



**Professionals
Australia**

The current capability of the Australian Public Service (APS)

**Submission to the Australian Senate Inquiry by
Professionals Australia**

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About Professionals Australia

Professionals Australia (formerly APESMA – the Association of Professional Engineers, Scientists and Managers Australia) are the trade union which represents 25,000 professionals across the country involved in the fields of science, technology, engineering and mathematics (STEM).

For over a hundred years, Professionals Australia has been the key union for engineers, scientists, information communication technology (ICT) and technical experts, including those in Australian Public Service (APS) employment. Our members are some of the best and brightest minds in STEM, and many of them deliver vital technical expertise to the commonwealth as APS employees in portfolios as diverse as transport, defence, agriculture and environment, health, innovation and communications.

They contribute to policy development and implementation, research and analysis, project and service delivery, regulation and investigation, and management, providing vital services and programs that serve departments, agencies, the Australian economy and community. Our members also work across the private sector in major engineering firms, the health, aviation, environmental and manufacturing sectors and defence industry.

Introduction

As Australia faces overlapping national crises, our members; the people who scope and design infrastructure, develop and advise on public policy, research, develop emerging technologies and develop and run our major ICT systems, want to be enabled to contribute to the national recovery.

Across the APS we have seen professional employees being stretched and tested for years. While their expected outputs have increased, they've been subject to staffing cutbacks, efficiency dividends, rampant outsourcing, changes to working arrangements and pay freezes.

The APS was further tested by the COVID-19 pandemic, with staff reallocated to different roles in areas of surge demand, the cancellation of almost all face-to-face meetings and events, the ramp up of remote working/working from home and other flexibility provisions, and an enormous body of work to roll out support for the struggling private sector.

Our members overwhelmingly report significant workplace changes as a result of COVID-19, particularly a rise in remote working, however levels of productivity and delivery have remained high. At every challenge, APS professionals have demonstrated their efficiency, adaptability, dedication, and professionalism. This has resulted in a resounding call for an increased ability to work flexibly in the long term, and the normalisation of flexible work practices.

While the APS's response to the challenges inflicted by COVID-19 should rightly be considered a success story, the service has achieved that success in spite of long years of reductions in capacity.

The workplace bargaining and staffing policies of successive governments over the last decade have left huge sectors of the workforce behind, with scientists, ICT workers and engineers particularly hard hit. There are any number of examples where the over-reliance on consultants by government agencies means they simply don't have the capacity to do important work.



Where STEM professionals were once respected and seen as part of the fabric of the public service, their jobs are increasingly insecure, under threat of being 'restructured out' or replaced with contractors. This trend simply hollows out the technical capability of government departments at great cost to the Australian taxpayer.

Some level of technical skill and expertise will be required in almost every job in the future economy including the public service, yet these are the people who have been left behind in the APS. Building an APS which attracts and retains the best and brightest technical minds in stable, secure careers presents significant opportunities. Our national security and capacity to respond to natural disasters and health emergencies would be bolstered.

Restrictions on employment conditions

We understand that it is the government's view that the APS bargaining policy (the bargaining policy) has been a successful measure in their management of the APS workforce. That view very much dependent on the matrix used to consider the policy's impact. While it's true that recent years have seen a marked decrease in industrial disputation in the APS, there have been other serious organisational and workforce consequences which have not been fully recognised or addressed.

For the members whom we represent, the bargaining policy has presented limitations which have negatively impacted their career as professionals, and the technical expertise and sovereign capability available to the government. The bargaining policy's limitations on enterprise agreement and departmental policy content has resulted in agencies being unable to fully tailor packages of employment conditions to the needs of vital professions like scientists, pharmacists, engineers, translators and interpreters and ICT professionals.

Specifically, these limitations impact the development of means to attract, train, develop and retain the next generation. In many cases, career paths for professionals aren't clear and classification structures aren't available which fit the way they progress professionally. Non-salary related conditions (such as professional development support and maintenance of qualifications and licenses) aren't effectively dealt with in existing enterprise agreements or policies, and are prevented from being introduced or expanded by the government's bargaining policy.



Case Study: The Department of Agriculture, Water and the Environment

The early 2020 Machinery of Government (MoG) process to create the Department of Agriculture, Water and the Environment shifted scientists formerly employed under the conditions of the Department of Agriculture Enterprise Agreement onto the conditions of the Department of the Environment Enterprise Agreement. These scientists were removed from a classification structure and conditions at Agriculture which provided a career path commensurate with their professional needs in their field. As no comparable classification structure existed under the Department of the Environment Enterprise Agreement, many senior, experienced scientists in agriculture and bio-security were placed into classification streams which mirrored those of unqualified generalists and non-specialists.

At the end of the MoG, the new Department of Agriculture, Water and the Environment has been left with a patchwork of classification structures, currently unable to recognise the breadth of the highly specialised knowledge, skills and expertise provided by a large part of its scientific workforce. The variety of different career and pay progression pathways now applicable to scientists depending on the classification which they have been slotted into, has created situations of relative disadvantage among the workforce.

Professionals Australia believe that this is a significant impediment to the Department of Agriculture, Water and the Environment truly becoming a centre for excellence in biosecurity, agricultural and environmental science.

The Department appears fully conscious that this situation presents a significant roadblock to their workforce capability and have brought together a task force to develop strategies that specifically recruits and retains high performing talent and provides tailored career progression provisions.

Unfortunately, the limitations placed on the Department by the current government's bargaining policy will see them struggle to introduce the solutions, as the policy requires that APS terms and conditions of employment should not be enhanced, and that improvements in pay and conditions are to be funded from within existing budgets, without the redirection of program funding¹.

The Department of Agriculture, Water and the Environment, like so many others, remains completely hamstrung by government policy in its efforts to attract and retain the highly skilled and specialised workforce it requires.

Staffing cap, pay and the impact on capacity

Contemporary thinking is that wage rises should be linked to productive output and the value created by the employee. The Federal Government has broken this link through years of imposing an arbitrary percentage cap on wage increases, and as of November last year, capping APS wage increases at the level of the private sector wages price index. In doing so, the government has severed the connection between pay and productivity, and wages, much like employment conditions, are largely no longer in the public sector workers' control.

Lucrative private sector opportunities created by competition for their skills, coupled with declining APS pay, acts as a significant factor pushing professional engineers, scientists and ICT professionals out of the APS, or preventing them from considering an APS career in the first place.



In addition to the cap on pay rises, the government has also long imposed a staffing cap on the APS called the Average Staffing level (ASL). While government rhetoric says the ASL cap is about making the public service more efficient, it is a false economy. The ASL cap places a ceiling on the number of staff an agency can employ, but this is often at odds with the expanding body of work being undertaken by the agency. As a result, the ASL cap effectively forces under-resourced government agencies to engage consultants at exorbitant cost to do work which should have been undertaken by APS staff.

The government's public service staff cap amounts to the privatisation of the public service by stealth, shifting work and resources from staff in government agencies to private consulting firms.

Not only does the ASL cap lead to higher costs (often obscured as consultants can be paid from operational budgets) but by redirecting work and resources to consultancies, it 'hollows out' the public service, meaning critical knowledge, skills and expertise are drained from government agencies. All the while consultancy firms capture that knowledge and expertise for themselves, and retain it to sell again in the future.

Since the cap was introduced, we have seen millions of taxpayer dollars flowing to big consultancies such as Deloitte, Ernst & Young, KPMG and PwCⁱⁱ while companies such as Manpower, Serco and Datacom have been awarded a huge numbers of contracts.ⁱⁱⁱ

The Senate Legal and Constitutional Affairs Reference Committee noted early in 2020 that the ASL cap has led agencies to use more contract labour, which costs the tax-payer more in the long run. In 2019 the Thodey Review of the APS also recommended that the government abolish the ASL cap, a recommendation quickly dismissed by government.^{iv}

The knowledge and expertise developed in the delivery of APS business (be that infrastructure delivery, defence, health, innovation or biosecurity) should be captured by the APS and retained for the future prosperity of the Australian community. The APS should not be a vehicle to divert that expertise to the private sector, only to leave the Australian community with an ongoing consultancy bill anytime they want to use it again.

Instead of persisting with this failed policy, the government should define the skills and capabilities needed to deliver good outcomes for the community and build the required workforce, with the required workforce plans, classification structures, policies and pay rates from there. A properly funded and staffed APS would make a considerable saving to the budget bottom line.

Data and information technology communications capacity

The role of ICT will continue to become central to the functioning of departments and agencies. In 2019, David Thodey's Independent Review of the Australian Public Service (the review) found that ICT contractor costs more than doubled over the previous five years, while APS employee costs remained largely the same. The review also found that:

"Australia's international context is changing rapidly. Propelled by advanced information technology and better telecommunications, globalisation is becoming more individual, more sudden, less predictable and less controllable. Technology will continue to shape the nature of globalisation, with profound and sometimes radically different effects on people, local communities, businesses and governments around the world."



“without trust, the ability of the public service to deliver personalised, quality services is weakened — more than 2.5 million Australians opted out of the My Health Record amid trust issues in data security“

The review recommended that there be an investment into and development of the APS’s digital and data technology to harness the power of technology to provide outstanding digital services to the public, improved advice and support to government and increased efficiency. ^v

Unfortunately, the reality is a world away from the recommendation. Documents obtained under freedom of information laws were widely reported in September 2020 and pointed to extremely high rates of ICT outsourcing in APS departments. At that time, IT News reported that in March 2020, the Department of Defence had 3,865 outsourced ICT personnel, 69% of whom were outsourced service providers (OSP) employed on a long term or permanent basis. IT News also reported that at Home Affairs, over half of all contractors engaged at the department were in ICT^{vi}, and the trend is continuing in favour of outsourcing.

Professionals Australia forecast that the distinct professions of ICT, science and engineering will progressively merge in coming years, as the interrogation and management of digital data becomes central to all three.

National security implications mean that the APS must have sovereign owned ICT skills and a capable workforce of ICT professionals to conduct the APS’s permanent ongoing work, and to properly and effectively oversight any external expertise. The APS clearly requires an internal ICT capacity not only to stay in front of international trends, but to also restore the confidence of the Australian public in the APS’s ability to manage and secure data.

Workforce development

Australia’s public service will increasingly be required to respond to threats and challenges that can only be met by a highly skilled ICT professional workforce. To ensure the APS can attract and retain this vital capability, the Federal Government must develop a clear plan for technology skills development and skill acquisition in the key emerging areas of cybersecurity, artificial intelligence (AI), machine learning and cloud computing to develop APS technical capability alongside career pathways and a proper classification/reward and recognition systems for ICT professionals.

Failure to build an APS ICT professional workforce capacity will result in ongoing skills gaps due to the rapid pace of change. The current short term approach to workforce skills development leads to buying in/importing of skills rather than including investment in APS ICT workforce development and upskilling and reskilling as a requirement for delivering tech-contingent projects. Investment in reskilling and upskilling in a sovereign ICT professional workforce must be a key priority for the government.

A similar, more strategic approach should also be taken toward technology adoption. This will ensure that the APS is not only driving better quality and more efficient services but also economic returns and economic development for the nation. This should feature as a key component of a professional and technical workforce development plan to support digital adoption and transformation within the APS.



Defence and cybersecurity

Development and retention of both a highly skilled ICT professional workforce and a strong approach to technology adoption is particularly important in Australia's defence sector. New technologies and technology adoption are critical to almost every defence and national security goal we have, including effective counter-terrorism technologies, protection against malicious cyber activities, improved submarine-related technology, intelligence, data mining and data management, chemical, biological, radiological and nuclear (CBRN) detection technologies, explosive detection technologies, blast mitigation tools and border security including digital identity management. A highly-skilled, well-trained professional and technical workforce is required to ensure all of these vital capabilities can be delivered in a sustainable and cost-effective manner.

Another capability critical to the operations and functionality of the APS is cybersecurity. While we note the Federal Government's \$1.7 billion Cybersecurity Plan, inclusive of efforts to create over 500 new jobs in the Australia Signals Directorate, a significant cybersecurity skill shortage still exists which will require targeted spending on skills development and acquisition to satisfactorily resolve.

While we acknowledge the appointment of Jane Hume as Minister for the Digital Economy within the Treasury portfolio as part of the Prime Minister's December 2020 cabinet reshuffle, we remain concerned that a cabinet-level cybersecurity minister has not yet been appointed.

Artificial intelligence

A key frontier that presents a significant opportunity for the Federal Government lies in the increased utilisation of AI. The most significant barrier for wider AI adoption however, remains the significant shortage of an AI skilled workforce.

With budget pressure arising from the COVID-19 pandemic, governments need to find solutions that are cost-effective and sustainable. AI can help governments solve these challenges by streamlining processes and enhancing the work that humans do by allowing them to focus on innovation and creative functions rather than repetitive, process driven tasks.

However, as demonstrated by the problems associated with the Robodebt program, the rollout of such projects needs to be supported by a strong, well-trained professional technical workforce with ongoing skills, bias and ethics training.

We need a highly-skilled, well-trained tech workforce to engage on AI technologies and it is vital that this occurs in conjunction with technology program development in the APS across departments and agencies.

Delivering diversity

Ensuring that our APS develops and maintains the ICT skillsets it requires is entirely dependent on the availability of a trained and readily available ICT workforce.



The Federal Government's \$800 million Digital Business Plan presents a significant opportunity to increase the supply of ICT workers and address the significant under-representation of women in the tech sector.

Comprising just 29% of the ICT workforce, women continue to be significantly underrepresented in Australia's technology workforce. This is significantly lower compared to 44% of female workers in professional industries and 47% of the total workforce. Only 19% of managers in ICT are women and the latest WGEA Gender Equality data shows a gender pay gap of 20.8% in the tech sector.

A comprehensive initiative to increase the representation of women in the ICT sector will be invaluable in supporting growth and innovation and in addressing this significant labour market gender imbalance.

The way forward

For Australia to have a strong public service capable of delivering expert advice and capability to government, and the services which our community expects, the APS must employ people with the right expertise in secure, rewarding jobs.

Technical professionals within the government were among the first to step up to provide support during the early response to the pandemic and this contribution has not been well-recognised by APS leaders or politicians. The deferral of wage increases implemented across the APS has only increased the overall feeling of technical ability being unvalued within the government. This also limits the ability of public servants to stimulate their own local economies, exacerbating the economic downturn.

A modern APS should be an employer of choice, providing inspiring work and developing new talent. To meet these objectives the APS needs to be supported by government policy prioritising the maintenance and development of a strong, sovereign owned technical capacity. The APS must employ, grow and develop the professional and technical minds needed to transform and innovate; the private sector cannot be relied on to supply these skills to government instance by instance.

In 2020, Professionals Australia conducted polling of our members in the APS to gather information related to APS capacity, particularly the impacts of COVID-19^{vii}. The results of this and other surveys show strong support for a government-led recovery effort to help Australia emerge from the current pandemic, economic downturn and the devastating effects of recent natural disasters. Government programs to improve public works, community development and infrastructure will provide economic stimulus to a range of sectors, but will require competent technical professionals in the APS to ensure cost effective and efficient delivery.

The APS needs to maintain its existing workforce, and attract new technical talent, to be able to research, develop, scope, oversight and deliver the growing pipeline of nation building projects. This can't be done while the APS is constrained by a blunt staffing cap.

Rebuilding commonwealth owned, sovereign capacity in science, technology, engineering and ICT will mean Australia will have access to and control over the essential skills, experience, intellectual property and resources to look after our national interests. Ensuring the APS is a repository for these skills will help avoid costly delays to project delivery and budget blowouts.



Enhanced graduate programs are a good place to start and will improve the desirability of a technical career in the APS while promoting careers in STEM more broadly. A targeted effort to build in-house technical capability through programs such as this will preserve the ongoing ability of the government to provide technical services into the future and beyond COVID-19.

Beyond the early years, improved career pathways and security from having APS jobs outsourced will be vital. In some cases, caps to salary and staffing levels has meant that one of the only ways to offer competitive employment conditions to technical subject matter experts has been to promote them into managerial positions. As a result, technical ability is diminished due to the increased administrative and HR responsibilities of APS executive-level roles.

Australians are sceptical about outsourced services. The Centre for Policy Development's 2017 report 'What Do Australians Want' showed that 82% of Australians want government to retain the skills and capability to deliver services directly, with government seen as the preferred provider on key indicators of cost, accessibility, quality, accountability and affordability. A reduction in the reliance on contract labour will have the dual effect of reducing the costs associated with engaging labour hire companies to obtain technical professional services and will increase the level of technical knowledge within the government.



Recommendations - a plan for the workforce

1. Investment in development of in-house technical capability

Agency heads should be able to manage their workforce within allocated budgets and in line with a whole of services workforce plan. Agencies must develop internal guidance for managers on the selective use of external service providers, which does not hollow out internal teams.

2. Graduate development

All agencies employing technical professionals should invest in developing best practice graduate development programs which provide a pathway into a long term, APS technical career.

3. APS Technical Careers

Agencies should have targeted initiatives to develop and attract needed expertise, as well as technical career pathways which allow professionals to progress in their careers as subject matter experts.

Ongoing professional development should be supported so engineers maintain their skills at the highest level, keeping up with contemporary practice.

4. Average Staffing Level Cap

A system to manage the APS workforce is required, but the right mechanism should define capability and desired output first, and build the workforce from there. The ASL cap should be abolished and replaced with a whole of services workforce plan, focused on economic output delivery.

5. Outsourced Labor, Contractors and Consultants

Each time work is contracted out rather than being conducted in house, the government makes an investment into a resource that is lost at the end of the contract. Instead, the government needs a whole of services workforce plan which defines capability and desired output, in order to make smart decisions relating to which work is undertaken by external contractors.

6. Develop a professional and technical workforce development and technology adoption plan

Developing, attracting and retaining a professional ICT workforce will be critical in the delivery of cybersecurity and defence functions and will allow government to fully exploit the opportunities that AI presents.

7. Delivering diversity

The government's Digital Business Plan presents an opportunity to ensure a trained, professional ICT workforce is readily available to support the APS and address a significant labour market gender imbalance.

8. Recognition

The government should develop a public relations program which recognises the technical excellence which exists across agencies and promotes a career in the APS, as a way to attract STEM students and prospective employees and help retain existing STEM employees.



Recommendations - a plan for a better future

9. Responding to Crises

Agencies should facilitate the movement of staff with critical skills to areas of the APS in acute need during times of crisis, while ensuring that employees retain the ability to return to their substantive role.

10. Workplace Flexibility

The response to COVID-19 has taught the APS how to work effectively from outside the normal workplace. Steps to improve the ability for APS professionals to work remotely or more flexibly should be embedded to improve the ability of employees to manage their work and non-work responsibilities.

11. Smarter project management and technical oversight

All agencies should publish reports on the performance of external service providers, as well as information detailing the spending on hiring and awarding major contracts, to enable scrutiny on whether external service providers represent value for money.

12. Information and Communication Technology

COVID-19 has demonstrated some significant gaps in the ICT capability of some agencies. Priority should be given (in terms of financial and human resources) to investing in ICT systems and training.

13. Responding to Crises

As has occurred during the pandemic, the government and the Australian Public Service Commission should continue to play a role in ensuring consistent application of policies and procedures across agencies. This coordination will assist in responding to future crises and enable workforce mobility.

14. Smarter project management and technical oversight

Where external service providers are required, the government should use its significant purchasing power to negotiate contracts with the private sector, in the national interest. Such contracts should ensure:

- Service providers invest in skills development,
- Focus on value for money rather than lowest cost bid,
- Ensure a better balance between quality, sustainability, time and cost,
- Providers utilise local, Australian content, and offer decent wages and employment conditions,
- The local supply chain is supported and developed.

15. APS Pay

Wage freezes, wage rise deferrals and other austerity measures limit the ability of public servants to be able to participate in stimulating their local economies and work counter to attempts to recognise the important work of APS staff in implementing the government's economic and COVID recovery plans. The government must ensure that APS employees are able to access fair and reasonable employment conditions and wage increases.



ⁱ Australian Government Public Sector Workplace Bargaining Policy
<https://www.apsc.gov.au/australian-government-public-sector-workplace-bargaining-policy>

ⁱⁱ Public sector work pays for Deloitte, EY, KPMG and PwC

<https://www.afr.com/policy/economy/public-sector-work-pays-for-deloitte-ey-kpmg-and-pwc-20200615-p552m7>

ⁱⁱⁱ Federal Government spending \$5 billion per year on contractors as gig economy grows inside public service
ABC News. Thursday 10 September 2020

^{iv} Commonwealth of Australia Department of the Prime Minister and Cabinet Our Public Service, Our Future. Independent Review of the Australian Public Service

^v Commonwealth of Australia Department of the Prime Minister and Cabinet Our Public Service, Our Future. Independent Review of the Australian Public Service

^{vi} Canberra's biggest agencies reveal size of outsourced IT workforce

<https://www.itnews.com.au/news/canberras-biggest-agencies-reveal-size-of-outsourced-it-workforce-553096>

^{vii} AGG Report: Workplace Issues in the Post COVID19 World

<http://www.professionalsaustralia.org.au/australian-government/blog/2020-agg-survey-report/>

