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Cooperative Research Australia acknowledges the traditional custodians of the land on which we operate, the Ngunnawal people. We also acknowledge the traditional custodians of the various lands across Australia upon which our members operate.

We pay our respects to Elders past, present and emerging and celebrate the diversity of Aboriginal peoples and their ongoing cultures and connections to our lands and waters.

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Executive summary

Cooperative Research Australia (CRA) welcomes the opportunity to provide a response to "Australian Universities Accord Panel Discussion Paper Consultation".

CRA is the voice of industry-research collaboration and advocates for the translation of research into commercial, economic, social, and environmental outcomes that benefit all Australians. Our members are the lynchpin in the Australian innovation system and are focused on creating new products, services, industries, and value in our economy. CRA represents Cooperative Research Centres (CRCs) and their spinoff/successor entities, CRC – Projects grant participants, 30 universities and research institutions, as well as other industry-research collaboration entities, associated businesses, alumni and professionals.

Our contribution focuses on the importance of creating productive collaborations between research organizations and businesses in an ecosystem setting, investing in research and development and a supportive policy for innovation, to aim towards a successful Higher Education System.

The highlights of CRA recommendations are:

Key recommendations:

- Adopt a unified and coordinated national approach with additional investment in areas of national importance. This includes the consideration of a coordinating body to ensure that interactions between different programs and policies are well understood and they complement each other.
- Grow industry-university collaborations in an ecosystem setting to address challenges facing Australia's higher education system.
- Set long-term targets for higher education attainment in consultation with stakeholders.
- Overhaul funding models and regulatory systems to bolster research and innovation in higher education and promote inclusivity.
- Foster innovation and entrepreneurship within the higher education sector to prepare students for the changing workforce.
- Enable incentives for industry participation in work-integrated learning programs and a collaborative approach to promote lifelong learning and upskilling opportunities.
- Improve pathways between VET and higher education and enhancing linkages across
 the tertiary education system to provide students with a more flexible and seamless
 educational experience.
- Guarantee access to higher education of students from disadvantaged backgrounds through financial support, scholarships, and offering more flexible and accessible pathways.

- Foster social license and diversity when shaping priorities for community engagement.
- Prioritise measures to recover international engagement such as increased investment for international collaborations, as well as promotion of clear migration pathways and sustainable career opportunities.

Cooperative Research Australia is committed to working collaboratively with the Australian Government in shaping the Australian Universities Accord to fulfill its purpose of addressing high education challenges. We are committed to a prosperous and innovative future for all Australians, and -as such- we are open to facilitating a platform for further consultation and/or clarification on any of the recommendations.

Recommendations

The Accord in the context of the nature and purpose of Australian higher education.

- Q1 How should an Accord be structured and focused to meet the challenges facing Australia's higher education system? What is needed to overcome limitations in the current approach to Australian higher education?
- Q2 How can the diverse missions of Australian higher education providers be supported, taking into account their different operating contexts and communities they serve (for example regional universities)?
- Q3 What should the long-term target/s be for Australia's higher education attainment by
 2030 and 2040, and how should these be set and adjusted over time?

Cooperative Research Australia (CRA) strongly advocates for a collaborative approach between higher education providers and industry partners to address the challenges facing Australia's higher education system and support Australians institutions to be key enablers of Australia's economic, environmental and social transformation. With a focus on translating research into real-world outcomes, we believe that a structured Accord that facilitates such collaboration will be the key to the sustainable growth and development of the sector.

In this regard, CRA suggests tailored support for different types of higher education providers based on their unique operating contexts and the communities they serve. Regional universities, for instance, require specific initiatives to attract and retain students and staff, as well as enhanced research collaboration with industry partners in regional areas. We believe that this will contribute to the overall success of the higher education sector and promote equitable growth across Australia.

Furthermore, CRA recommends setting long-term targets for higher education attainment that take into account the changing demands of the workforce and the need for continued innovation and research. Such targets should maintain fundamental research and education quality, include interdisciplinary and industry-focused research programs and initiatives to improve access to higher education for underrepresented groups, such as Indigenous Australians and those from low socio-economic backgrounds.

We urge that these targets be developed in consultation with stakeholders, for which we are happy to act as enablers, ensuring the consideration of demographic changes and technological developments.

It is important to note that CRA submitted a response to the Review of Australia's Higher Education System -Terms of Reference, which provides further details on our position regarding this issue, and we encourage to consider as a complementary response to these questions.

Challenges and opportunities for Australia.

- Q4 Looking from now to 2030 and 2040, what major national challenges and opportunities should Australian higher education be focused on meeting?
- Q5 How do the current structures of institutions, regulation and funding in higher education help or hinder Australia's ability to meet these challenges? What needs to change?
- Q6 What are the best ways to achieve and sustain future growth in Australian higher education, given the changing needs of the population and the current pressures on public funding?
- Q7 How should the mix of providers evolve, considering the size and location of existing institutions and the future needs of communities?

CRA recommends the adoption of a unified and coordinated national approach to address the challenges facing Australia's higher education system. In light of the current national agenda, CRA suggests that additional investment be made into areas of national need, such as advanced manufacturing, critical technologies, First Nations scientific and educational leadership, and decarbonisation. Upskilling the workforce to meet these demands are critical, but it will require a workforce drawn from across disciplines, capable of working across boundaries.

CRA recognizes that funding and regulatory frameworks play a crucial role in promoting innovation and research in higher education. Therefore, a review of current schemes that align with a coordinated national approach would benefit Australia's ability to meet the challenges. In addition, we encourage a coordinating body to better support research and innovation across higher education, including greater collaboration between industry and academia.

To achieve sustainable growth, investment in innovation should be regarded as a key driver of returns beyond economic benefits. In line with this, CRA suggests that the mix of providers should move towards promoting partnerships between universities and industry, as well as supporting institutions to better meet the needs of their communities.

Challenges and opportunities for the Higher Education System.

- Q8 What reforms are needed to promote a quality learning environment and to ensure graduates are entering the labour market with the skills and knowledge they need?
- Q9 How should Australia ensure enough students are studying courses that align with the
- changing needs of the economy and society?
- Q10 What role should higher education play in helping to develop high quality general learning capabilities across all age groups and industries?
- Q11 How should Australia boost demand from people to study in the higher education system?
- Q12 How should an adequate supply of CSPs be sustained and funded, as population and demand increase?

CRA believes that there are several reforms that can be implemented to promote a quality learning environment and ensure that graduates are equipped with the skills and knowledge needed to succeed in the labour market.

- Growth of industry-relevant skills and training. This can be achieved by increasing
 industry-university collaboration, such as through work-integrated learning
 programs and research partnerships. This will allow students to gain practical
 experience and develop relevant skills that are in demand by employers, and
 employers to understand the benefit of research capacity.
- 2. Increased opportunities in innovation and entrepreneurship within the higher education sector. This can be achieved by creating more opportunities for students to engage in entrepreneurship, such as through startup incubators, accelerators, and other innovation hubs. By fostering a culture of innovation and entrepreneurship, students will be better prepared to adapt to the rapidly changing nature of the workforce.
- 3. Expanded investment in teacher training and professional development for educators, including opportunities for engagement with businesses and industry.

Furthermore, we believe that addressing the challenges facing the Australian higher education system requires an ecosystem view that considers the interconnectedness of higher education institutions, non-university research institutions, industry, and government. We advocate for the development of place-based clusters that bring together these stakeholders to work collaboratively towards addressing regional and national challenges. These clusters would create opportunities for students to engage with local industry and contribute to solving regional challenges, while also promoting the region as a hub for education, research, and innovation.

By providing opportunities for HDRs to work with industry partners, this will help ensure that research training is seen as a valuable and relevant pathway for career development, which will in turn boost demand for research by businesses as a way of growth. Also, incentives to study in the form of higher stipends, can contribute to attracting more students, especially in light of the current difficulties in meeting the cost of living and the significantly greater remuneration available for direct graduate entry into many sectors of the workforce. This can be an important factor in ensuring that the education system is accessible to a diverse range of students, including those from low socioeconomic backgrounds or with financial barriers to study.

Finally, as we have argued in our submission to the Review of Australia's Higher Education System, attracting international talent through the provision of financial support and other incentives can benefit both the higher education system and the wider economy, by building international connections and promoting innovation and knowledge exchange.

Collaboration with Industry.

– Q13 How could an Accord support cooperation between providers, accreditation bodies, government and industry to ensure graduates have relevant skills for the workforce? Q14 How should placement arrangements and work-integrated learning in higher education change in the decades ahead?

At Cooperative Research Australia, we recognize the crucial role that collaboration plays in ensuring that higher education institutions produce graduates with the skills necessary to succeed in the workforce. To achieve this, we believe that the Accord should promote partnerships between stakeholders, including universities, industry, and government, to align relevant courses with industry needs and facilitate the transition of graduates into the workforce. Industry-led advisory boards for clusters of related disciplines could be established to ensure that universities are producing graduates with relevant skills and industry is developing a deep understanding of the university sector.

In addition, as recommended above, CRA supports initiatives that foster innovation, such as the creation of innovation hubs, place-based clusters, and the provision of incubator spaces for startups. These initiatives provide students with practical experience and exposure to cutting-edge technologies and business models that prepare them for the changing demands of the job market.

To ensure that placement arrangements and work-integrated learning (WIL) programs remain relevant and effective, ongoing consultation between universities, industry, and government is essential. CRA believes that an ecosystem-based approach to WIL, which involves the creation of networks and partnerships that bring together universities, industry, and other stakeholders, provides students with a range of placement opportunities and prepares them for diverse roles in the workforce.

Finally, CRA proposes that the Accord should encourage more incentives for industry to participate in work-integrated learning programs and offer meaningful opportunities for students to gain practical experience.

Lifelong Learning.

- Q15 What changes are needed to grow a culture of lifelong learning in Australia?
- Q16 What practical barriers are inhibiting lifelong learning, and how can they be fixed?

CRA recognizes the value of lifelong learning as a means to achieve personal and professional growth. We believe that promoting the benefits of lifelong learning through public awareness campaigns is critical in ensuring that Australians understand the importance of this approach. To support this, we encourage a collaborative approach to offer upskilling and reskilling opportunities, with a focus on emerging technologies, i.e., incentivizing businesses to invest in their employees' training and development.

Moreover, we recognize the importance of flexibility in education options to cater to the needs of workers with competing demands in light of cost, accessibility, and flexibility barriers to lifelong learning. To address this, we need to explore innovative funding models such as income-contingent loans and partnerships between industry and education providers to provide financial assistance and real-life professional experience.

Connection between the vocational education and training and higher education systems.

- Q17 How should better alignment and connection across Australia's tertiary education system be achieved?
- Q18 What role should reform of the AQF play in creating this alignment?
- Q19 What would a more effective and collaborative national governance approach to tertiary education look like?

CRA believes that better alignment and connection across Australia's tertiary education system can be achieved through a more ecosystemic approach to education that recognizes the role of place-based clusters. This approach involves creating closer linkages between education providers, industry, and government at the local level to ensure that the educational offerings are tailored to the specific needs of each region. In addition, CRA advocates for the development of more pathways for students to move between different levels of education, such as from vocational education to higher education, to enable learners to build on their existing skills and knowledge.

In our previous submissions, we have emphasized the need for whole-of-government coordination across the Australian innovation system. To address this, we have called for greater cross-departmental coordination and the establishment of shared principles by the Commonwealth. In line with this view, we suggest that a more effective and collaborative national governance approach to tertiary education that interconnects with the Australian innovation ecosystem.

Pathways for students.

- Q20 How can pathways between VET and higher education be improved, and how can students be helped to navigate these pathways?
- Q21 How can current examples of successful linkages between VET and higher education be integrated across the tertiary education system?
- Q22 What role do tertiary entrance and admissions systems play in matching learners to pathways and supporting a sustained increase in participation and tertiary success?

CRA believes that improving pathways between VET and higher education and supporting the integration of linkages across the tertiary education system can provide students with a more flexible and seamless educational experience, and support innovation hubs with a range of skills and capabilities.

A system that delivers new knowledge, innovation and capability

- Q23 How should an Accord help Australia increase collaboration between industry, government and universities to solve big challenges?
- Q24 What reforms will enable Australian research institutions to achieve excellence, scale and impact in particular fields?
- Q25 How should Australia leverage its research capacity overall and use it more effectively to develop new capabilities and solve wicked problems?
- Q26 How can Australia stimulate greater industry investment in research and more effective collaboration?
- Q27 How can we improve research training in Australia including improving pathways for researchers to gain experience and develop high-impact careers in government and industry?

CRA has consistently emphasized the need for greater collaboration between industry, government, and universities to address key challenges facing the Australian economy and society. To increase collaboration, CRA believes that the establishment of a coordinating body would be an important step. This body could facilitate collaboration and coordination by ensuring the interaction between different programs and policies is well understood and smoothed.

Complementary to this, reforms are needed to enable Australian research institutions to achieve their full potential and to ensure that Australia remains a global leader in research and innovation. One important area of reform is the need for increased investment in research and development across a range of sectors. We have suggested that the National Reconstruction Fund could play a key role in this regard, providing funding to support collaborations between industry and research institutions to address national challenges in areas such as health, infrastructure, decarbonisation and energy.

The Australian Research Council (ARC), on the other hand, can also play a key role in supporting the development of new capabilities and solutions for wicked problems by investing in the fundamental research that fuels innovation, including longer term patient capital that is required for ground-breaking work. We believe that legislation would benefit from clearly defining the ARC's powers, role and interactions with other Commonwealth research funding bodies. Specifically, the ARC Act should set out the functions of the organisation as a contributor to Australian research capacity, while allowing for flexibility to adapt to changes in the research landscape.

Finally, to improve research training in Australia, CRA recommends replicating the successful Cooperative Research Centre (CRC) model across various portfolios. The CRC program has been proven to be an effective way of bringing together researchers, industry, and government to solve complex problems and develop new technologies.

Creating opportunity for all Australians.

- Q28 What is needed to increase the number of people from under-represented groups applying to and prepared for higher education, both from school and from other pathways?
- Q29 What changes in provider practices and offerings are necessary to ensure all potential students can succeed in their chosen area of study?
- Q30 How can governments, institutions and employers assist students, widen opportunities and remove barriers to higher education?
- Q31 How can the costs of participation, including living expenses, be most effectively alleviated?
- Q32 How can best practice learning and teaching for students from under-represented groups be embedded across the higher education system, including the use of remote learning?
- Q33 What changes to funding and regulatory settings would enable providers to better support students from under-represented groups in higher education?

Cooperative Research Australia recommends increasing outreach and engagement efforts to under-represented communities, providing more targeted financial support and scholarships, and offering more flexible and accessible pathways to higher education through vocational education and training (VET) and other alternative pathways.

Providers could also offer more inclusive and responsive practices as suggested in the section of Lifelong Learning. Additionally, we recommend that providers work more closely with industry and employers to ensure that their offerings align with the needs of the workforce and provide students with relevant and practical skills that can help them succeed in their chosen career paths.

In terms of removing barriers to higher education, CRA has emphasized the need for increased funding to support access and equity initiatives, particularly for underrepresented groups. In its Pre-Budget Submission for 2023-24, CRA called for a range of measures to support disadvantaged students, including increased funding for the Higher Education Participation and Partnerships Program (HEPPP) and for scholarships that target underrepresented groups. Additionally, in its submission to the Review of Australia's Higher Education System Terms of Reference, CRA argued for the importance of broadening access to higher education through measures such as increased support for regional and remote students, improved pathways for mature-age and Indigenous students, and increased funding for vocational education and training programs that offer pathways to higher education.

Finally, CRA has also argued for the increasing of stipends for postgraduate students to support them while they pursue their research. This would help to reduce financial barriers to higher education and encourage more students to undertake research degrees. Additionally, in its submission to the 2023-24 Pre-Budget Submission, CRA suggested that the government should increase funding for research scholarships and postgraduate research programs to encourage more students to undertake research degrees. This, coupled with measures to reduce the cost-of-living expenses, could help to alleviate some of the financial pressures on students and widen access to higher education.

Governance, accountability and community

- Q34 How should the contribution of higher education providers to community engagement be encouraged and promoted?
- Q35 Where providers make a distinctive contribution to national objectives through community, location-based or specialised economic development, how should this contribution be identified and invested in?

CRA recommends that incentives be provided for higher education providers to foster social license when shaping their priorities for community engagement. By prioritizing principles that promote transparency, accountability, and active engagement with local communities, higher education providers can help build and maintain social license for the adoption of innovation.

Regulation and governance.

- Q36 What regulatory and governance reforms would enable the higher education sector to better meet contemporary demands?
- Q37 How could a more coherent and dynamic national governance system for higher education be achieved?

The continued diversification of the backgrounds of boards and governing bodies, to including experts in industry-led research, innovation, commercialization, and experience in the global market.

As mentioned above, CRA has consistently emphasized the need for greater collaboration between industry, government, and universities to address key challenges facing the Australian economy and society. To increase collaboration, CRA believes that the establishment of a coordinating body would be an important step. This body could facilitate collaboration and coordination by ensuring the interaction between different programs and policies is well understood and smoothed.

Academic workforce.

 Q38 How can the Accord support higher education providers to adopt sector-leading employment practices?

CRA believes that the adoption of sector-leading employment practices is vital to supporting the growth and success of the higher education sector in Australia. To achieve this goal, we recommend that the Accord support higher education providers in several ways, including:

 Providing resources and tools: The Accord can provide resources and tools to help higher education providers adopt best practices in employment that enables staff to move between higher education institutions, government and industry more easily with no loss of entitlements.

Quality and sustainability.

- Q39 What reforms are needed to ensure that all students have a quality student experience?
- Q40 What changes are needed to ensure all students are physically and culturally safe while studying?
- Q41 How should research quality be prioritised and supported most effectively over the next decade?
- Q42 What settings are needed to ensure academic integrity, and how can new technologies and innovative assessment practices be leveraged to improve academic integrity?

As a research-driven organization, Cooperative Research Australia (CRA) recognizes the importance of providing a quality student experience for higher degree research (HDR) students. To ensure a quality experience, reforms are needed to address the cost-of-living challenges that many HDR students face including increased stipends and clearer career pathways as mentioned above.

CRA believes that to address safety in the academic environment, as well as academic integrity, training is of crucial importance. Furthermore, we suggest leveraging the expertise and knowledge of international researchers and practitioners to bring new perspectives and solutions.

Finally, CRA's view of how research quality should be prioritised and supported most effectively over the next decade, draws on a multifaceted approach:

Firstly, investment in R&D should be a priority, not just in infrastructure, but in a broad range of fields, including health, education, and industry. This could be done through a range of mechanisms, including increasing funding to existing research programs, establishing new programs, and creating additional incentives for private sector investment in R&D.

Secondly, there should be whole-of-government coordination to ensure that appropriate levels of research funding is targeted towards the most pressing national priorities. This could involve greater collaboration between government agencies, universities, and research institutions, as well as the establishment of a central authority responsible for coordinating R&D investment.

Thirdly, investment in innovation ecosystems should be a key priority. This involves creating an environment that fosters collaboration between researchers, industry, and other stakeholders to drive innovation and commercialization of research outcomes.

Fourthly, the establishment of a future research fund should be considered. This fund would provide long-term support for research programs, ensuring that research excellence is sustained over time.

Fifthly, to strengthen the global pool of high skill talent, there should be a focus on attracting and retaining the best and brightest researchers from around the world. This could involve measures such as increased investment in international collaboration, streamlined visa processes, and financial incentives for international researchers to work in Australia.

Finally, there should be a range of incentives to promote collaboration between researchers, industry, and other stakeholders. This could include measures such as tax incentives, grants, and access to research infrastructure, as well as better promotion of research outcomes to industry and other potential partners.

The role of international education.

- Q43 How should the current recovery in international education be managed to increase the resilience and sustainability of Australia's higher education system, including through diversification of student enrolments from source countries?
- Q44 How can the benefits of international education be shared broadly across the system, including in regional areas, and what level of reporting should there be?

As Australia seeks to recover from the impacts of the COVID-19 pandemic, it is important to attract talented international students to our higher education system. The perception among some potential students is that it can be difficult to migrate to and establish a career in Australia. Therefore, it is essential that we promote clear migration pathways and the possibility of sustainable career opportunities for international undergraduate and HDR students in Australia. This will allow Australia to capture the benefits of an enhanced human capability which is of greater national benefit than the short term hosting of tuition feepaying international students who then return, skilled, to their home countries.

Investment and affordability.

- Q45 How should the contribution of different institutions and providers to key national objectives specific to their location, specialist expertise or community focus be appropriately financed?
- Q46 How can infrastructure development for higher education be financed, especially in regional and outer urban locations?
- Q47 What structure of Commonwealth funding is needed for the higher education sector for the system to be sustainable over the next two decades?
- Q48 What principles should underpin the setting of student contributions and Higher Education Loan Program arrangements?
- Q49 Which aspects of the JRG package should be altered, and which should be retained?

In relation to the cohort that we represent, we believe that better coordination and an integrated funding model across portfolios with a long-term view could solve the problem of industry-led research funding. This would involve closer collaboration between government, universities, and industry, with a focus on promoting innovation and building research capabilities in strategic areas. A more coordinated approach to funding would also help to ensure that the research priorities of different sectors are aligned, and that

investments are made in areas with the greatest potential for impact. Overall, we believe that a sustainable funding model for the higher education sector should prioritize strategic investments in research and innovation that can contribute to the long-term growth and prosperity of the Australian economy.

Finally, we believe that student contributions and Higher Education Loan Program arrangements should be underpinned by the principles of accessibility, affordability, and equity. We encourage a system that allows all students, regardless of their background or socioeconomic status, to access and benefit from higher education.