



The Hon Karen Andrews MP

Minister for Industry, Science and Technology

MS19-001483

Mr David Thodey
Chairman
CSIRO Board
GPO Box 1700
CANBERRA ACT 2601

Dear Mr Thodey

I am writing to outline my expectations of the Commonwealth Scientific and Industrial Research Organisation (CSIRO).

As you know, the Australian Government places high importance on science and innovation as drivers of our economy, employment, social wellbeing and positive environmental outcomes. It is therefore essential that CSIRO plays a central role in advancing the Government's broader economic agenda by driving innovation and technology development and fostering a strong science and research base.

As Australia's pre-eminent science agency, I am confident CSIRO will continue its core mission to drive the application of science and technology and resolve national challenges, with resounding benefits for all Australians.

I expect CSIRO to maintain its position as a world leader in critical areas of science whilst working with and across the Government and its multiple departments to progress key policy objectives, including: embracing the digital economy; working collaboratively to advance Australian industry; building SME engagement; encouraging access to national research infrastructure; promoting STEM careers and STEM equity; and facilitating the translation of research and commercialisation of outcomes.

Resolving national challenges for a competitive Australia

The Government is keen to ensure its research and innovation policies deliver large and sustained economic and social benefits. One of CSIRO's greatest strengths is its ability to operate at-scale to resolve challenges of national significance through its multidisciplinary science and by working collaboratively to develop integrated solutions.

CSIRO's own national challenges indicate to me that CSIRO is indeed thinking strategically about the imminent opportunities and challenges facing Australia. It will be essential that you work collaboratively across the science, research and innovation system, including with both industry and research agencies, to ensure your mission-directed research aligns with emerging priority areas for the Government and encourages at-scale outcomes.

CSIRO provides strategic advice through working with government agencies and a number of other government bodies, including Cabinet committees and the National Science and Technology Council (NSTC). CSIRO's ongoing representation on the NSTC will help ensure further alignment and integration of CSIRO's cutting-edge research with national science and technology priorities.

Advancing the Government's policy priorities

As you are aware, I am committed to advancing the Government's long-term strategy for science and innovation. This strategy is variously outlined through the *2015 National Innovation and Science Agenda*, the *2016 National Research Infrastructure Roadmap*, the Government's Response to Innovation and Science Australia's *Australia 2030: Prosperity through innovation* plan, the *2017 National Science Statement* and *Australia's Tech Future* report.

As the Government's priorities develop, I consider it important that our own science and research efforts are brought to bear on key challenges for national benefit. As such, I expect you to continue to work across the Government on how the science and research capabilities of CSIRO can be harnessed in support of the emerging policy priorities of government.

I am keen for us to work together to build the scale and impact needed to advance the Government's industry, innovation and science priorities. CSIRO must play a central role in the translation of science and technology into products and services that benefit our nation and enhance our productivity, prosperity and quality of life.

Working collaboratively to advance Australian industry

The Government wants to deepen collaboration between industry and Australia's science and research sector to secure enhanced economic benefits for all Australians. To meet this goal, I want CSIRO to leverage its unique position within Australia's science, research and innovation system to continue acting as a bridge between businesses and researchers to increase collaboration and innovation performance. I also expect CSIRO to engage with the Chief Scientist of Australia.

CSIRO is well placed as a highly networked organisation to connect with the Government's science and industry initiatives, including the Government's flagship Industry Growth Centres Initiative, Entrepreneurs' Programme and Cooperative Research Centres (CRCs). Deepening this system-level collaboration will help businesses realise their growth potential and build critical mass for industry-research ventures. CSIRO should continue to work with my department to develop metrics to support this.

To compete at a global scale, CSIRO must work with the best researchers and companies globally. I expect CSIRO to leverage its international relationships to better understand global markets and help make Australia an attractive destination for global companies.

With a strong track record in delivering space science, I am pleased CSIRO is continuing to drive space science and research activities by working closely with our recently established Australian Space Agency to support and reinforce the civil space sector's strategic direction. I expect CSIRO to work in partnership with the Australian Space Agency to provide leadership for the scientific research, technology and translation elements that support the *Australian Civil Space Strategy* to grow a globally respected Australian space sector.

Managing research infrastructure and national facilities

CSIRO hosts Australian world-class research infrastructure, national facilities and collections that support our leading-edge science and innovation. I am pleased to see that CSIRO is encouraging researchers and businesses to access and benefit from these facilities, and is committed to ensuring their sustainable and effective use.

The Government wants to ensure Australia's public science and research infrastructure is aligned with our broader economic strategy and is supporting innovation in the wider Australian economy. To meet this goal, I want to ensure Australia maintains or increases utilisation rates of major science infrastructure.

Please continue to facilitate the use of major research infrastructure by Australian and international researchers, and encourage industry access to the usage and development of relevant facilities. You should leverage collaboration with research institutions, universities and businesses to maximise the benefits that such infrastructure can provide. CSIRO should also continue to work with my department to develop and use metrics to measure the success of this objective.

Translation of research and commercialisation

I am keen to ensure Australia's world-class research is translated into commercial outcomes, with real-world benefits emerging for Australian industries. Positioned at the nexus of research and business, CSIRO is well placed to help advance this objective. CSIRO's facilitation role will be critical for bridging the gap between Australia's world-class R&D and industry outcomes, and for supporting SMEs to commercialise and integrate research innovations.

I am pleased to see CSIRO forging partnerships with industry through its suite of industry programs; helping businesses to connect with researchers and benefit from Australia's world-class science and research. I ask that CSIRO particularly focus on building engagement with Australian SMEs to maximise their productivity and competitiveness. I look forward to updates on the progress of your activities and initiatives in this space, such as the CSIRO Innovation Fund and SME Connect, which help businesses to increase their capabilities and translate research into commercial outcomes.

I trust you will also continue to seek opportunities to support the Government's entrepreneurship and venture capital programs as well as lead and collaborate through your CRC memberships to tackle major industry challenges for end-users.

CSIRO should maintain an intellectual property and research translation framework to support commercialisation outcomes.

Embracing the digital economy

The digital economy is transforming how we do business and undertake our science and research. We know that Australia's ongoing economic success will depend on our ability to harness technological advances to improve existing businesses, create new products and improve daily life.

Building on its digital expertise, CSIRO is well placed to integrate its cutting-edge digital technology into Australian industries. CSIRO's Challenges and Digital Transformation Program will complement and support the broader work my department is undertaking to help industry capitalise on technological opportunities arising from Australia's transition to a digital economy.

The Government also recognises the significant economic and social potential of artificial intelligence (AI) innovation to increase business productivity and competitiveness, develop new products and make services more accessible and inclusive for the broader community. CSIRO has been instrumental in working with my department to develop an AI Roadmap and Ethics Framework and I look forward to engaging your thought leadership to further support Australia's AI capabilities into key sectors for the nation.

Noting CSIRO's highly collaborative approach to research and innovation, I ask that CSIRO comply with the Australian Cyber Security Centre's Top Four Cyber Security Mitigation Strategies and have sound general ICT controls that still enable strong collaboration. It is vital that CSIRO builds a culture of awareness around the importance of security to CSIRO's mission, as well as improve its resilience and response capabilities to cyber-attacks. I expect CSIRO to have an important role in enhancing Australia's preparedness and resilience to cyber security threats.

Promoting STEM careers and STEM equity

My department recently released the *Advancing Women in STEM* Strategy and supported the development of the *Women in STEM Decadal Plan*, led by the Australian Academy of Science.

I ask that you work closely with my department, the Women in STEM Ambassador and other key stakeholders across the STEM sector to drive cultural and social change. I expect CSIRO to build on its Science in Australia Gender Equity accreditation to ensure an equitable workplace for all employees is maintained.

It is essential that CSIRO continues to promote careers in STEM and provide a career path for students, post docs, research and technical staff. CSIRO should continue to help students and teachers to understand how STEM is applied in the real world through its existing programs, including STEM Professionals in Schools. I also expect CSIRO to identify any STEM skills gaps arising from Australia's transition to a digital economy.

Driving your organisation's performance

Legislative requirements

I acknowledge the functions of CSIRO as set out under the *Science and Industry Research Act 1949* (the SIR Act) and the *Science and Industry Endowment Act 1926*. Consistent with the SIR Act, CSIRO should prevent unnecessary overlap with existing activities and promote the most effective and efficient use of available resources and staff.

I expect CSIRO to be an exemplar of the Government's commitment to the effective governance and performance of its agencies, governed by the *Public Governance, Performance and Accountability Act 2013* (the PGPA Act).

In accordance with the PGPA Act, I expect CSIRO to develop an annual report and corporate plan and to provide these to me, as the responsible portfolio Minister, and the Minister for Finance. In developing the annual report and corporate plan, I expect CSIRO to consult with me and my department, and to take into account the priorities and policies of the Government, especially as articulated in this Statement of Expectation.

CSIRO should regularly review its key performance indicators to ensure its performance, progress and success are consistent with the SIR Act and Commonwealth funding arrangements.

Sustainable operations

I support CSIRO to realise its potential as an innovation catalyst, underpinned by an operating model that is globally connected and facilitates high levels of collaboration and commercialisation. This operating model should ensure CSIRO's long-term operational and financial sustainability. It should be cognisant of ongoing Budget pressures and should encourage investment from non-government parties. It should provide CSIRO with the flexibility to integrate external expertise into its research teams and continue to drive down operating and property costs.

Agency staff and health

CSIRO's people are its most valuable asset. As an employer of choice, CSIRO should empower its staff to address and solve the great challenges facing Australia. This means developing the best talent to support achievement of science and innovation objectives and attracting the highest calibre researchers in Australia and globally.

In order to drive research integrity and scientific excellence, you should ensure that you provide training and appropriate incentives for staff. Furthermore, CSIRO should continue to ensure that its publications resulting from public funding are openly available within a reasonable time period, either through the publisher or through a CSIRO registry.

It is essential that CSIRO continues to provide a safe and positive working environment at all times by responding to its health, safety and environment obligations under the *Work Health and Safety Act 2011*. I intend to pay particular attention towards your continuing efforts to reduce workplace injuries and incidents and develop appropriate risk management policies and protocols to support this objective.

Communication of CSIRO's science and research

I am keen to promote the scientific work of CSIRO and encourage you to work with my department to meet this objective. The continuation of regular meetings between the senior executives of CSIRO and my department will help ensure alignment across the portfolio.

Working with my department and office

I look forward to CSIRO working closely with my department. Aside from regular meetings between you and me, I ask that you keep me informed of significant issues relating to the work health and culture of the organisation. Your timely and accurate advice to my department and office is essential in allowing me to communicate the benefits that your science and technology contribute to a competitive Australia.

To this end, I expect that CSIRO will discuss ministerial briefings and correspondence with the relevant areas of my office and my department, and provide copies in parallel. Further, I expect CSIRO to provide prior notice, to my office and my department, of significant announcements and events that are likely to attract media attention.

I look forward to continuing to work with you to advance Australia's industry, science and innovation agenda and to receiving your response outlining how the Board proposes to deliver on these priorities.

Yours sincerely

A handwritten signature in blue ink, appearing to read "Karen Andrews". The signature is fluid and cursive, with the first name "Karen" written in a larger, more prominent script than the last name "Andrews".

Karen Andrews

13 / 2 / 2020