

Australian Computer Society Inc. (ACT)

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National Secretariat

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The Hon. Stephen Jones, MP
Assistant Treasurer and Minister for Financial Services
c/o Treasury
Langton Cres
Parkes ACT 2600

25 January 2024

Dear Assistant Minister,

Thank you for the opportunity to submit ACS' proposals for the 2024-25 Federal Budget.

As the peak professional association for Australia's information and communications technology sector, ACS represents over 40,000 members working in all sectors of the economy across the nation's States and Territories.

This year's budget is an opportunity to deliver on the government's objective to lay the foundations for a stronger, more inclusive, and sustainable economy by giving Australians access to high-paid IT sector roles.

As recognised in the Government's recent interim response to the **Safe and Responsible AI consultation** paper, Artificial Intelligence based systems and applications are helping to improve wellbeing and quality of life, as well as growing our economy. This submission looks to build on the opportunities identified in that consultation.

In this submission, ACS proposes the below spending measures as detailed on the following pages.

1. A National Digital Skills Strategy to close the digital skills gap
2. Match workers with industry needs through a skills platform
3. Provide a Career transition scheme for workers looking to change careers
4. Boost the digital capacity of Australia's Small to Medium Enterprises
5. Assistance for skilled migrants to better realise their capabilities.

If you would like to discuss any part of this response or simply seek further clarification or input, please feel free to contact myself by email at troy.steer@acs.org.au or by phone on 0417 173 740.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Troy Steer', is positioned above the typed name.

Troy Steer
Director of Policy, Advocacy and Communications
Australian Computer Society



2024-25 Pre-Budget Submission

Australian Computer Society

About the Australian Computer Society

The Australian Computer Society (ACS) is Australia's leading professional association for the information and communications technology sector, proudly representing a thriving community of over 47,000 members across the nation's States and Territories. Our members span every sector of the economy, putting ACS in a unique position to provide insight into the sector's workforce and skills development landscape.

ACS works to accelerate the growth of a highly skilled tech sector, supporting the development of a diverse and growing workforce by:

- Fostering an innovative and inclusive community dedicated to powering positive change through technology.
- Setting the standard for assessing, developing, and recognising the skills and experience of technology professionals.
- Creating career pathways to guide technology professionals, securing a talent pipeline for our dynamic industry.
- Assessing and supporting technology-skilled migrants, addressing critical skills shortages for industry while we build a more diverse and skilled workforce.

About our submission

ACS appreciates the opportunity to contribute to developing the 2024-25 Budget through this submission.

With an increasingly digitalised economy, Australia must have a skilled and diverse tech workforce as we strive to maintain its competitiveness on the global stage. But we also need to consider the impact that technology is having on all workers and industries. There are few roles, sectors, or industries untouched by tech and digital transformation – meaning every worker in Australia is, in some respect, a tech worker.

We also recognise the need to ensure we do not worsen the digital divide as we seek to adopt and benefit from technology and innovation. We believe it is essential that every Australian can access opportunities to build the skills and capabilities needed to engage in community and civic life in an increasingly digital society.

We have based our proposals on six critical insights from ACS and Deloitte's research for its Digital Pulse 2023 – 9th Edition¹:

1. Australia's technology investment is set to grow to \$261 billion by 2030, requiring a skilled, adaptable, and sustainable workforce.
2. Australia will require up to 1.3m additional skills to meet the need by 2030, with a shortage of 237,000 workers looming for the industry.

¹ <https://www.acs.org.au/insightsandpublications/reports-publications/digital-pulse-2023.html>



3. The workforce challenges will affect every sector of the economy.
4. Australia is not currently on track to build the skills required.
5. 11.2 million Australian workers will need to reskill by 2030.
6. The estimated cost to the Australian economy from tech skills shortages is \$16 billion.

Meanwhile, demand for professionals with expertise in artificial intelligence, cybersecurity, and data analytics continues to outstrip supply. Our education and training pathways and migration settings must support helping people train for, find, and move into roles in these critical sectors.

As AI adoption accelerates and we make rapid advances in technology, young people leaving school will require a new portfolio of foundational skills and capabilities for a new technological age. Many will work in roles and sectors that are barely nascent, but we can encourage and support lifelong learning and skill development to support mobility and agility.

At the same time, the digital divide must be carefully managed so that technology becomes an enabler of inclusion rather than a point of exclusion.

In the next decade, we will also see some traditional industries and occupations in decline, with employment opportunities waning as Australia embraces digitalisation, advanced manufacturing technologies, clean energy, and green tech. This change in the employment landscape will generate a cohort of workers who can, with support, retrain and move successfully into new and emerging industries.

Finally, low levels of diversity within the industry constrain innovation and economic growth. To meet the known and unknown challenges of the next decade, the industry requires a workforce built on a foundation of diversity and equity, providing opportunities for all people to build thriving and well-paid careers.

Through this complex lens, we have developed a set of five proposals for consideration for the 2024-25 Budget. The proposals contained in this submission have also been situated in the context of:

- The announcement by the Australian Government that it would act to increase understanding of job opportunities in the sector; fix gaps in education and training products and pathways; improve the diversity of the tech workforce; target skilled migration to areas of high need and short supply; and improve industry level supply and demand analysis.²
- The establishment of Jobs and Skills Australia and the workplan for the Future Skills Organisation, the Jobs and Skills Council responsible for the tech sector.
- The release of the Government's Migration Strategy in December 2023, with new skills pathways and visa settings to support the growth and development of the tech workforce in Australia.
- The scoping and concept development of a National Skills Passport, announced following the Jobs and Skills Summit, to help individuals and employers match skills, qualifications, and opportunities.

² The Hon Ed Husic MP. (2 August 2022) *Mapping out Australia's path to tech jobs future* [press release] <https://www.minister.industry.gov.au/ministers/husic/media-releases/mapping-out-australias-path-tech-jobs-future>



ACS thanks the Assistant Treasurer for the opportunity to submit this proposal. If you would like more information on the proposals outlined in this submission or would like to discuss further the opportunities they present, please contact Troy Steer, Director of Corporate Affairs and Public Policy, by email at troy.steer@acs.org.au or by phone at 0417 173 740.



Proposal 1: A National Digital Skills Strategy to close the digital skills gap

The National Digital Skills Strategy would build on the Australian Digital Capability Framework³ with a remit across the workforce, not just specific occupations, or qualifications.

The National Digital Skills Strategy should be supported by consistent and underlying state and territory digital skills strategies with their objectives and targets encouraging best-practice initiatives and development.

Rationale:

- ACS's Digital Pulse 2023 identified that Australia will require an additional 1.3 million skilled workers by 2030 if we are to adopt and use the technologies that are reshaping the Australian workforce effectively⁴.
- The Productivity Commission reported that a lack of skills and knowledge was one of the top barriers to adopting technology.⁵
- A study by RMIT Online and Deloitte Access Economics⁶ found the digital skills gap costs Australian businesses \$3.1 billion annually and closing that shortfall would require an investment of \$1.5 billion.
- In 2023, the Productivity Commission released its second 5-year Productivity Inquiry Report, Advancing Prosperity⁷, making 79 recommendations to unlock the benefits of digital technologies. Of these, 16 relate to education and reskilling, and 12 to improving the migration system.

Potential economic benefit:

Bringing together the private sector, education and training sector, industry bodies and state governments to develop a national strategy to close the digital skills gap could reap a potential economic benefit of \$15b over the next five years.

³ <https://www.dewr.gov.au/skills-and-training/resources/australian-digital-capability-framework>

⁴ ACS (2023) Digital Pulse. <https://www.acs.org.au/insightsandpublications/reports-publications/digital-pulse-2023.html>

⁵ Productivity Commission (Commonwealth of Australia), 5-year Productivity Inquiry: Australia's data and digital dividend, (2023)

⁶ <https://online.rmit.edu.au/blog/digital-skills-gap-costing-australian-businesses-9-million-day>

⁷ <https://www.pc.gov.au/inquiries/completed/productivity/report>



Proposal 2: Match workers with industry needs through a skills platform

There is a disconnect between the availability of current and prospective technology professionals and industry needs. Putting aside the need to generate a substantial pipeline of new talent, Australia struggles to match available talent with industry needs.

We propose a national platform to bridge the gap between supply and demand, connecting individuals with training, skill development, employment opportunities, employers, and businesses with the talent they seek. We envisage a 'no wrong door' marketplace for 60,000 professionals.

The platform would be profile-based, allowing individuals to identify their skills, experience, and qualifications and businesses to identify the capabilities they are looking for. The platform could include validation of skills, qualifications, and experience with linkages to the proposed National Skills Passport.

Rationale:

- ACS's 2023 Digital Pulse survey found that tech-qualified people take an average of 3.5 months to find their first tech role.
- Sixty per cent of people with an IT qualification are not currently working in the industry but would return if it were easier to find a job.
- A platform such as this could contribute to the Government's efforts to support better geographic matching of workforce supply and demand.
- The platform could represent an enhancement to the National Skills Passport proposal.

Potential economic benefit:

The platform would deliver financial and efficiency savings for employers through reduced recruitment costs. Meanwhile, improving opportunities for reskilling, upskilling and career transition support for individuals will lead to better employment and social and economic outcomes.

Using the example of a Junior Software Developer with a likely salary of \$90,000 a year, reducing the time it takes to find a role from 3.5 months to 1 month could see them \$18,750 better off in their first year of employment.

While ACS has not quantified the overall potential benefit to the Australian economy, over 1.2 million Australians forecast to be working in technology roles by 2027 so we would anticipate major economic and social benefits from a well implemented platform.



Proposal 3: Provide a Career transition scheme for workers looking to change careers

Australians are under increasing economic pressure. Most workers cannot fund extended periods of retraining as demands on income increase annually. The Australian Government could introduce a Career Transition Scheme involving a stipend tied to further tech study to address cost barriers to retraining.

The scheme should target Australian residents aged over 30 who are seeking to reskill in technology. For six months, the scheme would offer participants a payment at the rate of the minimum wage or half average annual earnings (i.e. worth around \$23,000) rather than relying on other allowances provided during the study.

The Scheme would commence with a trial of 1,000 participants for the first year and would be subject to evaluation across the trial period to assess effectiveness. Based on pilot results, the Scheme could be expanded and scaled accordingly. It could be targeted at 5,000 participants per year, for example.

Over ten years, with a target of 5,000 participants a year and an initial 1,000-person first-year trial, the Scheme will enable an additional 46,000 individuals to upskill and potentially move into new careers.

Rationale:

- ACS's 2022 Digital Pulse report found that 9 per cent of professional services workers were interested in moving into a technology role. Based on employment in the sector, this equates to nearly 120,000 workers who might help meet the demand for tech skills if they had retraining opportunities.
- The Productivity Commission's 5-year Productivity Inquiry outlines job mobility as a critical contributor to productivity, allowing resources to flow to more productive firms in a competitive labour market. However, there has been a decline in job mobility amongst Australians over the past three decades.
- In addition to FEE-HELP loans to pay all or part of a student's tuition fees, Austudy provides a means-tested \$280 per week for those over 25 years old. However, these payments fall short for employed professionals looking to reskill, with the weekly minimum wage in Australia being \$812.60.

Potential economic benefit:

Run over a decade, the present value benefits of 46,000 participants would be over \$3 billion through higher wages and business productivity. Additional personal income and company tax collections over a decade would be the same as the government's outlays on the scheme.

Based upon ACS's 2022 finding that 120,000 workers would be prepared to reskill into the sector and our 2019 report that a worker entering the IT industry realises \$11,000 per annum benefits⁸, we estimate this could deliver up to \$1.32 billion in economic benefits to the economy over the next five years.

⁸ <https://www.acs.org.au/insightsandpublications/reports-publications/digital-pulse-2019.html>



Proposal 4: Boost the digital capacity of Australia's Small to Medium Enterprises

Australia's economy is rapidly evolving, and technologies such as AI and robotics touch all industries. For Australian businesses and workers to compete in the global digital economy, the workforce must have skills appropriate to the modern workplace. To achieve this, ACS proposes the federal government implement a tax credit program supporting businesses providing training for staff in key technology fields.

ACS proposes a tax credit program for up to \$10,000 per employee for businesses providing staff vocational technical training and apprenticeships, particularly in high-demand areas such as artificial intelligence and cyber security.

Rationale:

- As previously noted, the Productivity Commission reported that a lack of skills and knowledge was one of the top barriers to businesses in Australia adopting technology.⁹
- Improving the digital literacy and skill levels of business owners and operators in Australia will be a crucial component of strengthening Australia's cybersecurity network and protecting communities from exploitation, fraud and crime.

Potential economic benefit:

While ACS has not modelled the costs of such a tax credit program, item one in our submission identified up to \$5 billion in economic benefit from improved labour and business productivity should Australian businesses address the digital skills gap.

⁹ Productivity Commission (Commonwealth of Australia), 5-year Productivity Inquiry: Australia's data and digital dividend, (2023)



Proposal 5: Assist skilled migrants to better realise their capabilities

Underutilising migrants within the technology workforce is costing the economy. Businesses struggle to find skilled employees, while migrants cannot access roles that allow them to work the jobs they are trained for. Ensuring migrants are supported once they begin work in Australia is critical to enabling them to reach their full potential.

ACS proposes expanding the Professional Year program¹⁰, aimed at developing job-readiness for recent full-time study graduates through internships to provide ongoing skills development for migrants once they are working.

The Professional Year program offers workshops, training, and networking events to help migrants gain local networks and exposure to the broader labour market. The program also builds the employability and non-technical skills increasingly required for tech roles now as well as those evolving to 2030.

Rationale:

- Skilled migrants account for about 45% of the technology workforce. Yet research by ACS to be released in February has found that 39 per cent of skilled IT migrants reported taking longer than 12 months to find their first job in tech.
- In addition, our survey also found nearly 1 in 5 (18%) migrant technology workers believe their skills and experiences are not fully utilised in their current jobs. This is supported by ABS data showing about a quarter of surveyed migrants struggled to find their current job¹¹.
- Deloitte research on migrant skills underutilisation in Queensland found that 49 in every 100 migrants and refugees with overseas skills and qualifications do not use their highest skills or qualifications or are unemployed¹².

Potential economic benefit:

CEDA research on migrant underutilisation estimates that \$1.25 billion was lost to the Australian economy between 2013 and 2018 regarding foregone wages¹³.

Expanding the Professional Year program as part of a program to improve outcomes for skilled migrants can be expected to deliver substantial economic and social benefits to the Australian economy while ensuring the nation gets the best return from the skilled migration program.

¹⁰ <https://www.acs.org.au/cpd-education/professional-year-program.html>

¹¹ <https://www.abs.gov.au/statistics/people/people-and-communities/characteristics-recent-migrants/latest-release>

¹² The Hon Sterling Hinchcliffe MP (7 November 2018) Migrant and refugee skills \$250 million boost to Queensland [press release]. <https://statements.qld.gov.au/statements/85963>

¹³ Committee for Economic Development of Australia (29/03/2021). Mismatch cost 1.25 Billion: CEDA Report [press release].

[https://www.ceda.com.au/NewsAndResources/MediaReleases/Population/Skilled-migrant-job-mismatch-cost-\\$1-25-billion-CE](https://www.ceda.com.au/NewsAndResources/MediaReleases/Population/Skilled-migrant-job-mismatch-cost-$1-25-billion-CE)