



### Advice to Relevant Unions

Advice in accordance with Clause 3(a), Schedule 3 of the CSIRO Enterprise Agreement

**Business Unit:** CSIRO Research Divisions and Flagships  
**Date:** April 2014  
**Contact for further information:** Trevor Heldt 02 6276 6493

#### Details of the circumstances causing the potential redundancy situation

In June 2013 the CSIRO Board initiated a review of the effectiveness of CSIRO's operating arrangements, with Terms of Reference and Project Charter endorsed at the August Board. The review was commissioned as a *"fundamental, decadal review of the effectiveness of CSIRO's operating arrangements to enable the delivery of impact on national challenges and opportunities through world class, multi-disciplinary, collaborative and large scale applied science"*.

The objectives of the review were to make clear findings on what is, and what is not, working well in CSIRO's operating arrangements and clear recommendations for improvement in terms of reducing complexity, improving productivity and supporting external engagement. The scope included all aspects of the organisational structure, including "the matrix", in the context of broader operating model considerations such as culture, processes and systems. A project team and business reference group was formed, and experienced external advisors were appointed.

Findings drew on interviews, survey data, workshops and inputs from hundreds of CSIRO staff and clients including the Staff Association, as well as a significant body of existing information and relevant data, including the 2012 All Staff Survey and resulting Innovation Maturity assessment, 2009 Psychological Health & Wellbeing Review, 2010 Simplification initiative, 2012 CFO's Budget / Deployment reform working Group and the 2013 Phase 1 report of the independent Pearce Review. The project team augmented this with benchmarking studies of our peer research & technology organizations globally, relevant literature and a high level review of external best practices of global innovation organizations.

In summary, the new operating model will see CSIRO cluster around three lines of business that recognise our differentiation and the key roles we play:

- The pre-eminent manager of National Facilities, Collections and scientific infrastructure.
- Our Flagships. Our core impact/science activity. We will merge Flagships and Divisions into a smaller number of new entities – called Flagships, which will be focused on delivering impact against national challenges, and integrate all activities from capability development, through science delivery and the external interface. These Flagships will integrate all of our existing impact commitments and science teams. Importantly - Flagships will jointly foster our exciting transformational science platforms for the future, and continue to build on our differentiated capacity to work across Flagships in projects like the National Outlook Project.
- Our Commercial Services – those innovation and community services that we provide, including our engagement and outreach to Australian SMEs.

The new operating arrangements will be broadly implemented by July 1 2014, and embedded through 2014/15.

**Impact of the proposed change upon science, research capabilities and/or support for these areas.**

The impact on science is expected to be favourable upon implementation of the new operating model. CSIRO's research capability is not directly affected by this change and the aim is in fact to enhance science outcomes via a less complex operating environment, allowing researchers to focus more on science than on internal transactional activities. The main areas impacted in research management and support to research managers as new roles are created. There is likely to be some minor disruption until July 2014 however we are aim to minimise disruption by clarifying at the earliest opportunity the new leaders in the new operating model and will provide further details as soon as possible.

**The anticipated number of officers affected and their level, functional area and location.**

**Note:** Where the provision of this information will allow an individual officer to be identified, all but the identifying information has been made available.

This is an updated statement of the positions we anticipate will be impacted. These details are approximate and are provided to give an indication of impacted roles. The following roles will be impacted:

- Deputy and Assistant Chief (CSOF7/8)
- Deputy Flagship Director (CSOF7/8)
- Executive Officers in Divisional and Flagship offices and other senior managers in Divisions and Flagships (CSOF5-7)
- Executive Assistants, Personal Assistants and various administration roles currently residing in Divisions or Flagships offices (CSOF2-4)
- Research Program Leaders (CSOF7/8)
- Theme Leaders (noting these are often part-time roles) (CSOF7/8)
- Research Group Leaders (CSOF6-8) (noting almost all of these roles are a 10-30% portion of a research role)
- Stream Leaders(CSOF6-8) (noting almost all of these roles are a 10-30% portion of a research role)
- Operations Managers (CSOF6-8)

The table below details indicative number of impacted staff by functional area and CSOF level. We have indicated up to 100 staff may become potentially redundant as a result of this restructure. It is anticipated that the majority of impacted staff in the Research Management, Research Scientist/Engineer and General Management roles will return to an ongoing science role in the new Flagships where they are not placed in any new management roles as a result of assessment processes.

	Total HC	CSOF 2	CSOF 3	CSOF 4	CSOF 5	CSOF 6	CSOF 7	CSOF 8	CSOF 9	C1 1
Admin Services	163	2	100	40	7	10	3			1
Comms & Info	1				1					
Res Projects	6		2	3	1					
Res. Sci/Eng	29				1		1	9		18
Tech. Services	3					2	1			
Res. Management	106							69	3	34
Gen. Management	10					1	3	3		3
Res. Consulting	2									2
<b>Total FTE 297.56</b>	<b>320</b>	<b>2</b>	<b>102</b>	<b>43</b>	<b>10</b>	<b>13</b>	<b>8</b>	<b>81</b>	<b>3</b>	<b>58</b>

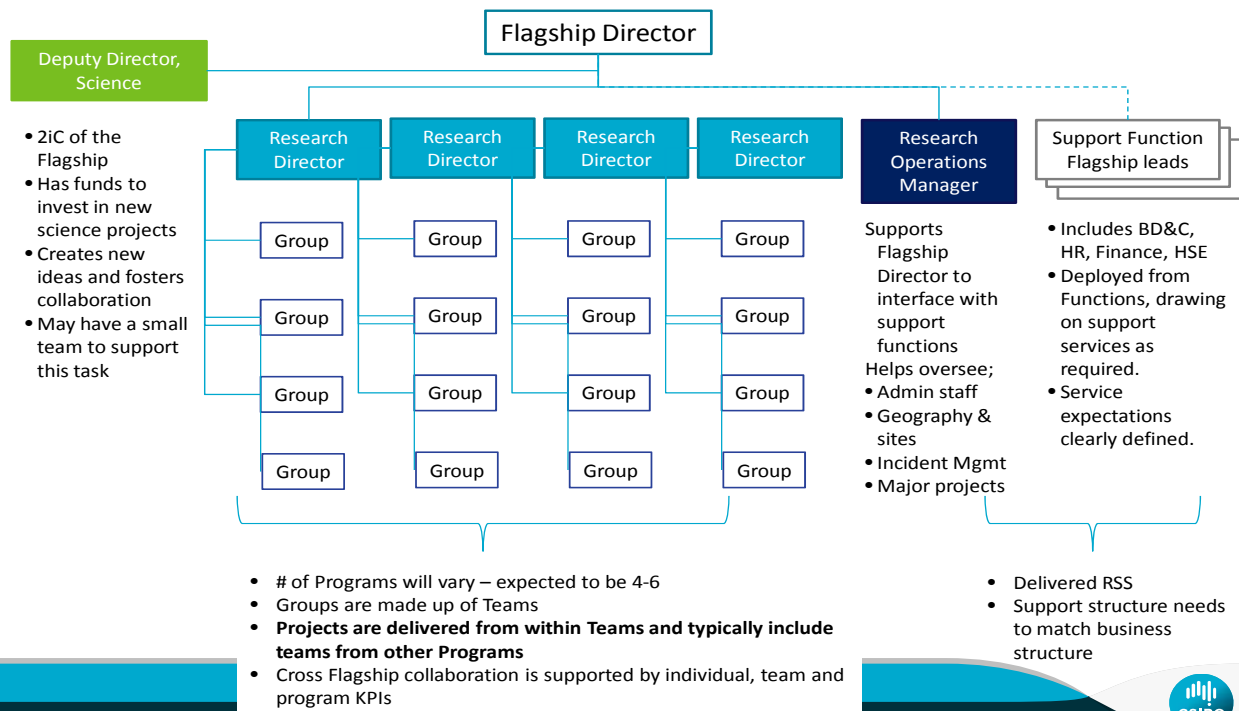
Location: The positions appear on the majority of CSIRO sites. The approximate impact per location is as follows:

	Total HC	CSOF2	CSOF 3	CSOF 4	CSOF 5	CSOF 6	CSOF 7	CSOF 8	CSOF 9	C11
Adelaide	14		5	1		1		6		1
NSW	9	1	2	1				4		1
Brisbane	53		17	9	1	4	1	10		11
Canberra	72		23	8	3	2	4	24	1	7
Vic Regional	20	1	3	3	1	1		8		3
Hobart	31		11	5	1	2	2	1		9
Melbourne	58		19	6	2	2	1	12	2	14
Newcastle	7		2	1				2		2
Perth	26		11	1	1			8		5
Sydney	27		8	8	1	1		4		5
QLD Regional	3		1					2		
<b>Admin Total FTE 151.58</b>	<b>320</b>	<b>2</b>	<b>102</b>	<b>43</b>	<b>10</b>	<b>13</b>	<b>8</b>	<b>81</b>	<b>3</b>	<b>58</b>

We are designing a phased approach to implementation to maximise opportunities for people impacted by the changes.

A copy of the proposed new Flagship structure is also provided below. While the new Flagship structure is largely finalised, the number of programs in each Flagship is not yet confirmed and consultation is still underway to define the level of administrative support required for each Flagship.

# Flagship Organisation Chart



## The method of identifying potentially redundant officers.

In accordance with the CSIRO Enterprise Agreement.

### Actions

Complete identification of Officers in relevant "group"

Notification to staff advising they are in a group of impacted Officers and commence consultation on proposed process which may be as follows:

Remind all staff of Voluntary Redundancy Substitution and the process to register.

Staff to provide comments on the process and raise any concerns or issues via email or by appointment if preferred. This feedback can include any feedback on the names of other managers who are nominated to assist relevant line manager and the details of the new roles

Relevant line manager (or central co-ordinator) will confirm the final assessment process after considering feedback from staff. Relevant line manager (Or Central Co-ordinator) will also confirm that the timeline for the assessment after considering any feedback from staff. The timeline can be shortened at any time with the agreement of staff.

Staff may choose to provide information (may be in a written statement or via a discussion) however there is no requirement to do so.

Relevant line manager (or Central co-ordinator) will meet with individual staff to provide them with their assessments against the role and capabilities in line with the CSIRO Work Classification Standards.

Staff have the option of providing feedback on their assessments via email or by appointment if preferred.	
Relevant line manager (Or Central Coordinator) will confirm the outcome after considering any feedback from staff.	
Identified staff from the above will be advised and we will discuss Redeployment and Redundancy details as indicated in Clause 6(a) of Schedule 3 of the CSIRO Enterprise Agreement	
<b>Any other relevant information</b>	
<p>The process for populating the new organisational structures will be managed through a central coordinator in HR.</p> <p>A phased approach is necessary due to the complexity and size of the change. It is for these reasons also that the actual impact of the change is not fully known. It will be necessary to provide ongoing updated information as consultation occurs throughout the development of the new model and the new Flagships evolve.</p>	

When completed this form should be forwarded to Sam Popovski at [sam.popovski@cpsu.org.au](mailto:sam.popovski@cpsu.org.au)



# Innovation Organisation Reform

*Enabling our People to deliver Impact from Science*

Summary Report – Management response to Strategic Reviews of CSIRO's Operating Arrangements, Financial Sustainability and Staff Wellbeing

March 2014

**CSIRO in confidence**

## Summary Findings – drivers for change

CSIRO is delivering record performance, we have successfully differentiated ourselves as an impact delivery organisation, and we are internationally recognized as a leading applied science agency. However, now and in the future, we face increasing competition, demand for efficiency and have some clear opportunities for improvement;

1. **Differentiation;** We need to **sharply differentiate ourselves and the critical roles we play** in the Innovation system to our key stakeholders and clients, including the new Government. We need to more clearly demonstrate our **effectiveness and efficiency** in those roles and realise **the next performance ‘step change’**
2. **Client feedback;** clients tell us that they value our great science and have a great experience with our teams, but that our costs are too high, that we need to be more focused on delivering solutions for them, and that we can be too hard to deal with in commercial contracting. While we have many excellent SME relationships, others tell us we are too hard to navigate and deal with.
3. **We do too many things,** and have too many internal structures, handoffs, programs and inconsistencies of processes and systems
4. **Staff feedback;** staff have told us that our current operating arrangements are too complex, are hampering our productivity, and disrupting our research teams. We can reduce duplication across our matrix management structures, flatten our organisation, and eliminate our current complex ‘double’ deployment and budgeting matrix approach
5. **Process complexity;** We have built a strong ‘One-CSIRO’ support function platform, but our business processes and support functions can be more **integrated and consistent across our organisation**, and we can further streamline and improve service delivery to our research teams.
6. **Financial sustainability;** we are financially stretched too thin. We need to manage the costs of our property portfolio and science infrastructure which are growing faster than our revenue. Some of our Flagships have been persistently unable to lift external earnings ratios in a tough external environment. While we are already relatively lean on expenditure in our support functions (ESS = 13% of budget), we need to **continually reduce our overhead costs** and maintain or increase the proportion of our expenditure directly supporting science.

## Summary Decisions

CSIRO's future operating model builds on strategy 2011-15, and prepares us for sustainable success through strategy 2015-25. We will sharpen our differentiation as a large scale, impact focused applied science organisation, position our roles externally, empower and hold our frontline leaders accountable, and realise efficiencies. It is important to note that our overall reform objectives will not be realised through simply changing reporting lines – but will require complementary **cultural, process, systems and overhead cost** reduction to achieve.

**A comprehensive set of recommendations is at Attachment 1.** The key outcomes are:

1. Move to a **'line of business'** structure to better externally position and internally manage our distinct roles in major facilities & infrastructure, impact science and CSIRO Services<sup>1</sup> (See diagram page 7)
2. **Within the Impact Science** Line of Business, we will **complete the shift to an impact focus through our Flagship Research Program** as our primary vehicle, to sharpen our impact focus – underpinned by excellent science -and greatly reduce the internal management requirements of our matrix. This means;
  - a. 'merging' current Divisional and Flagship responsibilities into a portfolio of large scale Flagships which integrate capability, science and project delivery 'end-end'
  - b. Within Impact Science, rationalising our portfolio of National Research Flagships to 9
  - c. All staff in this line of business will be assigned through their Research Program (see more on this below) to one primary Flagship eliminating double budgeting and much of the current 'matrix' complexity
  - d. Management of a clear portfolio of cross Flagship 'future science platforms', each domiciled in a 'lead Flagship' undertaking risky, breakthrough science projects and aiming to develop and deploy new capability with multiple applications. Representing approximately 15% of Impact Science resources.
  - e. The primary organising unit to be "Research Programs" (an amalgam of current Research Programs and themes) which will be aligned to a "primary or home" Flagship. The Research Program level will be established clearly as the primary layer of accountability, delivery and responsibility, increase consistent delegation to this level, and reduce management structures above and below.
  - f. Flagships and Research Programs will be assigned more accountability for geographic and site leadership, and geography may be a determining factor in the mapping of units to Flagships and Research Programs (eg; some regional sites could be Research Programs in their own right
  - g. Projects will continue to be the basic work unit with cost and delivery control managed at the "Group and Team" level below Research Program.

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<sup>1</sup> The case for further lines of business in 'International Operations', and 'Transformational / Open Innovation', will be part of the development of the 2015-25 strategy



### 3. National Facilities and Collections line of business (NFC)

- a. Within the NFC LOB it is proposed we bring together the management of the three major national research facilities – AAHL, MNF and the ATNF along with other significant national infrastructure and the National Research Collections (recently aggregated under single management model)
- b. Underpinning this line will be integrated and coordinated processes for facility use and development by the broader innovation system which we believe may provide the platform for the further growth in CSIRO's management of similar major national research infrastructure on behalf of the national innovation system
- c. Capability intimately connected with the operations & maintenance of the facility to ensure it is 'research ready', will be housed in the National Facilities line
- d. CSIRO research capability which works with the facility will be housed in the most relevant Flagship and deployed to work with the facility within the line of business. The exception will be the research capability attached to ATNF and the Collections, as there is no relevant Flagship home.

### 4. CSIRO Services line of business (CS)

- a. CSIRO's Services line delivers cost effective innovation services to clients which directly apply CSIRO's intellectual property, capability and infrastructure to deliver client solutions and outcomes, and support our impact objectives.
  - b. Within the CS line of business we will seek to bring together a range of different businesses currently operated by CSIRO including Industrial Research Services, SME Engagement, Publishing, Education and Futures. Others will be identified over time.
  - c. The Services line will develop some exciting and high profile initiatives that will position and support CSIRO's overall role as an 'innovation catalyst'. These may include roles as an 'industry shopfront' for 'lighter touch' innovation services, facilities and IP licensing or supporting open innovation collaboration initiatives.
  - d. Over time additional mature, replicable services developed within CSIRO's Flagships may transition to the Services Group for commercial development and potential spin out – examples could include river basin modelling or big data services
  - e. Underpinning this Line of Business will be common approaches to costing and pricing services and where appropriate partnerships with the private sector to increase the scale and extend the impact of these activities
5. Integrate, streamline and centralise more of our **support functions and enterprise processes within a clear 'One-CSIRO' Enterprise architecture**, to improve consistency, realise efficiencies and overhead savings. Realign our support services to deliver relevant, responsive support services to lines of business.
  6. Consider and plan a staged program of property consolidation to reduce the long term property-related cost burden

## Strategic Context & Framework

We are building on a long journey of strategic reform, and building on our reform achievements for the next decade in a logical and consistent way.

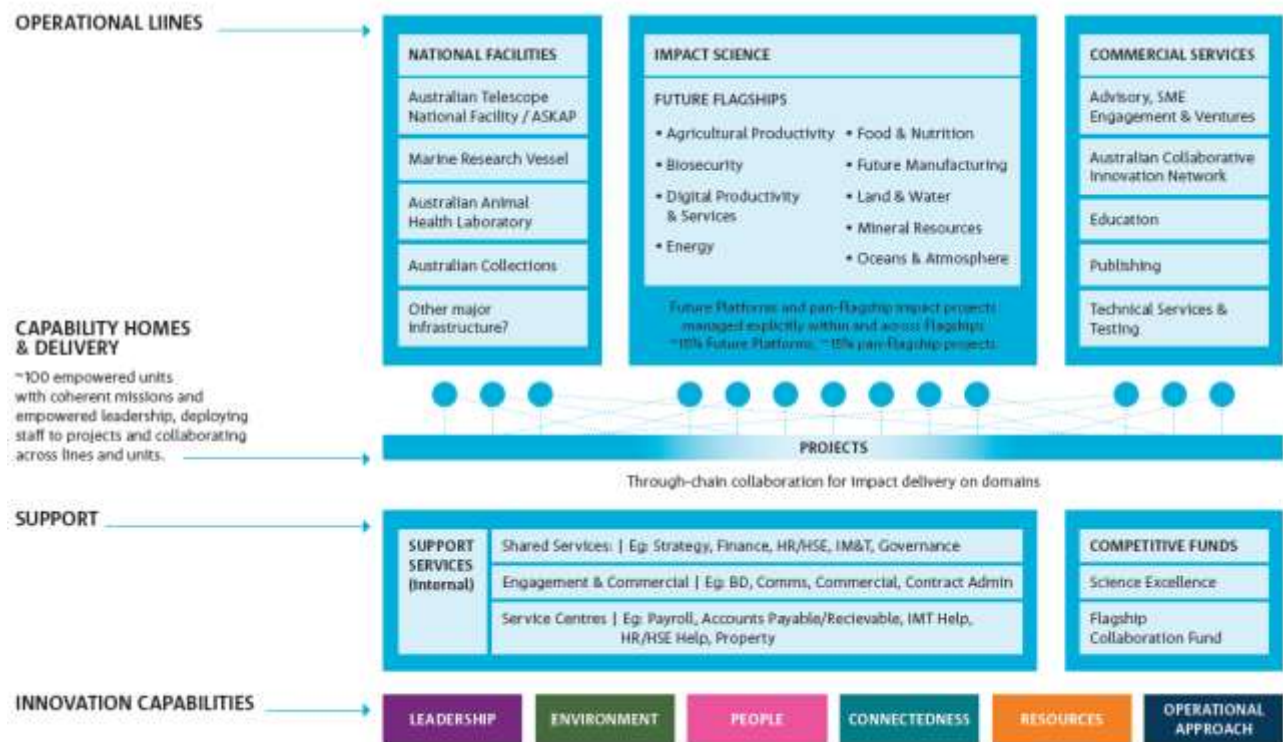
ROLE	2000-2003	2003-2007	2007-2011	2011-2015	2015-2025
Access to Global Knowledge					International reach (inwards and outwards)
National R&D Connector				Partner for Success	Innovation catalyst, Services
Trusted Advisor				Trusted Advisor	Trusted advisor
Science Excellence and Preparedness			Science Focus (TCPs)	World Class Capability & Precincts	Precincts, Future platforms, national facilities
Mission Directed		Flagships 20% SIP	Flagships 40% SIP, SAP	Flagships 65%	Flagships 80%
Multi-Disciplinary		RSS	Matrix RSS	People, Governance & Values	Networked and open
Large Scale	One-CSIRO	Flagships	Flagships	Transformational Impact Flagships	Line of business, Flagships primary

DELIVERING ON OUR STRATEGY

This reform Program supports the delivery of our current 2011-15 Strategy, and provides an improved footing for key emerging elements of the 2015-25 Strategy or external uncertainties.

## Future CSIRO Operating Model

The recommended Future CSIRO Operating Model to finalise the 2011-15 strategy, and bridge toward strategy 2015-25, is represented below. The precise composition and branding of our Future Flagship portfolio may be refined. The operating model is not a structure, but an integrated set of choices about how we organise and deploy our resources to deliver on strategy.



This operating model will embody the following set of organisational design principles, developed by a cross section of CSIRO science and support staff. "CSIRO delivers profound impact through world class science, delivering innovative solutions with industry, government and the community. Our innovation organisation is successful when we apply the following principles:

1. Impact and client focused, delivering innovative solutions through projects
2. Support coherent, creative research teams which integrate science and delivery over the short and long term
3. Enable entrepreneurial, frontline research leaders to manage risk effectively and deliver on commitments
4. Promote collaboration across boundaries to bring the best internal and external capability to projects in a globally connected world
5. Provide clear accountability and focus for leaders at all levels
6. Deliver more efficient and lower cost operations
7. Flexible and continually adapting to change"

Detailed work is currently being undertaken to develop line of business budgets and map current units to the future model for transition during 2014. Indicative key statistics for commencement are outlined below;

Key parameter	National Facilities & Collections	Impact Science	CSIRO Services
Overall indicative proportional investment (% of science investment/FTEs) at commencement	9%; 500 FTEs	87%; 4000 FTEs	4%; 100 FTEs
Financial model at maturity	100% user pays / Govt	40-50% external (on a portfolio basis)	100% externally funded + surplus

### Future Flagship portfolio

The current view of the Future Flagship Portfolio to be realised as part of the proposed 'Impact Science' line of business through the integration of the current Divisions and Flagships is set out below. This will provide the basis for further refinement in line with EMC and other stakeholder input. The key considerations and principles adopted developing this view of Future Flagship are to;

- maximise continuity of Flagship impact commitments, sector alignment & branding
- execute on the 2013/14 KEA to rationalise remaining Divisional Portfolios (Plant Industry, CAFHS, CMAR and Biodiversity) to Flagships
- Streamline the Preventative Health and Climate Adaptation Flagships into other Flagships.

Our Future flagships will be;

1. Future Manufacturing
2. Digital Productivity & Services
3. Energy
4. Minerals Down Under
5. Oceans & Atmosphere
6. Agricultural Productivity
7. Food & Nutrition
8. Land & Water
9. Biosecurity

Following further input from EMC a process of defining and mapping Future Research programs will be undertaken to map intact teams to Future Flagships. These are largely expected to be formed from current Programs, although on review some themes and sites may be strong candidates to be crystallised as Research Programs. This mapping process will be a significant task to design and realise, but is not anticipated to significantly disrupt the fabric of the organisation. While under our matrix system we have become a more networked organisation, approximately 75% of CSIRO **projects** currently draw capacity from a single Program. So the **mapping of most Projects and clients** will be clear. Of **CSIRO's ~95 programs**;

- ~1/3 map almost entirely (>90% of Program) to a single Future Flagship (14 are 1:1)
- ~1/3 map their majority (>75% of Program) to a single Future Flagship
- ~1/4 map substantially (>50% of Program) to a single Future Flagship
- ~8 remaining programs are dispersed

## What does success look like?

A high level **Innovation Organisation Program** business case is under development, and the financial components calibrating with the 4 year balanced budget. When fully developed, the business case provides a critical tracking tool to ensure that Research Program benefits are clear from commencement and sets a clear, measurable target enveloped for reform to deliver against;

- We have freed up productive capacity across our business to grow science, impact and revenue
- Our innovation capacity has lifted from 55% to 65% as measured through our Innovation Maturity Model by 17/18
- Overall staff engagement has been maintained above 80%
- Our client willingness to recommend scores have been maintained above 8/10 on average, and there is less underlying dissatisfaction with our cost, commercial contracting and IP positions
- We have managed short term staff wellbeing impacts and have not seen a significant increase in unplanned staff separations and stress related LTIFR over the key transition period
- We are an efficient, effective and entrepreneurial Government entity delivering value as an Innovation catalyst

**Attachments:**

1. Detailed recommendations
2. Transition Principles
3. Reform Program terms of reference
4. Risk Management
5. Values and critical success factors
6. Sample literature and external references
7. Wellbeing at Work Strategy interface
8. Operating Arrangements Review Terms of Reference

# Attachment 1 - Detailed Recommendations

## 1. DESIGN PRINCIPLES

Adopt and communicate the following “**Innovation Organisation**” Design Principles as an enduring basis and ‘touchstone’ for organisational development;

*"CSIRO delivers profound impact through world class science, delivering innovative solutions with industry, government and the community. Our innovation organisation is successful when we apply the following principles:*

1. *Impact and client focused, delivering innovative solutions through projects*
2. *Support coherent, creative research teams which integrate science and delivery over the short and long term*
3. *Enable entrepreneurial, frontline research leaders to manage risk effectively and deliver on commitments*
4. *Promote collaboration across boundaries to bring the best internal and external capability to projects in a globally connected world*
5. *Provide clear accountability and focus for leaders at all levels*
6. *Deliver more efficient and lower cost operations*
7. *Flexible and continually adapting to change”*

## 2. LINE OF BUSINESS MODEL

- a. Implement a top level ‘**Line of Business**’ structure to enable;
  - i. The pursuit of clear and differentiated growth opportunities in each of our major roles in the national innovation system
  - ii. Greater accountability and specialisation for the parts of our organisation that have substantially different core competencies, external stakeholders, funding and business model requirements
- b. In the first instance, this includes the separation of three primary lines of business:
  - i. **National facilities & Infrastructure**; Large scale, national science facility management and operations which service an external research user base on a co-equal basis with CSIRO research (~20% of current research expenditure)
  - ii. **Impact Science**; Collaborative, applied R&D focused on large scale impact delivery (~75% of current research expenditure)
  - iii. **CSIRO Services**; Technical and CSIRO Services with low requirements for scientific discovery (~5% of current research expenditure)
- c. That additional cases for lines of business further separating out some activities currently undertaken within the ‘Impact Science’ line of business, (eg; ‘International’ and ‘Transformational

Innovation')<sup>2</sup> are explicitly developed and tested as part of the 2015-25 strategy, and with reference to the learnings from the implementation of the line of business model

### **3. IMPACT SCIENCE LINE OF BUSINESS;**

That within the core 'Impact Science' line of business;

- a. The distinct functions of Divisions and Flagships are merged into a new entity, called Flagships, which integrates the full continuum of capability, science and project delivery to deliver impact, and work across all 'horizons' of research
- b. The Flagships are the primary delivery vehicle and signal of our impact focus areas, responsible for developing, funding, monitoring and meeting an impact goal which is supported by a portfolio of Impact pathways
- c. The Flagships each run a P&L budget, and are accountable for all KPI's (impact, science excellence, finance, and people)

### **4. FLAGSHIP PORTFOLIO**

That in the light of the integration with Divisions, the current portfolio of Flagships and Divisional themes,

- b. That as part of the transition to an 'Impact Science' line of business, CSIRO rationalises its portfolio of National Research Flagships to 9, streamlining the activities of the Preventative Health Flagship, Climate Adaptation Flagship and remaining Divisional portfolios (Plant Industry, CAFHS, CMAR and Biodiversity) into the Flagships
- c. That as part of the 15-25 Strategy development, the underlying impact science capability be critically reviewed for alignment to Flagship selection criteria, and considerations of;
  - Continuity and delivery on commitments (eg; goals) to stakeholders, sectors, clients and maintaining branding
  - Expectations of primary external stakeholders
  - Requirements to free up appropriation revenue to meet funding cuts or to re-invest in new requirements under the 2015-25 Strategy
  - Synergies or consolidation opportunities between Flagships

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<sup>2</sup> International Operations (e.g. physical research presence of CSIRO overseas like we have recently done in Chile)  
Transformative Science (e.g. identifying key issues that require complete out of the box solutions to address and funding a limited number of internal and external projects to try and crack them – high risk/high return investments)

## 5. FUTURE RESEARCH 'RESEARCH PROGRAMS'

- a. Within the 'Impact Science' line of business, identify and define a portfolio of Research Research Programs which are new units at the current level of themes and Research Programs which integrate aspects of each, and;
  - i. Are coherent, persistent teams of generally <100 staff, with a clear, common mission and an empowered leader – practically selected to recognise and solidify **current intact teams** – whether those teams are currently Research Programs, themes or sites
  - ii. Are recognised as the primary unit of management and systematically empowered to a significant degree, across all delegations and business processes, with risk and accountability chunked up from below, and devolved from above
  - iii. Have leaders which are selected primarily as connectors, integrators and managers – not necessarily eminent scientists (see Rec. 6). That these leaders are recognised as a key leadership cohort across CSIRO. Consider term limits and explicit renewals to promote performance and portfolio evolution.
  - iv. Are accountable for clear performance metrics under a balanced set of measures across impact, science, people and resources
  - v. Employ and deploy staff to projects, and manage the delivery of projects for which the Research Program is accountable
  - vi. Are responsible for capability management and integrating science with project and impact delivery
- b. That across other lines of business, discrete units are identified which correspond to the 'Impact Science' Research Program level and are treated consistently within their own operating context
- c. That across lines of business, management structures and resource levels above and below the 'Research Program' level of the organisation are critically reviewed, and that this level is recognised as the key;
  - To promote a more flexible, adaptive and de-layered organisation, able to act quickly and seize opportunities entrepreneurially
  - Recipient of support services and business processes

## 6. FUTURE SCIENCE

That the following mechanisms will be explicitly managed within the Impact Science line of business, overseen by SICOM;

- a. A clear portfolio of cross Flagship 'future science platforms' domiciled in one 'lead Flagship' undertaking risky, breakthrough science projects and aiming to develop and deploy new capability with multiple applications. Representing approximately 15% of Impact Science resources.
- b. A competitive 'science excellence fund' similar to current OCE scheme, to promote capability building & merit based science, including in, but not restricted to 'Future Science Platform' projects
- c. Provision of a more explicit framework to recognise and provide a forum for influence to our most eminent scientists - to engage substantively in science leadership, mentoring and research management issues of CSIRO wide significance



- d. A framework to facilitate the setup and management of communities of practice, particularly to promote disciplinary connectivity and mentoring, commencing with our top 5 science disciplines

## **7. PROMOTING COLLABORATION AND INTEGRATION**

- a. That the 'Impact Science' line of business clearly defines and manages a well resourced framework to incentivise and promote collaborative activity and staff mobility – inside and outside the organisation – through defining and managing;
  - i. a clear portfolio of 'Pan Flagship' inter- and trans disciplinary projects led by one Flagship, but with participation and resources from others. These may be testing grounds for 'Future Flagships', and should represent approximately 15% of Impact Science resources
  - ii. A competitive Flagship Collaboration Fund, as per current, to promote capability sourcing and integration from strategic partners, especially national and global Precinct partners
- b. That across lines of business and between Flagships, there are adequate mechanisms in place to incentivise staff mobility over the long and short term, through;
  - i. Incentives for longer term secondments and mobility for staff – inside and outside CSIRO
  - ii. A collaboration KPI to maintain desirable rates of cross-collaboration
  - iii. Processes and Systems which enable the simple allocation of staff to projects outside their 'employment' home with financial recovery

## **8. SUPPORT FUNCTION REFORM**

Integrated support function reform to align to a clear enterprise architecture, which improves efficiency and effectiveness through:

- a. Providing high quality, streamlined support services aligned to lines of business within an overarching consistent model
- b. Prosecuting greater centralisation, standardisation, consolidation across most all support functions within a strong, integrated support function environment, which makes clear distinctions between three key support functions with different purposes and models;
  - i. External Engagement & Commercial (eg; BD, Comms, Commercial, CA)
  - ii. Shared Services (eg; Finance, HR/HSE, IMT, Governance)
  - iii. Service Centres (eg; Payroll, AP/AR, IMT Help, HR / HSE help, Property)
- c. Prioritising and delivering efficient and effective support and service delivery to research Research Programs and sites in a way which provides clear, easy to navigate support service to frontline research teams

## **9. ACCOUNTABILITY FRAMEWORK**

- a. Establish a refreshed and clear, short list of KPI's and metrics across impact, science, people and resources, extending down to 'Research Programs with clear accountability for performance,

including required model characteristics such as collaboration levels (i.e. sourcing capability and exchanging staff). Quantitative, outcome measurement against KPI's would take a more overt role in reviews, funding continuation and portfolio evolution decisions.

- b. Develop as part of our values (delivering on commitments, trust & respect) and innovation culture, a more robust performance management culture across the organisation against organisational KPI's and values, with higher standards of personal accountability for leaders, and more active performance management at the both the unit and individual level.
- c. Provide Research Program Leaders more autonomy and flexibility in promoting, rewarding and recognising staff – for example, to increase rates of promotion of scientific staff on the basis of impact delivery, not just scientific performance

## 10. IMPACT CULTURE

**Impact Culture;** Design and deliver a broad, bold, enterprise wide and enduring cultural program to deliver long term improvement and competitive differentiation in our **outcome focus, customer service and impact delivery culture**. Aligned to the 'Impact 2020' program, the program needs to recognise and build the differentiated professional skill sets involved in delivering impact through multi-disciplinary science. These include;

- Multi, inter and trans disciplinary management and capability integration
- Client and customer engagement and innovation 'brokering'
- Impact planning, monitoring and evaluation

This would include an effective client relationship management system, and engagement skills program, including improved talent management and particularly engagement of the 'engagement team' or 'innovation broker' roles inside CSIRO (eg; currently Theme leaders, Research Consultant, BD, Comms, Commercialisation).

## 11. BUSINESS PROCESS STREAMLINING

Achieve significant requirements reduction, simplification and streamlining of business processes to improve customer and staff satisfaction, enhance productivity, achieve efficiencies and reduce cost, in the following key areas;

- a. Investing in a Research Program of streamlined process and system improvement aligned to the research operating model (SROM), including;
  - i. unwinding complex financial mechanics around deployment, allocations, project management and effort logging for small scale projects below 'Research Research Program' level, applied to 2700 contracts and in deploying 4500 staff (and additional visiting staff) across the matrix
  - ii. and elevating the level at which we manage financial and commercial risk

- b. adjust commercial, risk and governance practices to enhance and prioritise IP diffusion, customer experience, speed of contract execution, and enable reduced administrative workload in the external and commercial engagement processes.

## 12. INFORMATION SYSTEMS

To enable accountability, transparency and process efficiency gains, identify required information system investments, which specifically may include;

- a. providing leaders with transparent performance information 'on demand' aligned to KPI accountability
- b. systems to support an Innovation Marketplace, to facilitate exchange and transparency of ideas, project, customer and funding information across the organisation, and subsequently inclusive of external partners

## 13. CHANGE MANAGEMENT

- a. Adopt and widely communicate a clear Future Operating Model for the organisation to fully realise and embed within 2 years, within a framework which provides clear alignment to supporting and enhancing the 2011-15 Strategy, and the emerging directions of the 2015-25 Strategy
- b. Adequately resource an implementation Research Program to deliver it in line with the recommendations of this report, through the delivery of a phased transformation Research Program which incorporates;
  - i. a design and shaping phase under leadership of the relevant, designated executives who will take each operating model element forward
  - ii. an all staff and stakeholders communication and change plan for the endorsed recommendations as part of the design phase
  - iii. realisation of fundamental elements of the new operating model and delivery of clear benefits for stakeholders and staff within the first 12 months
  - iv. a transformation Research Program delivered in accordance with the major project standards, sponsored by an Executive team member supported by an executive steering committee, reference group, and responsible to a Board Committee
  - v. redevelopment of systems and processes ahead of and as a pre-requisite to structural transition to support successful operations in the new model
  - vi. Intensive focus on leadership selection and skill development for leaders to 'research cell' level on how to operate successfully in the new operating model
  - vii. Ensuring that the change roadmap and resourcing adequately supports the embedding and development phases of change, and doesn't fall away after the initial wave of (mostly structural) changes which are necessary but not sufficient to deliver benefits
- c. Following Reform Research Program Implementation, establish a dedicated and enduring team with **Business Improvement** capability, and responsibility for continuous improvement and guardianship of the target operating model and administrative workload levels to help deliver on benefits and adapt the model over time.

## 14. IDENTIFYING AND MAINTAINING A PROFILE FOR LONG TERM SUSTAINABILITY & COST CONTROL

That to enable and support the directions and objectives of the operating model transformation, CSIRO focuses resources on our areas of core differentiation and prosecutes an ongoing and systematic Research Program of **reducing costs** to achieve a balanced four year budget which reduces overheads and enhances the 'liquidity' of appropriation within our system to support long term science impact:

- a. Achieves cost savings and efficiencies in support functions without compromising our ability to support science teams
- b. Changes the shape of our organisation in terms of staff levels and costs through;
  - o Increasing spans of control for all leaders and reducing the number of 'layers' in our organisation from current 9, to 6 or 7
  - o increasing the ratio of staff at lower levels to staff at higher levels, in all functions and roles over time
- c. Contains unplanned cost growth in fixed asset costs due to property related expenditure and national facilities
- d. Holds to clear principles for cross-subsidisation of different lines of business, including;
  - o Non-subsidisation of unfunded national facility operations
  - o Realising a dividend return from CSIRO Services
- e. Defines and is targeted to maintain a benchmark of untied funding (eg; 20%) in the Impact Science business to buffer normal uncertainties and maintain longer term scientific excellence
- f. Maintains a management reserve

## 15. NARROW OUR BREADTH

Narrows our science and impact breadth to maintain our long term differentiation by;

- a. exiting areas which are not aligning applied research against a national challenge, where we are not performing at an elite level (eg, #1 or #2 in Australia, top 20 in world), strategically investing for the future, or where we are not clearly differentiated from other providers in the innovation system

## 16. PROPERTY PLAN

Accelerate the execution of a self-funded **property plan** to the fullest extent within available funding, and continue to seek means to enable a substantial re-shaping and downsizing of our property portfolio for long term sustainability and vibrancy, which:

- a. Increases the concentration of research staff in geographic clusters identified as nationally significant (i.e. global precincts, national centres and key associated regional sites)

- b. Enhances the innovation vibrancy of our sites and increase staff density in line with science value and staff space benchmarks and reduce future property related costs including avoidance of future repairs and maintenance expenditure

## Attachment 2: Transition Plan

### Operating Model timeline

We have examined a range of options for implementation noting we would like to move to this model as soon as it is practicable given the benefits it will deliver to staff and clients. We are also keen to ensure we get it right – so over the next month, we will be seeking further input from EMC, engage our top 300 leaders and hold a number of social media enabled ‘Jam’ sessions open to wider staff to shape and put in place the necessary detail and where appropriate refine the implementation plan. All staff will be given the opportunity to participate in these forums with some staff also engaged more directly on developing this Program and managing communication and relationships internally and externally to ensure that we don’t lose momentum we have created with our 2011-15 Strategic plan.

- Subject to further input and feedback changes at the ET and EMC level are expected to be in place by early May to enable a ‘go live’ at EMC level from 1 July.
- As part of the implementation process we also expect we will further review the scope and boundaries of current Flagships as we seek to integrate the last remaining Divisional research portfolios. This work will be coordinated through SICOM and we expect it to be completed by the end of May so we can re-code SAP and do detailed budgeting for full ‘go-live’ by 1 October .
- High level staff allocations to different LOBs and revised Flagships are expected to be in place by July. Structures supported on 1 July will need to be defined by mid March to re-code SAP and develop the high level budgets
- Program Level Budgets and new processes and systems expected to be in place by 1 October 2014, which will require definition and mapping by June.

## Attachment 3: Program Management and Governance

**We will manage the implementation of the reform agenda through an integrated 'Innovation Organisation' program of reform across all elements of CSIRO's operating model under the framework of our 2011-15 strategy and 2015-25 strategic directions.**

**The overall objectives of this reform are to;**

- Reduce complexity and improve clarity, empowerment and accountability within the organisation
- Enhance our productivity in the delivery of profound impact, creative, world class science and revenue growth
- Improve the customer experience and reduce barriers to commercial collaboration
- Reduce our overhead costs to improve the long-term financial sustainability of the organisation
- Empower and support our people to do their best work in line with our values

**The Reform Program will;**

- Report to the Deputy Chief Executive who as Program Sponsor, has accountability for the Program delivery, on behalf of the Chief Executive.
- Define CSIRO's future organisation design architecture and reform objectives
- Co-ordinate and manage the integration of work streams delivering discrete elements of the reform Program
- Play a 'guardian' and integration role across all work streams to assure the delivery of business case and integrity of the future operating model architecture
- Manage a Research Program budget and track / oversight overall Program expenditure
- Take overall responsibility for enterprise change and communications related to the reform Program, and the constituent work streams
- Prepare progress reports for the Sponsor, the Chief Executive, Board and Executive Team on a regular basis and as required,
- Escalate issues and decisions to the Sponsor and to the Chief Executive as defined by the Program governance model and decision rights, and
- Ensure that the reform Program is aligned with CSIRO's Strategy, policy, procedures and any other relevant decisions or factors.

**The Program approach will be to;**

- Include design of a benefits frame work, including baseline values and target outcomes, to ensure that measurement and progress is transparent to stakeholders and sponsors throughout and beyond the life of the Program.
- Manage the program under the 'major projects standard' - follow leading practice Program, project and change management practices to ensure that the organisation is both ready and able to transition from the current state to the new, and that risk of productivity loss in a time of transition is minimised and managed
- Deliver on future CSIRO 'design principles', including focus on the needs and perspective of the frontline Research Program of generally <100 staff as the dominant design consideration in designing and implementing change

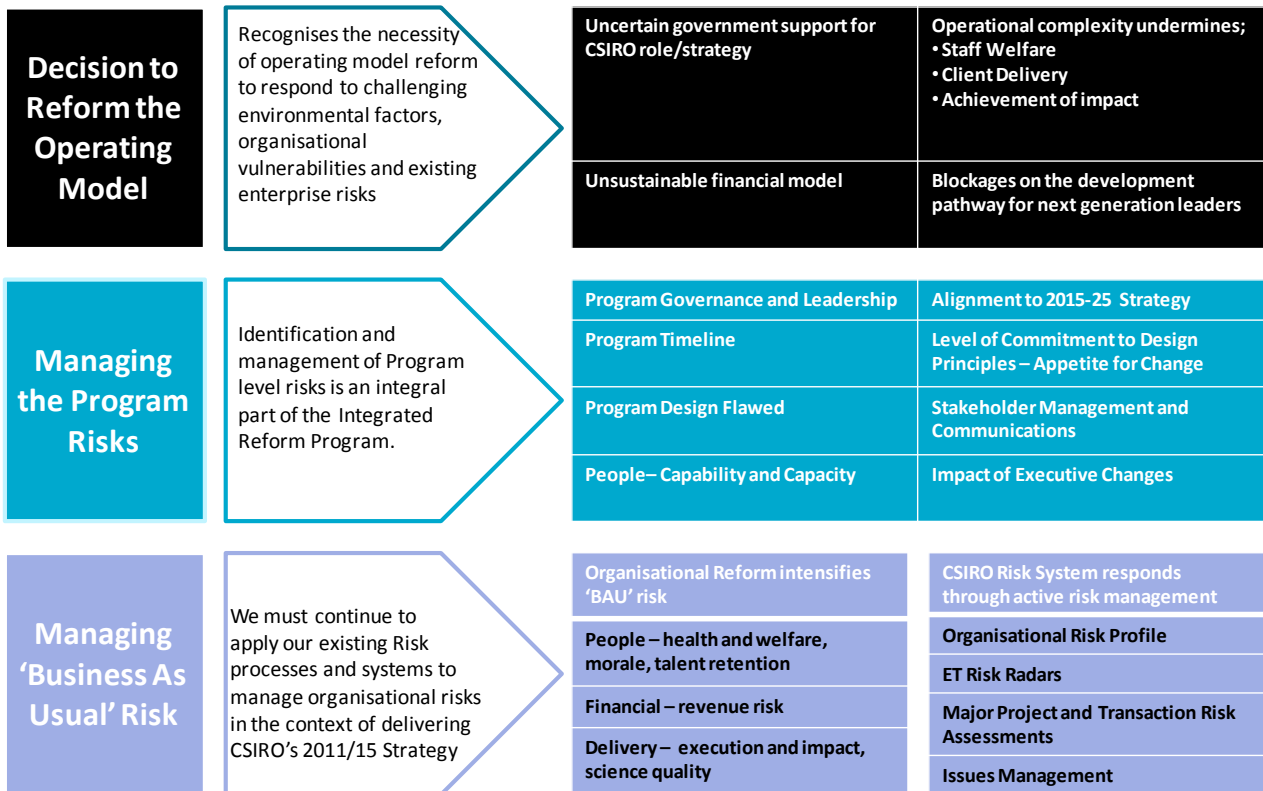
## Attachment 4: Risk Management

This program of work represents a critical response to risks currently facing the organisation. Our current environmental context is characterised by a challenging fiscal environment, a focus on lifting our capacity on staff wellbeing and Executive transitions.

Program risk has been examined at three key levels – the decision to reform the operating model, managing the program, and managing ‘business as usual’ risk.

1. **Organisational reform is essential to the long term mitigation of existing organisational risks.** It is the responsibility of the Program leadership and the Executive Team with oversight from the Board to ensure that the proposed changes to operational arrangements are sufficiently bold and far reaching - whilst robust in their design and implementation - to ensure that the objective of profoundly mitigating key organisational risks and vulnerabilities is achieved.
2. This leads to the second risk accountability whereby the **leadership of the reform Program is accountable for ensuring sound risk management practices are observed** throughout the life of the reform initiative. To this end the role of ET working groups, Program Work Stream and Project Leaders in supporting the identification and mitigation of program risks is essential to the adoption of a comprehensive and effective Program risk management strategy.
3. Thirdly, the organisation will continue to deliver against the objectives of the 2011-15 Strategy during this period of change. Recent iterations of the Organisational Risk Profile provide that the level of inherent risk faced by the organisation has significantly increased. Embarking upon major organisational reform will further increase that risk in the short term in order to achieve long term benefit and risk mitigation

The proactive application of existing risk processes is vital to ensuring that we remain on track. Regular ET and Board level update and review of the Organisational Risk Profile, the role of ET members and their teams in updating their ‘Risk Radars’, escalation of new /intensifying risks and existing Issues Management processes take on greater importance during this period .



Mitigation strategies for key program delivery risks also partly address management of business as usual.

Program Risk	Mitigation (In place/planned/proposed)
<b>Program Leadership &amp; Sponsorship;</b> Executive capacity and visible ownership of the change	<ul style="list-style-type: none"> <li>• CEO / DCE sponsorship</li> <li>• High degree of ownership &amp; involvement from ET leaders – significant work undertaken to establish common understanding and agreement regarding Program objectives and priorities</li> <li>• Engage and enrol EMC and Next level leader cohorts to provide input and shaping within high level directions</li> <li>• Quick resolution critical leadership roles</li> <li>• CSIRO Board oversight</li> <li>• Program Charter establishes governance mechanisms and decision making authority</li> </ul>
<b>Capacity to execute; without unacceptable business risk</b> program timeline & change load; people, processes & systems ready to go	<ul style="list-style-type: none"> <li>• Rigorous planning processes - resource allocation identification of dependencies</li> <li>• Serious resource commitment of dedicated, high calibre personnel, frontloaded</li> <li>• Contractor resourcing of key functions under load – eg; HR and IM&amp;T</li> <li>• ET commitment to resource prioritisation/clearing road blocks/program support</li> <li>• SROM integration and prioritisation to deliver critical path process / system reform</li> <li>• Resourcing of a ‘go-live stream’ for training and change management</li> <li>• Recognition of program impact on BAU – e.g prioritise role design and appointment of key leaders to minimise leadership vacuum/uncertainty.</li> </ul>
<b>Program Resources –</b> Capability and Capacity	<ul style="list-style-type: none"> <li>• Program team comprised of key functional and science leaders - needs to be dedicated and backfilled to manage BAU impact</li> <li>• ET/EMC support to identify and release the right resources to the Program</li> <li>• Supplementation through use of contractors/consultants as required</li> </ul>



<p><b>Level of Commitment to Design – design process,</b> appetite for realising change,maintaining integrity of the vision and realising benefits</p>	<ul style="list-style-type: none"> <li>• CSIRO Board expectation that substantial change is required to address current organisational context and vulnerabilities</li> <li>• Sound analysis and consultation through review – reference Group, Board, extensive ET discussion, external validation</li> <li>• Commitment to open and transparent communications (ET/EMC/Top 300/All Staff)</li> <li>• Review phase identified/confirmed the desire for change</li> <li>• Governance and leadership mechanisms to reinforce commitment to substantial reform</li> <li>• Strong Communications presence within the Program Team</li> <li>• Clear design principles and business case in place from commencement Appropriate resources (science and support) harnessed to ensure effective design</li> <li>• Recognition that incremental deviations from design will aggregate to material loss of benefits – including financial benefits already identified</li> </ul>
<p><b>Alignment to 2015-25 Strategy</b></p>	<ul style="list-style-type: none"> <li>• Strong 2011-15, 2015-25 Strategic framework in place</li> <li>• Shared leadership between the Reform Program and the Strategy 2015-25 development team</li> </ul>

## Attachment 5: Values and Critical Success Factors

Ensuring we deliver on our values in both the design of the model and our transition Research Program

Values	Design features	Transition considerations
<p><b>Embracing scientific excellence and working together ethically and with integrity in everything we do.</b></p>	<ul style="list-style-type: none"> <li>Competitive funds and defined future platforms</li> <li>Ensure Flagships can manage cross organisation discipline communities of practice</li> </ul>	<ul style="list-style-type: none"> <li>Need to deliver workable processes and systems with any organisational change</li> <li>Need to engage meaningfully and substantively with staff and stakeholders on decisions which impact them, and to tap their ideas</li> </ul>
<p>Building <b>trust and respect</b> each day with our communities, partners and colleagues, knowing that with trust comes accountability.</p>	<p>Across all lines – clearly recognise, empower and support our <b>coherent, intact research teams of &lt;100 people (ie; Program / theme level)</b>. Establish this level clearly as the primary layer of accountability, delivery and responsibility, increase consistent delegation to this level, and reduce management structures above and below.</p>	
<p>Igniting our <b>creative spirit</b>, exploring new horizons and creating an environment where innovation thrives</p>		
<p>Consistently <b>delivering on our commitments</b>. 'Do what we say we will do'.</p>	<ul style="list-style-type: none"> <li>Lines of business deliver distinctive, valued roles in the innovation system more effectively and efficiently</li> <li>Flagships have full control over resources and capability to deliver to our impact domains, stakeholder segments and customers</li> </ul>	<ul style="list-style-type: none"> <li>Need to deliver quickly and clearly on organisational change to minimise uncertainty and business disruption</li> <li>Need to respond to clear client and staff feedback as a high priority – eg; we have said we will streamline the matrix for years and have not done so</li> </ul>
<p>Striving towards a <b>healthy, safe and sustainable</b> future.</p>	<ul style="list-style-type: none"> <li>More empowerment and consistency for science teams</li> <li>Less anxiety and stress around internal deployment</li> <li>Overhead savings and efficiencies</li> </ul>	<ul style="list-style-type: none"> <li>Need to maintain focus on coherent design and realisation of business case benefits</li> <li>Need to ensure that change load is manageable for staff and staff feel they own the change process</li> </ul>

## Attachment 6 – Sample Literature & Examples informing the review

Values, innovation, adaptability, passion and ideology –  
these are the things that matter now for organisations...

Hamel, What Matters Now

Matrix management meets a need for a multidimensional organisation to respond to growing external complexity, but problems emerge when companies focus more on the anatomy (structure), and less on the physiology (values, systems and relationships that shape the way managers think and act)...  
Bartlett & Ghoshal, Matrix Management

**Everything should be as simple as possible, but no simpler... Albert Einstein**

**Successful growth organisations effectively empower small teams, and use frequent large and small restructuring to re-focus the business... Baghai, the Alchemy of Growth**

To work effectively in 'Pasteur's quadrant' and deliver breakthroughs, DARPA is focused on managing constant flux—building, replanning, changing tack, and moving talent in and out as project needs shift, Dugan & Gabriel, Special Forces Innovation, HBR

Innovation means decentralisation of resource control and unleashing innovation at the boundary with collaborators and customers, effective portfolio management, and radically changing the way we hire, train, incentivise and manage frontline employees and teams.... Hamel, What Matters Now

# Attachment 7 – Wellbeing at Work

CSIRO's 'Wellbeing at Work' Strategy is a key complementary initiative to the Future Operating Model, and was developed as the outcome of the Staff Wellbeing strategic review.

CSIRO's 2014-18 Wellbeing @ Work Strategy is focussed on strengthening our innovation culture and operating conditions in key areas that positively contribute to the wellbeing of our people, and remediating in areas that detract from wellbeing.

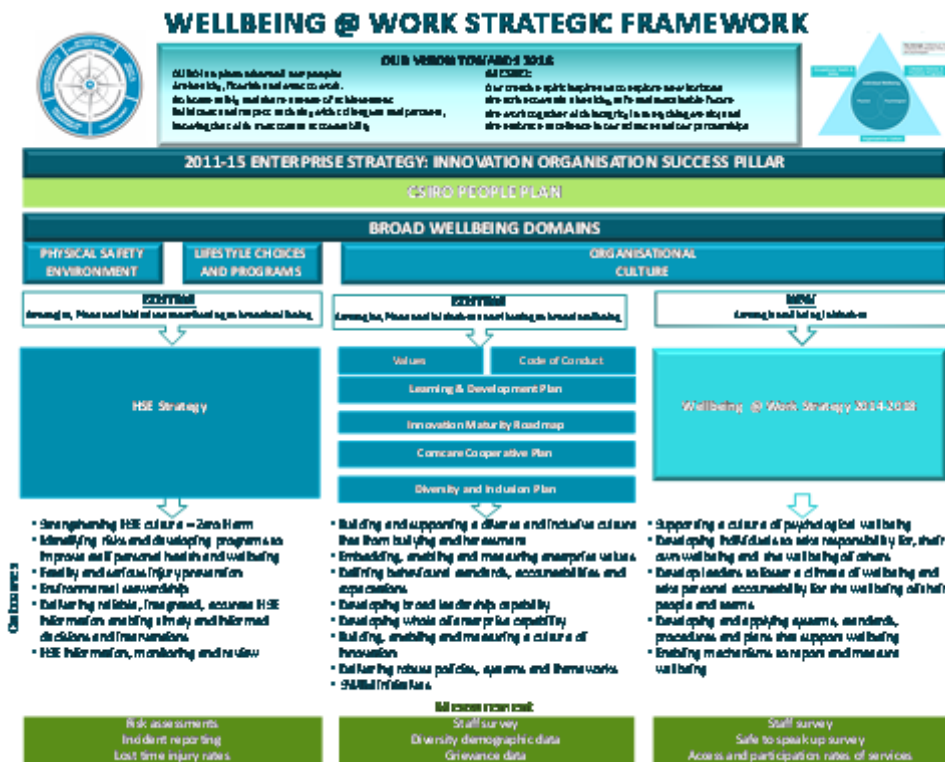
From our review of extensive internal and external literature and data sources, we know that the key psychological wellbeing factors that affect our people are:

1. Our operational approaches, such as those associated with resource allocation, effort logging, project management, general administration and client engagement
2. Resources (financial pressures and time for creativity) and job security
3. Leadership and related areas such as role clarity, meaningful work, collaboration, team relationships, flexible work arrangements and development opportunities.

Remediating wellbeing issues associated with our operational approach and financial resources is outside the scope of the Wellbeing Strategy. This is because it is in scope for two organisational review programs, namely, the Operating Arrangements and Financial Sustainability Reviews.

The cultural and operational conditions that are in the scope of the Wellbeing Strategy are:

1. People and Leadership;
2. Human Resources systems, standards and procedures;
3. Supporting wellbeing through professional partnerships; and
4. Governance, measurement and reporting



## Attachment 8 – Review Terms of Reference

**A fundamental, decadal review of the effectiveness of CSIRO’s operating arrangements to enable the delivery of impact on national challenges and opportunities through world class, multi-disciplinary, collaborative and large scale applied science;**

The primary objectives of the review are to identify clear recommendations to;

- Reduce complexity and improve clarity within the organisation – including a review of the matrix and our management structures
- Achieve productivity improvement, in terms of capacity to deliver profound impact, undertake creative, world class science and grow revenue
- Enhance the customer experience and reduce barriers to commercial collaboration

The secondary objectives of this review are to identify recommendations which support two other review work streams;

1. Achieve overhead cost savings and efficiency gains to free up resources for impact delivery to address the financial sustainability of CSIRO (Stream C)
2. Enhance the wellbeing of our people in areas additional to the above objectives and address the recommendations of the Pearce Review (Stream A)

The review will provide findings and recommendations on;

1. Whether our current structural arrangements effectively facilitate our capacity to efficiently deliver multidisciplinary, mission directed science and deliver on our strategy
2. What is working well, and where there are options and opportunities to make substantial improvements
3. A clear set of recommended and endorsed actions, with a business case and roadmap to change inclusive of specific scenarios describing interdependencies between specific change options.

CSIRO’s strategy and role is not in scope of this review – the review findings will inform CSIRO’s 2015-25 Strategy process;

- With this exception, the review will be bold and fundamental in the options and alternatives presented for consideration by the Board / Executive, identifying implications and constraints
- The review will be informed by an examination of common structures and challenges faced by other complex, multi-disciplinary, services based organisations
- While structure will be a key focusing lens, recommendations addressing root cause issues will be expected to have implications for governance / risk, structure, processes, people & culture, systems and infrastructure
- The findings and recommendations of the Review will inform responses to Ministerial direction following the September 2013 election, as well as internal management action



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