A New Approach (ANA)

30 November 2023

ANZSCO Comprehensive Review Australian Bureau of Statistics (ABS) updating.anzsco@abs.gov.au

ANZSCO Comprehensive Review - Round 3

A New Approach (ANA) welcomes this opportunity to make a submission to the Australian and New Zealand Standard Classification of Occupations (ANZSCO) Comprehensive Review. ANA is Australia's leading think tank focused on arts and culture. Through credible and independent public leadership, ANA helps build an ambitious and innovative policy and investment environment for arts, culture and creativity. We work to ensure Australia can be a great place for creators and audiences, whoever they are and wherever they live.

Our submission makes several key points about ANZSCO and creative occupations:

- Cultural and creative industries value and utilise ANZSCO (and data based on ANZSCO)
- Employment in creative occupations has grown faster than in the overall workforce, and new investments in cultural and creative industries may drive further employment
- Artificial intelligence may create new creative occupations but also disrupt or change existing occupations

In this submission, we provide answers primarily in the context of the occupation focus area 'Arts and recreation', though we note cultural and creative occupations also span other focus areas. We provide answers to two consultation questions via the online survey and on the next page of this document. These are Question 14 (Are there occupations that are emerging, or that you anticipate will emerge, in the next 5 to 10 years in your industry, business or workplace?) and Question 16 (Please provide information on any other issues in relation to ANZSCO that have not already been covered in this survey).

In our role as a philanthropically funded, independent think tank, ANA is ready to provide further information about the response in this submission and would welcome the opportunity to discuss. We confirm that this submission can be made public.

Warm regards,

Kate Fielding, CEO, A New Approach (ANA)

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Answer to Question 14 - Are there occupations that are emerging, or that you anticipate will emerge, in the next 5 to 10 years in your industry, business or workplace?

ANA draws attention to potential leading indicators of growing and emerging occupations in arts and culture. We consider these indicators provide context for the ABS when considering whether new ANZSCO occupations are required or whether alternative titles grouped under existing ANZSCO occupations should be made standalone ANSCZO occupations.¹

ANA understands an important factor when deciding whether to create a new ANZSCO occupation is the number of people who work (and are likely to work) in that occupation. To assist these decisions for creative occupations, ANA highlights the **high annual growth rates of employment in creative occupations**. Between the Census 2016 and Census 2021, employment in creative occupations was an average 3.3 to 3.4 per cent, higher than 2.4 per cent for the general workforce. ANA considers that if there are two similar candidates for a new ANZSCO occupation, the one with higher employment growth has a stronger case.

ANA is aware that **large, sustained government investments** may drive emergence of new occupations or support more employment in existing occupations in cultural and creative industries. For example, this includes multi-year government tax rebates and government grants for screen (including film and television) production and for digital games development. These involve annual investments of hundreds of millions of dollars from Australian governments to the screen and digital games projects. These investments typically increase employment associated with these projects. For example, the Bureau of Communications, Arts and Regional Research (BCARR) found that the federal Location Incentive created over 39,000 screen industry jobs from 2018–19 to 2020–21 and will create an estimated 108,800 jobs by 2026-27.

ANA highlights the **widespread application of artificial intelligence** (AI) by Australians in arts and culture, which may change the skills used in certain creative occupations and enable new occupations, but also affect the need for existing occupations. ANA's recent Analysis Paper *Friend, for or frenemy* shows Australian creators are using AI as a tool to support their work across forms and mediums while distributors and regulators are applying other forms of AI across places and platforms. Impacts of AI on cultural and creative occupations are emerging:

- On one hand, there are new cultural and creative occupations emerging, spanning far beyond being an 'AI programmer' who develops AI systems. Our Australians are using AI to create, distribute, discover, participate, mediate, regulate, preserve, automate, translate and classify arts and culture material.
- On the other hand, we see potential impacts on incentives to create, including employment and certain occupations. We note a recent report commissioned at the request of the federal Minister for Industry and Science cautions against assuming generative AI will lead to a reduction in certain occupations.

Universities and vocational education and training organisations also confirm that the next generation of creators in arts and culture are already using generative AI tools. This is evident from use of generative AI by students at TAFEs, Group of Eight Australia Universities and Universities Australia members.

ANA also highlights the **emerging tertiary courses focussed on applications of AI in arts and culture**, which suggest potential new occupations in arts and culture (or potential new alternative titles for existing ANZSCO occupations). For example:

- the Queensland University of Technology Bachelor of Games and Interactive Environments (Game Design) degree includes a unit on 'Al for Games'.ix
- The University of Sydney's English course on Shakespeare invites students to explore how and whether ChatGPT can assist with textual analysis.*
- The University of Wollongong explicitly permits combining undergraduate majors in 'Game and Mobile Development' and 'Artificial Intelligence'.xi

Answer to question 16 - Please provide information on any other issues in relation to ANZSCO that have not already been covered in this survey

In considering the 'arts and recreation' focus area for this review, ANA encourages the ABS to continuing **engaging with BCARR to ensure any updates to ANZSCO are fit for purpose for the Cultural and Creative Activity Satellite Accounts** (the Satellite Accounts).^{xii} ANA understands a later phase of the BCARR's Methodology Refresh of the Satellite Accounts will focus on employment and rely on ANZSCO.^{xiii} The Satellite Accounts quantify cultural and creative activity in Australia and track how it changes over time. Arts and culture organisations, researchers, and policymakers in governments use the Satellite Accounts to understand the scale and economic contribution of cultural and creative activity.

ANA highlights the **frequent and established use of ANZSCO by governments, researchers and arts and culture organisations**. For example, a recent collaboration between universities and arts and culture government agencies at all levels relied on Census 2021 and Census 2016 data (which, in turn, relied on ANZSCO) to provide important information about embedded creative employment and creative incomes. **V* Likewise, a joint policy submission from the Australian Government's arts investment and advisory body Australia Council for the Arts (now Creative Australia), leading cultural and creative industry researchers from three universities and ANA emphasised the need for consistent, regular data on employment in arts and culture. **V* This would not be possible without appropriate ANZSCO occupations.

Endnotes

ⁱ For example, we note the Interactive Games and Entertainment Association has called for a new occupation 'Game Developer' in Round Two of the ANZSCO Comprehensive Review, distinct from Multimedia Specialist (ANZSCO 261211) which includes Electronic Game Developer. https://igea.net/wp-content/uploads/2023/05/IGEA-Submission-to-Cultural-and-Creative-Activity-Satellite-Accounts-Methodology-Refresh-May-2023.pdf page 3

- '' 'The incentive is a merit-assessed grant program where funding of up to 13.5 per cent of a production's expenditure may be offered to large budget international screen productions that commit to filming in Australia and perform strongly against the assessment criteria.' See Bureau of Communications, Arts and Regional Research, "Economic Assessment of the Location Incentive on Australia's Screen Sector Working Paper," February 2022, https://www.infrastructure.gov.au/sites/default/files/documents/economic-assessment--location-incentive-on-australias-screen-sector--working-paper--february2022.pdf.
- ^v Alan Hui and Kate Fielding, "Friend, Foe or Frenemy Foreseeable Impacts of AI on Arts, Culture and Creativity," Analysis Paper (Canberra, Australia: A New Approach (ANA), October 31, 2023), https://newapproach.org.au/analysis-papers/friend-foe-or-frenemy-foreseeable-impacts-of-ai-on-arts-culture-and-creativity/.
- vi The Interactive Games and Entertainment Association (IGEA) has previously expressed the view that 'Software Engineer' (ANZSCO 261313) covers emerging roles such as 'Al programmer'. IGEA, "Great News for the Australian Video Games Development Industry as Game Jobs Are Added to the Priority Visa List," June 25, 2021, https://igea.net/2021/06/great-news-for-the-australian-video-games-development-industry-as-game-jobs-are-added-to-the-priority-visa-list/.
- vii 'The fact that a machine may perform one or more relevant tasks does not mean that job replacement will necessarily occur, indeed the strongest business cases for investment in AI are likely to emphasise the creation of additional value to products or services rather than savings in labour costs.' References omitted. Genevieve Bell et al., "Rapid Response Information Report: Generative AI," 2023, https://www.chiefscientist.gov.au/sites/default/files/2023-06/Rapid%20Response%20Information%20Report%20-%20Generative%20AI%20v1_1.pdf.

^{II} McCutcheon and Cunningham, "Briefing Paper 2 - Embedded Creative Employment and Creative Incomes (Version 2)," 4.

iii In the screen sector alone, Australian governments have been contributing close to one third (32%) of \$551 million aggregate finance for Australian TV and video-on-demand content and almost half (46%) of \$465m aggregate finance for Australian theatrical feature films. These figures reflect the 5-year averages to 2022-23 for all Australian government sources of finance, the Australian Producer Offset and Australian Location and PDV Offsets. Screen Australia, "Drama Report 2022-23,"

November 2, 2023, 14, 36, https://www.screenaustralia.gov.au/getmedia/22bfb310-9734-4845-9d03-a2c472a08a35/Screen-Australia-Drama-Report-2022-23.pdf.

- xii These updates are being made to the experimental Cultural and Creative Activity Satellite Accounts for the 2008-09 year, which the ABS developed and then released in 2014. See https://www.infrastructure.gov.au/have-your-say/cultural-and-creative-activity-satellite-accounts-methodology-refresh
- xiii ANA has confirmed this with BCARR directly. ANA also notes BCARR's 2023 consultation paper explicitly suggested including employment estimates in the Satellite Accounts. Department of Infrastructure, Transport, Regional Development and Communications, "Cultural and Creative Activity Satellite Accounts Methodology Refresh—Consultation Paper" (Bureau of Communications, Arts and Regional Research, February 2023), https://www.infrastructure.gov.au/sites/default/files/documents/cultural-and-creative-activity-satellite-accounts-methodology-refresh-consultation-paper-february2023_0.pdf.
- xiv Marion McCutcheon and Stuart Cunningham, "Briefing Paper 2 Embedded Creative Employment and Creative Incomes (Version 2)," The Creative Economy in Australia What Census 2021 Tells Us, March 8, 2023, https://www.canberra.edu.au/research/faculty-research-centres/nmrc/major-projects/tabs/current-funded-projects/The-creative-economy-in-Australia-Briefing-paper-2.pdf.
- xv Scott Brook et al., "The New National Cultural Policy: Cultural Data Needs Submission to the Department of Infrastructure, Transport, Regional Development, Communications and the Arts Office for the Arts" (Australia Council for the Arts, August 2022), https://creative.gov.au/wp-content/uploads/2022/09/Australia-Council-Submission-to-NCP-Cultural-data-needs-2.pdf.

viii Smartcopying, "Using Generative AI Platforms in TAFEs," May 30, 2023, https://smartcopying.edu.au/using-generative-ai-platforms-in-tafes/; Universities Australia, "Submission to the Inquiry into the Use of Generative Artificial Intelligence in the Australian Education System," July 14, 2023, https://goa.edu.au/goa-submission-to-the-inquiry-into-the-use-of-generative-artificial-intelligence-in-the-australian-education-system.
to-the-inquiry-into-the-use-of-generative-artificial-intelligence-in-the-australian-education-system.

ix See https://www.qut.edu.au/courses/bachelor-of-games-and-interactive-environments-gamedesign.

^{*} See https://educational-innovation.sydney.edu.au/teaching@sydney/how-sydney-academics-are-using-generative-ai-this-semester-in-assessments/

xi See https://courses.uow.edu.au/aos/2024/MAJ41477?year=2024