adopt and leverage the approach of some BUs which are seen as setting high standards in change management (e.g. ownership of Executive decisions, conducting road shows following the outcome, having honest and open communications with staff, action as staff liaison during implementation of the process).

6.5 External Stakeholder Engagement

> **Given that its activities impact on many external stakeholders, CSIRO should have engaged external stakeholders early to take input and inform the decision first; and then subsequently to signal the direction ET was minded to take, in order to rally support, and when necessary, explain potential funding change decisions.**
>
> **In this instance, such discussions would have increased stakeholders' confidence that decisions were well informed; and alerted CSIRO to the potential risks and implications of their consideration of investment decisions in the SPI process.**
>
> **As a result, some external stakeholders (e.g. government partners) felt they could have been better engaged during the process, especially when decisions directly affected their investments and projects.**
>
> **It should be noted that CSIRO's capacity for such early engagement in this instance was somewhat restricted by the compressed timeframe resulting from the second round of BU presentations to ET (i.e. the Deep Dives) and the leaking of confidential discussions.**

6.5.1 Context

CSIRO is a public authority established by statute. It receives a large amount of government funding. It also has a significant private sector revenue stream from industry and other government entities. CSIRO's stakeholders are therefore numerous and highly diverse, making stakeholder management highly complex and wide reaching.

6.5.2 External Stakeholder Engagement Analysis

Consultations with key stakeholders identified a range of external stakeholder groups with a vested interest in the outcomes of the SPI process, including:

Table 4: Key External Stakeholders

External Stakeholders
The Department of Industry, Innovation and Science
The Department of Prime Minister and Cabinet
The Department of Finance
The Department of Environment*
The Bureau of Meteorology
Other major funding bodies
Customers
Relevant unions and staff association

*now known as The Department of Environment and Energy

An external stakeholder analysis was conducted by individual BUs as a component of their BU Strategic Plans. This occurred at the beginning of the Science Prioritisation phase when BU Strategic Plans were submitted to SICOM in October 2016. These stakeholder engagement analyses were never subsequently revisited or updated in the subsequent Deep Dives. As such, they were not explicitly consolidated, considered or actioned at an enterprise level. Furthermore, stakeholder management risks were not documented (see Section 6.3 for further detail).

As a consequence, external stakeholder consultation in relation to the SPI process was found to be limited, particularly in light of the fact that adverse impacts were going to be felt by some stakeholders. This is likely to have been exacerbated by the lack of protocols around the timing, nature and frequency of communication and engagement with these key groups within the SPI process.

The lack of an enterprise-wide stakeholder management strategy, or clear consultation guidelines for CLT to follow with key partners and stakeholders, resulted in varied levels of stakeholder consultation during both the decision-making process, and the subsequent period once the outcomes were made public. Instead, this was undertaken on an unplanned basis by each BU with their respective customers.

It was reported that some stakeholders (e.g. government partners) felt they could have been better engaged during the decision-making process, especially when the decisions appeared to impact on their investments and projects.

In addition, engagement with key CSIRO stakeholders suggests that there was insufficient consultation with a diverse range of key external stakeholders on the process to brief them of the changes in advance of the official announcement at an enterprise level (e.g. the Department of Environment, CPSU, and a diverse range of stakeholders).

A formal external stakeholder engagement process as part of the Implications Assessment Phase was not conducted. Instead, there were informal, ad-hoc discussions triggered by CLT teams based on existing relationships. This in part may be a result of inadequate organisational-wide risk action planning which may have identified the level of external stakeholder consultation required.

There were several factors that are likely to have contributed to the limited levels of external stakeholder engagement throughout the SPI process, including:
- ▸ The Implications Assessment phase overly focusing on internal implications without sufficient due diligence and time spent identifying and understanding external stakeholder implications
- ▸ A lack of a trusted and confidential environment to consult with external stakeholders about the implications of their preliminary decisions
- ▸ An assumption held by ET that BU Leaders were addressing the relevant external stakeholder concerns throughout the SPI process. This was due to a lack of clarity regarding the protocols and responsibilities relating to external stakeholder engagement (see Section 6.1 Governance for more details)
- ▸ A lack of senior level representation based in Canberra (see Section 6.1 on Governance for more details).

The combination of factors listed above significantly affected CSIRO's timing of external stakeholder engagement and hampered its ability to engage them in open discussions until later in the implementation process.

6.5.3 Public Affairs Capability

It was only after CSIRO had moved into the Delivery and Implementation phase of the SPI that the need for greater external stakeholder consultation and communication was recognised. It was reported and evident from the documents reviewed that CSIRO increased its engagement with these relevant external stakeholders in March and April 2016, with the support of an external public affairs consultancy. The external consultancy was asked to provide CSIRO with advice on how to improve the management of its communications due to CSIRO's limited public affairs and issues based communication capability. It was reported that CSIRO's communication capability is weighted towards campaign based communication rather than issue based communication that responds dynamically to evolving circumstances.

6.5.4 Recommendations

Recommendation 5A: Continue the work started to develop an external stakeholder engagement strategy (ESES) - including target stakeholder groups and protocols for engagement - to build trust in external stakeholders and support robust decisions or decision-making.

Guidance: The sheer number and significance of CSIRO's external stakeholders requires clear and structured engagement, especially in areas that have a potential to affect its public perception, and ongoing and future relationships.

CSIRO could consider further developing an external stakeholder engagement strategy (ESES), relevant to not only SPI but also, for example, revenue generation, whole-of-government policy alignment, and CSIRO's contribution to policy formulation, which includes:
- ▸ A definition of the target stakeholder groups such as the Government, customers, relevant partners and related agencies as well as selected media organisations, and Unions (e.g. Community and Public Sector Union and CSIRO Staff Association) that influence these stakeholders

- Identification of specific individuals within these groups that need to be engaged based on their power / influence to support the change, control of resources needed to carry out the change, and position to benefit or lose directly or indirectly as a result of a change, including an analysis of the degree of influence and interest associated with each of the identified stakeholders
- Clear protocols around the timing, frequency and sequencing of external stakeholder engagement at each phase of the SPI process. This is to ensure that external stakeholders are sufficiently consulted and informed in a timely manner and expectations are managed early.

Recommendation 5B: Improve the understanding of the CLT in engaging Ministers, external government officials and other key external stakeholders, including through strengthening CSIRO's senior leadership presence in Canberra.

Guidance: As a high profile government organisation that also extends to the private sector, academia and broader community, any change to the organisation needs to be effectively managed and the narrative controlled.

CSIRO could therefore consider developing specific protocols regarding the engagement, general communication, and management of issues with external stakeholder groups. This is to ensure that they are sufficiently consulted and informed in a timely manner and expectations are managed early. An external advisor could be used to support appropriate engagement with and activation of these protocols. The advisor could be someone familiar with the Commonwealth public sector environment.

CSIRO could also embed external stakeholder engagement and media management activities into the SPI process. These activities could be supported by engaging an experienced Canberra based media or public affairs manager.

Increasing senior leadership presence in Canberra to assist with engagement of government stakeholders (see Section 6.1 on Governance) will also likely assist.

These steps would enable CSIRO to build trusted relationships through early and regular engagement with the right messaging and effective management of expectations. In turn, this would also help to influence and guide the acceptance of the changes and outcomes required.

6.6 Culture

Some staff (especially those from particularly sensitive areas of the organisation) indicated the ET and CLT could have been more transparent early on in relation to the decision-making deliberations and drivers of change; and further considered feedback during the SPI process, and vice versa.

Apparent disregard of the internal CSIRO code of conduct and public comments policy by some staff, further amplified the issues that emerged during the SPI process. This significantly hampered the CLT's ability to effectively engage with staff.

6.6.1 Context

CSIRO has a unique organisational culture based on its mission and the staff employed to carry it out. The majority of the staff are very highly educated and are passionate about their respective scientific fields. It was reported that, for many scientists, their identity is closely tied to their work and is often an important expression of their values.

CSIRO scientists are often nationally and internationally visible and well respected for their expertise. Staff have been encouraged to speak about science in the public domain, to stimulate discussion and awareness of CSIRO's initiatives, and as such many CSIRO staff have direct links to certain journalists and media organisations.

6.6.2 Oceans & Atmosphere and Land & Water BU Culture

Like most BUs, the environmental science areas at CSIRO have a distinct subculture. Similar to other scientists, environmental scientists are passionate about their field of research. This is partly due to the perception that much of their work is seen as critical to public good and the future wellbeing of humanity and the planet; and also partly due to the fact CSIRO is globally recognised for research excellence in this field of science. Some staff have been inclined to publicly advocate against decisions that in their opinion, breaches the national interest (e.g. funding or staff cuts in environmental science).

It appears that some environmental science parts of the organisation have been shielded from changes and staff reductions despite external funding reductions made in, for example, the 2014 Federal budget. Within environmental science, this has led to more limited incremental adaptation to changing funding conditions and market opportunities, culminating in a more significant and abrupt change during the most recent SPI process. The more stable environment in O&A and L&W over recent years may have contributed to a BU culture less accustomed to changes in priorities and resourcing than a number of other BUs.

6.6.3 Broad Culture

It was indicated by some stakeholders that some CSIRO staff are reluctant to accept management decisions, instead seeing management decisions as opportunities for negotiation. This assumption is likely to have been reinforced by CSIRO's highly consultative culture and past practices where management revised parts of their original decision as a consequence of staff action.

Two industrial disputes were lodged by the CSIRO Staff Association to the Fair Work Commission concerning the adequacy of consultation by CSIRO with the staff regarding the investment decisions.

6.6.4 Restrictions on staff contributions to the SPI Process

It was reported that there is also varying confidence from staff in the ET to be transparent in the decision-making process and willing to consider staff feedback, and vice versa. There was an underlying sentiment held by particular BU Leaders that even though a number of suggestions, recommendations and proposed changes were developed and put forward to address certain issues, these were overlooked by the ET. The likely reasons for this may be a combination of lack of trust in staff's ability to develop a workable solution, and the leadership's effort to prevent leaking of confidential information. This behaviour meant that particular consultation sessions to improve

CSIRO's processes and management of issues could not proceed, to the detriment of potential solutions and actions being implemented.

However, it is important to note that the majority of BU Leaders' strategic plans and associated changes were approved by the ET. Further, the remaining BU changes proposed by ET (that were not consistent with the BU's original strategic plans) were consulted with BUs who were later given an opportunity (via consultations and submission of business cases) to propose alternate options, many of which were considered and in specific scenarios approved.

6.6.5 Staff Behaviours

CSIRO's staff policy and Code of Conduct is aligned to the Australian Public Service Code of Conduct. Despite the existence of these guidelines and including a public comment policy, some CSIRO staff felt that it was their right to publicly voice their concerns on internal management decisions that they disagreed with, especially if they thought it affected the national interest. It was also reported by some stakeholders consulted that, for a small minority of staff, there was some confusion around the differences between unauthorised disclosures and whistle blowing. In addition, CSIRO has a history and culture of staff activism via direct media engagement, information leaks and open criticisms of management.

There was also a lack of clarity around the enforcement of breaches in CSIRO's staff policy. It was reported that some individuals were disciplined as a result of breaches to staff policy, and these incidents were appropriately addressed privately. While this ensured confidentiality, it may have been prudent as these issues arose to remind staff of their obligations operating under the CSIRO Code of Conduct. Staff are aware of extreme examples of poor behaviour (e.g. physical threats directed toward the CEO; an unauthorised recording of a staff forum subsequently leaked to the media) but are unaware of any resulting disciplinary actions taken to manage this behaviour. This may have led to the apparent perception that breaches of staff policy were occurring and could continue without consequences.

Many of those who were consulted or made submissions to this review expressed that the attempted manipulation of decisions and application of external pressure to decision makers' via media is not considered appropriate; it is a misrepresentation of CSIRO values and culture as a whole. However, there was concern from some stakeholders consulted during this review that this behaviour was in part reinforced by a perception that ET amended some of the decisions taken in response to external pressures.

It should be uncontroversial, that CSIRO's ET and CLT should be able to consult, where appropriate, on broad directions with key internal and external stakeholders in order to make well-informed and considered decisions. However, several stakeholders reported that the ability to carry out these management activities was constrained by the adversarial position adopted by some staff and the way in which some discussions were made public.

We acknowledge that striking the right balance in this area is complex and difficult.

As a large public organisation, it is reasonable and appropriate that the operational and leadership performance of CSIRO is publicly scrutinised and held to account. However, this scrutiny could occur at appropriate times where the performance of decisions can be fully evaluated; or it runs the risk of compromising management's ability to execute their responsibilities effectively and transparently.

Significant introspection and considered action is required by CSIRO as to how it achieves the optimal balance in this area.

6.6.6 Recommendations

Recommendation 6A: Develop a long-term strategy to change aspects of CSIRO's culture by resetting expectations and reinforcing behaviours that enable greater trust and transparency, linking in with the existing Culture Alignment Program.

Guidance: A culture that values transparency in the workplace fosters staff engagement. As such, CSIRO could continue the work already started as part of the Culture Alignment Program to develop a

long-term strategy towards resetting its organisational culture with a particular focus on staff behaviour. The strategy could be guided by principles that consider the type of organisation culture CSIRO aims to foster, empower champions, redefine metrics and incentives and creating a safe space for expression.

This would also enable staff across the organisation to understand the importance of not engaging in public comment regarding management decisions, whilst not constraining their ability to publically talk about scientific matters.

Recommendation 6B: Increase awareness and enforce a greater emphasis on CSIRO's code of conduct and the values and behaviours expected of CSIRO staff.

Guidance: While it is understood that CSIRO enforces its code of conduct in relation to individual staff in the event of a breach, this is appropriately done in private. Given the organisation's size, there is a general perception that these breaches are not enforced leading to the general disregard (by some) of maintaining privacy and privileged information.

Based on this, CSIRO could consider increasing the awareness of the organisation's commitment to the CSIRO code of conduct, and the consequence of breaches with all staff and leaders, and its commitment to upholding the code. CSIRO could also identify ways to acknowledge staff whose performance and behaviours embody CSIRO's expected ethical workplace practices.

6.7 Crisis Management

> CSIRO's initial response to the issues that emerged following the 4 February 2016 all staff announcement did not utilise its Crisis Management Framework effectively. An ad-hoc issues response team was established instead. However, without the required guidance and relevant experience (including media management), the team was unable to immediately mitigate or reduce the impact of the issues. This resulted in issues being drawn out even further amongst staff, stakeholders and/or the media.

6.7.1 Context

Following a briefing to the BU Leaders and GMs on 3 February 2016, but prior to the all staff email going out on the morning of 4 February 2016, information in relation to the preliminary decisions stemming from the SPI process was leaked to the media. This led to the Minister's Office receiving a large number of calls and emails in the hours before the all staff message was released at 10am on 4 February 2016.

Following the media leak, public outrage was expressed not only at the decisions taken and the perceived tone of the email, but also at CSIRO's lack of engagement with key stakeholders.

As the crisis gained momentum, an issue management team was formed to respond to the issues as they emerged. The issue management team was comprised of several staff, mostly General Managers of Corporate BUs.

6.7.2 Managing the Unfolding Crisis

There was a delay in the setting up and subsequent response of the crisis response team when the reaction to the CEO's all staff email emerged shortly after it was sent on 4 February 2016. This was due to the complexity of the issues that arose, and the lack of clarity surrounding the capabilities required to effectively deliver what was required. However, as the group formed routines and became familiar with their roles, they slowly became more capable at dealing with the emergent issues.

CSIRO has an existing Crisis Management Framework (CMF), but this was bypassed in favour of setting up an issues response team. The reported reasons for this were:
- A conscious effort to avoid signalling to other parts of the business and externally that CSIRO was in a crisis
- A lack of knowledge of the existence of CSIRO's CMF
- A lack of clarity in knowing how and when to invoke the CMF.

As a consequence of not leveraging the CMF, the terms of reference for the issues response team was ambiguous and not clearly understood, thereby delaying team coordination. Moreover, the lack of critical incident issue based communication capability within CSIRO further limited the overall effectiveness of the crisis response.

It was understood that the issues response team were slow to engage other BUs, which could have assisted its mobilisation, (i.e. Organisation Development & Change; Risk). There was also a communication vacuum from CSIRO to erroneous media reports for several days (e.g. Fact Sheets to correct factual errors in media took two weeks to be developed and released).

6.7.3 Recommendations

Recommendation 7A: Ensure that the most appropriate levels of the Crisis Management Framework (CMF) are invoked at the Implication Assessment phase, and when announcing major changes to the organisation or a number of BUs.

Guidance: At the Implication Assessment phase, and at the commencement of any period of major change, CSIRO could initially default to invoking the most critical levels of its CMF, (i.e. escalation to senior management and the CEO). The issue can then be de-escalated accordingly once it has been thoroughly considered by this senior group.

Recommendation 7B: Improve the understanding of the CLT on the specific triggers that warrant invoking CSIRO's CMF through, for example, training and operational crisis simulation exercises.

Guidance: In an effort to ensure that senior CSIRO staff have the required level of knowledge and understanding of when the CMF is to be invoked, CSIRO could consider:

▸ Conducting the necessary training sessions and workshops to step through exact processes and responsibilities required to implement the CMF, and its ability to be applied to various situations including simulations on responding to corporate crises (not just work health and safety crises)

▸ Enhancing and improving its existing crisis simulation exercises and incorporate them into their broad governance processes where appropriate. Simulation exercises could also be conducted on internal operational events.

Appendix A   Summary of Recommendations

Governance

Recommendation 1A: Strengthen and better communicate the existing governance practices, including accountabilities, responsibilities, and sponsorship needed to support all phases of the SPI.

Guidance: Given the changes within the organisation and the fact that the SPI contained new elements, which were new to the organisation, we recommend that the governance practices:

▸ Clearly articulate the accountabilities and responsibilities of senior CSIRO staff throughout the process. This includes defining the roles and relationships of the Board, Chairman, CEO, ET, BU Leaders and their leadership teams and Corporate GMs; as well as the membership and terms of reference of relevant committees (e.g. Science, Strategy, Investment and Impact Committee (SICOM))

▸ Consider the need to assign a senior executive sponsor to provide governance and management of the implementation of consequential changes across the different BUs within the organisation. This senior executive would be accountable for the coordination of required activities that need to be performed

▸ Consider scheduling regular reviews of governance practices to ensure and monitor their effectiveness in catering for major changes (e.g. new members, management styles etc.), including a formal acknowledgement by senior CSIRO staff that they have read and understood the governance practices and the expectations of them in their respective roles.

Recommendation 1B: Reassess the existing organisational structure and practices (including lines of reporting and distribution of corporate functions) to provide appropriate management and coordination to all phases of the SPI process.

Guidance: CSIRO could consider developing a more integrated organisational structure that enhances the delivery of the SPI process rather than relying on the formation of multiple committees that leads to unnecessary administrative overhead. As such, CSIRO could:

▸ Review existing lines of reporting and make the necessary changes in terms of requirement, fit and frequency to cater to the varied background and management styles of the Board, ET, BU Leaders and Corporate GMs

▸ Review the distribution of corporate functions within the organisational structure, and consolidate the reporting lines of those with high interdependencies and need for coordination under a single Executive Director (e.g. Communications, MPLO and Commercial & Governance) to enable a more consistent, efficient and effective delivery process

▸ CSIRO could increase its senior leadership presence in Canberra to assist engagement with government stakeholders. This will also assist with external stakeholder engagement (see external stakeholder recommendations for more detail).

Process

Recommendation 2A: Update and improve the documentation of policies, processes and procedures that underpin the SPI for greater clarity of purpose and consistency of approach (e.g. protocols around recording decisions), and ensure they are widely communicated and commonly understood.

Guidance: Based on the level of ambiguity in the understanding of the SPI process, and the decisions and outcomes that flow from it, CSIRO could consider:

▸ Updating and reviewing policies and procedures within the end-to-end SPI process where required. For example, CSIRO could:
  – Clearly articulate and communicate the guiding principles for decision-making in the Science Prioritisation phase (to complement existing investment criteria)
  – Clarify the purpose and rationale behind each activity in the SPI, including identification of critical steps, likely outcomes from each activity, and their linkages to the overall strategy
  – Specify the expectations, key activities, period, and extent of ET, BU Leader, and staff involvement throughout the SPI process (e.g. all ET members to be part of all critical steps in the SPI process)

▸ The SPI process might include an administrative procedure that mandates and guides the documentation of decisions and meetings at each stage of the SPI.

Risk Management

Recommendation 3A: Formally integrate CSIRO's existing Risk Management Framework into the SPI process so that risks are optimally identified, monitored and treated, and investment opportunities appropriately resourced, particularly at the Implication Assessment phase.

Guidance: In efforts to ensure a greater emphasis on risk throughout the SPI process, CSIRO could (to the extent that it is not already doing so):

▸ Confirm the organisation's risk appetite at the time the SPI process is executed, to inform decisions and also the level of investment in risk treatments/mitigation

▸ Ensure that responsibilities for the identification, assessment, monitoring and treatment of risks are assigned and clearly documented at all phases of the SPI process

▸ Ensure the SPI process clearly articulates when the risk management function is required to support various committees (e.g. SICOM, ET, etc.)

▸ Ensure consistent and robust risk templates are provided for the BUs to complete (e.g. detailing risks involved with implementation of BU plans) and present at relevant meetings.

Recommendation 3B: Improve existing risk management practice and culture (through, for example, training and assigning risk owners) to ensure that, at each of the Investment, ET and BU levels, decisions are made and resourced that are risk-based and proportionate, using the best capability (including the CSIRO risk team) and internal and external information.

Guidance: In an effort to make better use of and increase the internal capability within CSIRO, the risk team could be consulted (to the extent it is not already) to:

▸ Assist in the identification, assessment and treatment of risks at an enterprise level when there are significant changes to CSIRO's strategy, governance or operations, and to help develop an internal risk management awareness and capability beyond the CSIRO risk team

▸ Increase the integration between risk and strategic decision-making to ensure that both upside (opportunity) and downside (threat) risks are considered within strategic forums. This can be done at both the ET and BU levels. At the ET level, the Science Prioritisation phase could include specific checkpoints that adequately consider the business and organisational risks with regard to a proposed decision

▸ Incorporate elements of risk management into relevant training programs provided to CSIRO staff to promote an appreciation and understanding of risks and better embed it into CSIRO's everyday behaviours and culture. In addition, specific risk management training about strategic risk management application and risk governance obligations could be provided to CLT, including the differences between risks related to BU strategy and BU operations

▸ Ensure comprehensive and ongoing identification and monitoring of Enterprise and BU risks through relevant ET and other committee meetings to ensure that risk is effectively considered as part of the business as usual governance processes (e.g. include members of the Risk function in key meetings and document risk management as a standing agenda item). Consider having risk owners regularly present to ET on how risks are being mitigated, so that the ET have direct access to the people who have the greatest understanding of the key risks and are able to make investment decisions using current information about risks, rather than relying exclusively on (potentially dated) reports

▸ Going forward, CSIRO may wish to consider integrating data analytics techniques into its BU and Enterprise risk monitoring and reporting processes to provide for "real time" information about its key risks, thereby supporting superior decision-making based on timely and more complete information.

Change Management

Recommendation 4A: Ensure that an enterprise-wide view of change management is undertaken for any change affecting either a significant part of, or the whole organisation (as determined by, for example, pre-determined thresholds).

Guidance: In an effort to ensure that an enterprise-wide view of change management is taken, CSIRO could consider (to the extent it is not happening consistently across the organisation already):

▸ Including thresholds to trigger the activation of an enterprise-wide change management approach. These thresholds (e.g. number of BUs affected by a change, number of proposed staff redundancies, financial impact etc.) would need to relate to any change affecting part of (i.e. individual or multiple BUs) or the broader organisation and have close alignment with the risk and crisis management frameworks. This approach would provide senior CSIRO staff with the ability to communicate a consolidated and joined-up narrative of the change to the entire organisation, whilst understanding the specific needs of the BU

▸ Providing tailored support to BUs to manage the specific levels of change required where there is a major change to the funding or operating environment of BUs (for example, provide a dedicated Change Manager to the impacted BU).

Recommendation 4B: Ensure timely engagement and responsiveness of the relevant Corporate BUs (e.g. Organisational Development & Change) at the start of the Implication Assessment phase; and especially when proposed changes are likely to have a material impact on CSIRO's staff or reputation.

Guidance: Given that an enterprise-wide change management approach would provide a consistent, consolidated, and joined-up narrative for BU Leaders and staff, CSIRO could – to the extent it is not already - involve the Communications, Ministerial & Parliamentary Liaison Office, Commercial & Governance and Organisational Development & Change BUs from the start of the Implication Assessment phase of the SPI process.

This would provide a platform that considers the need for BU led change-management and governance and the need for a consistent enterprise-wide approach. This timely engagement will also foster operating protocols amongst the Communications, Ministerial & Parliamentary Liaison Office and Organisational Development & Change BUs when managing the overall change process.

Recommendation 4C: Establish protocols and guidance principles for the development of all staff messaging and communications, informed by approaches that have proven effective in the past. Protocols and guidance should be in relation to topics such as communicating the drivers of change, and communicating preliminary and final decisions.

Guidance: CSIRO could consider developing guidelines and support materials for how:

▸ CLT communicate business drivers for change, at both the enterprise and BU level (e.g. by providing broad enterprise-wide direction statements linking to the CSIRO Strategy 2020 and by providing drivers for change that are unique to the BU) including the approval process for all staff emails

▸ CLT communicate preliminary and final decisions at each stage of the SPI. The modes and channels of communication are likely to be unique to each BU and could, wherever possible, utilise existing and respected forums for each BU

▸ To adopt and leverage the approach of some BUs which are seen as setting high standards in change management (e.g. ownership of Executive decisions, conducting road shows following the outcome, having honest and open communications with staff, action as staff liaison during implementation of the process).

External Stakeholder Engagement

Recommendation 5A: Continue the work started to develop an external stakeholder engagement strategy (ESES) - including target stakeholder groups and protocols for engagement - to build trust in external stakeholders and support robust decisions or decision-making.

Guidance: The sheer number and significance of CSIRO's external stakeholders requires clear and structured engagement, especially in areas that have a potential to affect its public perception, and ongoing and future relationships.

CSIRO could consider further developing an external stakeholder engagement strategy (ESES), relevant to not only SPI but also, for example, revenue generation, whole-of-government policy alignment, and CSIRO's contribution to white papers, which includes:

- A definition of the target stakeholder groups such as the Government, customers, relevant partners and related agencies as well as selected media organisations, and Unions (e.g. Community and Public Sector Union and CSIRO Staff Association) that influence these stakeholders
- Identification of specific individuals within these groups that need to be engaged based on their power / influence to support the change, control of resources needed to carry out the change, and position to benefit or lose directly or indirectly as a result of a change, including an analysis of the degree of influence and interest associated with each of the identified stakeholders
- Clear protocols around the timing, frequency and sequencing of external stakeholder engagement at each phase of the SPI process. This is to ensure that external stakeholders are sufficiently consulted and informed in a timely manner and expectations are managed early.

Recommendation 5B: Improve the understanding of the CLT in engaging Ministers, external government officials and other key external stakeholders, including through strengthening CSIRO's senior leadership presence in Canberra.

Guidance: As a high profile government organisation that also extends to the private sector, academia and broader community, any change to the organisation needs to be effectively managed and the narrative controlled.

CSIRO could therefore consider developing specific protocols regarding the engagement, general communication, and management of issues with external stakeholder groups. This is to ensure that they are sufficiently consulted and informed in a timely manner and expectations are managed early. An external advisor could be provided to support appropriate engagement with and activation of these protocols. The advisor could be someone familiar with the Commonwealth public sector environment.

CSIRO could also embed external stakeholder engagement and media management activities into the SPI process. These activities could be supported by engaging an experienced Canberra based media or public affairs manager.

Increasing senior leadership presence in Canberra to assist with engagement of government stakeholders (see Section 6.1 on Governance) will also likely assist.

These steps would enable CSIRO to build trusted relationships through early and regular engagement with the right messaging and effective management of expectations. In turn, this would also help to influence and guide the acceptance of the changes and outcomes required.

Culture

Recommendation 6A: Develop a long-term strategy to change aspects of CSIRO's culture by resetting expectations and reinforcing behaviours that enable greater trust and transparency, linking in with the existing Culture Alignment Program.

Guidance: A culture that values transparency in the workplace fosters staff engagement. As such, CSIRO could continue the work already started as part of the Culture Alignment Program to develop a long-term strategy towards resetting its organisational culture with a particular focus on staff behaviour. The strategy could be guided by principles that consider the type of organisation culture CSIRO aims to foster, empower champions, redefine metrics and incentives and creating a safe space for expression.

This would also enable staff across the organisation to understand the importance of not engaging in public comment regarding management decisions, whilst not constraining their ability to publically talk about scientific matters.

Recommendation 6B: Increase awareness and enforce a greater emphasis on CSIRO's code of conduct and the values and behaviours expected of CSIRO staff.

Guidance: While it is understood that CSIRO enforces the CSIRO code of conduct in relation to individual staff in the event of a breach, this is appropriately done in private. Given the organisation's size, there is a general perception that these breaches are not enforced leading to the general disregard (by some) of maintaining privacy and privileged information.

Based on this, CSIRO could consider increasing the awareness of the organisation's commitment to the CSIRO code of conduct, and the consequence of breaches with all staff and leaders, and its commitment to upholding the CSIRO code of conduct policy. CSIRO could also identify ways to acknowledge staff whose performance and behaviours embody CSIRO's expected ethical workplace practices.

Crisis Management

Recommendation 7A: Ensure that the most appropriate levels of the Crisis Management Framework (CMF) are invoked at the Implication Assessment phase, and when announcing major changes to the organisation or a number of BUs.

Guidance: At the Implication Assessment phase, and at the commencement of any period of major change, CSIRO could initially default to invoking the most critical levels of its CMF, (i.e. escalation to senior management and the CEO). The issue can then be de-escalated accordingly once it has been thoroughly considered by this senior group.

Recommendation 7B: Improve the understanding of the CLT on the specific triggers that warrant invoking CSIRO's CMF through, for example, training and operational crisis simulation exercises.

Guidance: In an effort to ensure that senior CSIRO staff have the required level of knowledge and understanding of when the CMF is to be invoked, CSIRO could consider:

▸ Conducting the necessary training sessions and workshops to step through exact processes and responsibilities required to implement the CMF, and its ability to be applied to various situations including simulations on responding to corporate crises (not just work health and safety crises)

▸ Enhancing and improving its existing crisis simulation exercises and incorporate them into their broad governance processes where appropriate. Simulation exercises could also be conducted on internal operational events.

Appendix B   References

An overview of the extensive staff and executive consultation activities conducted to form the basis of this review.

24
Interviews
Conducted

326
Documents
Reviewed

3
Management
Workshops
Conducted

53
Staff Responses
Reviewed

2
Staff Focus
Groups Conducted

Interviews

Table 5: List of Interviews

List of Interviews				
#	Attendees	Title*	Location	Date
1	Jen Baxter & Kimberley Shrives	Ministerial & Parliamentary Liaison General Manager	Black Mountain, Canberra	31-May-16
2	Hazel Bennett	Chief Finance Officer	Black Mountain, Canberra	1-Jun-16
3	Anita Hill	Future Industry Executive Director	Clayton, Melbourne	2-Jun-16
4	Mark Bazzacco	Acting General Manager, Strategy, Market Vision & Innovation	Black Mountain, Canberra	3-Jun-16
5	Martin Cole	Food & Nutrition Business Unit Director	North Ryde, Sydney	3-Jun-16
6	Trevor Heldt	Human Resources General Manger	Black Mountain	3-Jun-16
7	Dave Williams	Digital, National Facilities & Collection Executive Director	North Ryde, Sydney	6-Jun-16
8	Jack Steele	Science & Government General Manager	North Ryde, Sydney	6-Jun-16
9	Craig Roy	Deputy Chief Executive	North Ryde, Sydney	6-Jun-16
10	Alex Wonhas	Environment, Energy & Resources Executive Director	North Ryde, Sydney	6-Jun-16
11	Jonathan Law	Mineral Resources Business Unit Director	Clayton, Melbourne	6-Jun-16
12	Larry Marshall	Chief Executive	North Ryde, Sydney	7-Jun-16
13	David Thodey	Chairman of Board	CBD, Sydney	7-Jun-16
14	Sue Davidson	Organisational Development & Change General Manager	North Ryde, Sydney	7-Jun-16
15	John Manners	Agriculture Business Unit Director	Black Mountain, Canberra	7-Jun-16
16	Glenys Beauchamp & Sue Weston	Department of Industry, Innovation and Science Secretary and Deputy Secretary	Canberra	9-Jun-16
17	Lou Morrissey	Communications Acting General Manager	Sydney	10-Jun-16
18	Keith McLean	Manufacturing Business Unit Director	Clayton, Melbourne	14-Jun-16
19	Paul Hardisty	Land and Water Business Unit Director	Floreat, Perth	14-Jun-16
20	Peter Duffy	Risk Executive Manager	Clayton, Melbourne	15-Jun-16
21	Trevor Heldt	Human Resources General Manager	Black Mountain	15-Jun-16
22	Ken Lee	Ocean and Atmosphere Business Unit Director	Kensington, Perth	17-Jun-16
23	Adrian Turner	Data61 CEO	Eveleigh, Sydney	17-Jun-16
24	Laurence Street	Commercial & Governance General Manager	Sydney	21-Jun-16

*Based on CSIRO Outlook address list and CSIRO organisation charts

Focus Groups

#	Focus Group Representatives	Location	Date
1	Agriculture, IM&T, National Collections & Marine Infrastructure, HR	Black Mountain, Canberra	1-Jul-16
2	Energy, Mineral Resources, Food & Nutrition, IM&T, Oceans & Atmosphere, Manufacturing	Clayton, Melbourne	5-Jul-16

Note: at least one staff member from every science BU was invited to participate, however not all invitees attended their session.

Documents Reviewed

#	Document Type	Number
1	Hansards	10
2	Questions on Notice (QON)	40
3	Order for the Production of Documents (OPD)	10
4	BU Strategic Plans	10
5	BU Presentations	12
6	Deep Dives	25
7	BU Comms	51
8	ET and Board Papers	29
9	SICOM Feedback	12
10	Communications	19
11	Operational	13
12	Media Reports	61
13	Miscellaneous	34

Staff Responses

#	Response Type	Number
1	Feedback/Comments	53
2	Questions	8

Appendix C   Evaluation Framework

Rec. #	Recommendation	Example Evaluation Question
1A	Strengthen and better communicate the existing governance practices, including accountabilities, responsibilities, and sponsorship needed to support all phases of the SPI	▸ Are the accountabilities and responsibilities of stakeholders, including Terms of References (ToR), well articulated, documented and understood? ▸ Is there a senior executive sponsor accountable for the overall coordination to ensure required activities are carried out? ▸ Are there clear protocols around the requirement, nature, timing, frequency and sequencing of stakeholder engagement? Are these protocols clearly articulated, documented and understood?
1B	Reassess the existing organisational structure and practices (including lines of reporting and distribution of corporate functions) to provide appropriate management and coordination to all phases of the SPI process	▸ Has a review been conducted on the distribution of the corporate functions? ▸ Are the BUs grouped in a logical way under the appropriate Executive Director to allow better facilitation and coordination between related functions? ▸ Has the recommendation of reinstating a second Deputy CEO been considered and acted upon? ▸ Has an assessment been done to evaluate the number and composition of committees and sub-committees? ▸ Is the committee and sub-committee composition appropriate and all-encompassing to ensure the right individuals are include to inform decision making? ▸ Are the ToRs well articulated, documented and understood?
2A	Update and improve the documentation of policies, processes and procedures that underpin the SPI for greater clarity of purpose and consistency of approach (e.g. protocols around recording decisions), and ensure they are widely communicated and commonly understood	▸ Are the policies, processes and procedures underpinning the SPI process clearly articulated, documented and understood? ▸ Are there sufficient details in the policies, processes and procedures, such as the steps, date, staff or management involvement, purpose and rationale behind each activity, and its linkage to the overall strategy? ▸ Is the critical path of the SPI clearly mapped out, documented and understood? ▸ Are there mechanisms in place to increase the awareness and understanding of the SPI process and ancillary processes to all staff? ▸ Is the rationale, the decision-making framework, and target outcome sufficiently communicated and understood by staff? ▸ Are the decisions supported by sufficient evidence and data? ▸ Is there a clear linkage between the decisions and the rationale / strategy to avoid perceived unjustifiable outcomes?
3A	Formally integrate CSIRO's existing Risk Management Framework into the SPI process so that risks are optimally identified, monitored and treated, and investment opportunities appropriately resourced, particularly at the Implication Assessment phase	▸ Is the assignment of responsibilities for the identification, monitoring and mitigation of risks clearly articulated, documented and understood? ▸ Is there a mechanism in place to ensure the proper documentation and the implementation of the Risk Management Framework?
3B	Improve existing risk management practice and culture (through, for example, training and assigning risk owners) to ensure that, at each of the Investment, ET and BU levels, decisions are made and resourced that are risk-	▸ Is the Risk Management Framework sufficiently embedded in the SPI process, with built in check points at critical stages of the process? ▸ Are the roles and responsibilities for specific individuals clearly articulated, documented and understood to

	based on proportionate, using the best capability (including the CSIRO risk team) and internal and external information.	ensure risks are sufficiently identified and assigned to owners for resolution? ▸ Are the critical stages of the process appropriately described and aligned with the required decision forums? ▸ Is there a risk presence at relevant meetings to ensure the review of implementation of the risk management process is guided by expert advice? ▸ Does the risk template capture relevant information to inform decision making across all levels of the organisation? ▸ Is there training in place to increase awareness and understanding of risks in the planning and decision making process for both the staff and leadership levels?
4A	Ensure that an enterprise-wide view of change management is undertaken for any change affecting either a significant part of, or the whole organisation (as determined by, for example, pre-determined thresholds)	▸ Have decisions been made in regards to the preferred approach to plan and execute change management activities for the SPI? ▸ Are the decisions based on valid rationale? ▸ Was there adequate consultation with key stakeholders to reach the decisions? ▸ Are the roles and responsibilities of the enterprise level change management team clearly articulated, documented and understood by key stakeholders (ET, BU Directors and BU Leadership team, OD&C, Communications, etc.)? ▸ Are the roles and responsibilities of the BU level change management team clearly articulated, documented and understood key stakeholders (ET, BU Directors and BU Leadership team, OD&C, Communications, etc.)? ▸ Are the distinctions between the processes, dependencies, interdependencies, handoffs, and SLAs (if applicable) in the two layers of change management clearly articulated, documented and understood key stakeholders (ET, BU Directors and BU Leadership team, OD&C, Communications, etc.)? ▸ Is there an executive sponsor / point of contact to provide additional clarification and guidance to stakeholders involved if required?
4B	Ensure timely engagement and responsiveness of the relevant Corporate BUs (e.g. Organisational Development & Change) at the start of the Implication Assessment phase; and especially when proposed changes are likely to have a material impact on CSIRO's staff or reputation	▸ Is there an executive sponsor to ensure timely engagement of the OD&C and Communications BUs? ▸ Is there sufficient visibility for OD&C and Communications BUs to identify opportunity for engagement? ▸ Are the processes and expectations between BUs and OD&C and Communications BUs clearly articulated, documented and understood?
4C	Establish protocols and guidance principles for the development of all staff messaging and communications, informed by approaches that have proven effective in the past. Protocols and guidance should be in relation to topics such as communicating the drivers of change, and communicating preliminary and final decisions	▸ Is there a set of clear protocols and guiding principles in place for the development of all staff messaging and communications through multiple channels and mediums? ▸ Are the protocols and guiding principles well articulated, documented and understood by key stakeholders? ▸ Is there an executive sponsor to ensure all stakeholders adhere to the protocols and guiding principles? ▸ Are the roles and responsibilities for OD&C and Communications BUs clearly articulated, documented, and understood by key stakeholders? ▸ Is the process of joint collaboration between OD&C and Communications BUs clearly articulated, documented and understood by key stakeholders?
5A	Continue the work started to develop an external stakeholder engagement strategy (ESES) - including target stakeholder	▸ Has an SPI specific external stakeholder engagement strategy been developed and sufficiently communicated?

	groups and protocols for engagement - to build trust in external stakeholders and support robust decisions or decision-making	▸ Does the external stakeholder engagement strategy include a definition of the target stakeholder groups, specific individuals within these groups to be engaged, the degree of influence and interest associated with each of the identified stakeholders, and the understanding of the specific expectations?
5B	Improve the understanding of the CLT in engaging Ministers, external government officials and other key external stakeholders, including through strengthening CSIRO's senior leadership presence in Canberra.	▸ Is the external stakeholder engagement framework sufficiently embedded in the SPI process, with built in check points at critical stages of the process? ▸ Have responsible individuals been identified with in all levels of CSIRO to manage specific external engagement? ▸ Are the roles and responsibilities for these specific individuals clearly articulated, documented and understood to ensure external stakeholder engagements are carried out in a timely and appropriate manner based on specific requirements?
6A	Develop a long-term strategy to change aspects of CSIRO's culture by resetting expectations and reinforming behaviours that enable greater trust and transparency, linking in with the existing Culture Alignment Program	▸ Is there sufficient information available on the SPI, including the rationale, the IDF and ancillary processes, the decision making framework, and target outcome, to ensure transparency with staff? ▸ Are there mechanisms and/or forums in place to encourage open and timely discussion with staff? ▸ Are the leadership leading by example to rebuild confidence and respect in their capability to lead? ▸ Have the leadership made themselves available and remain constructive in dealing with staff feedback?
6B	Increase awareness and enforce a greater emphasis on CSIRO's code of conduct and the values and behaviours expected of CSIRO staff	▸ Is there sufficient and easily accessible information on CSIRO code of conduct and public comment policies? ▸ Is there training in place to increase awareness and understanding of on CSIRO code of conduct and public comment policies? ▸ Is there recurring training in place to refresh knowledge on CSIRO code of conduct and public comment policies? ▸ Is there an opportunity to include code of conduct compliance as part of the performance and recognition systems? ▸ Is there a mechanism in place to provide case studies of breach of code of conduct and the consequent disciplinary actions taken?
7A	Ensure that the most appropriate levels of the Crisis Management Framework (CMF) are invoked at the Implication Assessment phase, and when announcing major changes to the organisation or a number of BUs	▸ Is the Crisis Management Framework sufficiently embedded in the IDF process, with built in checkpoints at critical stages of the process? ▸ Is the Crisis Management Framework flexible and adaptable to be used abroad range of issues? ▸ Has a crisis checklist been developed to assist a rapid assessment of the crisis, assembly of the Crisis Management Team and activation of an appropriate crisis management plan?
7B	Improve the understanding of the CLT on the specific triggers that warrant invoking CSIRO's CMF through, for example, training and operational crisis simulation exercises.	▸ Does Crisis Management Team have the right skillset and capability required? ▸ Are the roles and responsibilities, including ToRs clearly articulated, documented and understood?

Appendix D   Suggested High-Level Implementation Plan

This is the suggested high-level implementation plan, developed by EY, based on the criticality and interdependencies of each recommendation. It should be noted that recommendation owners have been assigned at the ET level.

CSIRO's SPI Review Proposed Implementation Plan

Overview of Timeline

Recommendations	Owner	Timeframe
Governance		
1A: Strengthen and better communicate the existing governance practices, including accountabilities, responsibilities, and sponsorship needed to support all phases of the SPI.	CE	◔
1B: Reassess the existing organisational structure and practices (including lines of reporting and distribution of corporate functions) to provide appropriate management and coordination to all phases of the SPI process.	CE	◔
Process		
2A: Update and improve the documentation of policies, processes and procedures that underpin the SPI, for greater clarity of purpose and consistency of approach (e.g. protocols around recording decisions), and ensure they are widely communicated and commonly understood.	Dep CE	◕
Risk Management (RM)		
3A: Formally integrate CSIRO's existing Risk Management Framework into the SPI process so that risks are optimally identified, monitored and treated, and investment opportunities appropriately resourced, particularly at the Implication Assessment stage.	Dep CE	◔
3B: Improve existing risk management practice and culture (through, for example, training and assigning risk owners) to ensure that, at each of the Investment, ET and BU levels, decisions are made and resourced that are risk-based and proportionate, using the best capability (including the CSIRO risk team) and internal and external information from within the agency.	ET	◑
Change Management (CM)		
4A: Ensure that an enterprise-wide view of change management is undertaken for any change affecting either a significant part of, or the whole organisation (as determined by, for example, pre-determined thresholds).	ET	◔
4B: Ensure timely engagement and responsiveness of the relevant Corporate BUs (e.g. Organisational Development & Change) at the start of the Implication Assessment phase; and especially when proposed changes are likely to have a material impact on CSIRO's staff or reputation.	Dep CE	◔
4C: Establish protocols and guidance principles for the development of all staff messaging and communications, informed by approaches that have proven effective in the past. Protocols and guidance should be in relation to topics such as communicating the drivers of change, and communicating preliminary and final decisions.	Dep CE	◔
External Stakeholder Engagement		
5A: Continue the work started to develop an external stakeholder engagement strategy (ESES) - including target stakeholder groups and protocols for engagement - to build trust in external stakeholders and support robust decisions or decision-making.	Dep CE	◔
5B: Improve the understanding of the CLT in engaging Ministers, external government officials and other key external stakeholders, including through strengthening CSIRO's senior leadership presence in Canberra.	CE	◑
Culture		
6A: Develop a long-term strategy to change aspects of CSIRO's culture by resetting expectations and reinforcing behaviours that enable greater trust and transparency, linking in with the existing Culture Alignment Program.	ET	◔
6B: Increase awareness and enforce a greater emphasis on CSIRO's code of conduct and the values and behaviours expected of CSIRO staff.	ET	◑
Crisis Management		
7A: Ensure that the most appropriate levels of the Crisis Management Framework (CMF) are invoked at the Implication Assessment stage, and when announcing major changes to the organisation or a number of BUs.	Dep CE	◕
7B: Improve the understanding of the CLT on the specific triggers that warrant invoking CSIRO's CMF through, for example, training and operational crisis simulation exercises.	Dep CE	◔

Timeline columns: Aug-16 | Sep-16 | Oct-16 | Nov-16 | Dec-16 | Jan-17 | Feb-17 | Mar-17 | Apr-17

Appendix E Glossary

Glossary		
#	Acronym	Full Name
1	BU	Business Unit
2	CEO	Chief Executive Officer
3	CMF	Crisis Management Framework
4	CSIRO	Commonwealth Scientific and Industrial Research Organisation
5	ET	Executive Team
6	CLT	CSIRO Leadership Team (ET are also members of CLT)
7	GM	General Manager
8	IDF	Investment Decision Framework
9	RMF	Risk Management Framework
10	SICOM	Science, Strategy, Impact and Investment Committee
11	SPI	Science Prioritisation and Implementation

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