

APPENDIX C

Occupations and Qualifications in Demand Table

Aviation



ANZSCO code	Occupation	Training Package qualification	Justification/evidence (qualitative and/or quantitative)
231111 – Aeroplane Pilot	Aeroplane Pilot	AVI40108 Certificate IV in Aviation (Commercial Pilot Aeroplane Licence)	<p>Airline closures in regional areas have been directly attributed to the slowdown in the mining and resource industries, compounded by competitive retendering of regional air routes.¹</p> <p>Strong growth in the demand for pilots is predicted in the medium to long term, with an increase in international and domestic travel associated with a growing population and a recovering tourism market.^{2,3} Boeing predicts that the world will need 533,000 new commercial airline pilots by 2033, with 41% of these new jobs created in the Asia-Pacific region.⁴</p> <p>In the shorter term, employers indicate the demand for qualified pilots will remain at current levels or increase slightly.⁵ There is significant concern, based on forecast growth strategies, that emerging markets (particularly Asia) will look to Australia as a source of skilled labour.⁶ Reports of pilot poaching are emerging as demand in the Middle East and Asian markets increases.⁷ The ongoing demand for Australian-trained pilots is expected to lead to skills shortages in the future without greater industry commitment to the training and development of pilots.⁸</p> <p>The cost of obtaining a commercial pilot's licence is a challenge, particularly for young entrants.⁹ Cadet programs that incorporate flying time requirements have been successful in encouraging new entrants and ensuring they are able to achieve the required qualifications. Some employers advocate these be extended on an industry-wide basis as a commitment to meeting the longer-term demands for pilots.¹⁰</p>

<i>ANZSCO code</i>	<i>Occupation</i>	<i>Training Package qualification</i>	<i>Justification/evidence (qualitative and/or quantitative)</i>
231111 – Aeroplane Pilot (continued)	Senior Flight Instructors, Grade 2 Multi Crew Coordination (MCC) Instructors	AVI50510 Diploma of Aviation (Flight Instructor) AVI60110 Advanced Diploma of Aviation (Flight Instruction)	Grade 2 or Senior Flight Instructors are in demand across the aviation sector with some employers reporting the need to recruit offshore to find suitably qualified candidates with minimum licence hours. ¹¹ The demand is expected to continue as it takes time to develop the skills required of a senior-level instructor. Remuneration is lower than some candidates expect, which makes it difficult to attract qualified people. There is also demand for Flight Instructors at levels 1, 2 and 3 with specific skill sets including instrument-rated pilots (rotary wing) and multi-engine training. New licensing rules, aligned to the Air Transport Pilot Licence, have a mandated requirement for training designed to prepare pilots for operating in multi-crew environments. A competency and qualification framework is being developed as part of the Aviation Training Package. ¹²
323111 – Aircraft Maintenance Engineer (Avionics)	Aircraft Maintenance Engineers	MEA40611 Certificate IV in Aeroskills (Avionics)	Employers report that technology is having an impact. New digital equipment is causing restructuring of maintenance departments and requiring existing workers to develop new skills or upskill. This has been reported as a challenge for some older workers. ¹³
323112 – Aircraft Maintenance Engineer (Mechanical)		MEA50111 Diploma of Aeroskills (Avionics)	On a global level, over the next 20 years demand for aircraft technicians will remain significant. The combination of world fleet growth and an increasing trend to outsource maintenance, repair and overhaul (MRO) activities to third-party providers will drive demand for more qualified technicians in an expanding number of locations. ¹⁴
323113 – Aircraft Maintenance Engineer (Structures)		MEA40711 Certificate IV in Aeroskills (Mechanical) MEA50211 Diploma of Aeroskills (Mechanical) MEA41311 Certificate IV in Aeroskills (Structures)	The need will be greatest in the Asia-Pacific region, which will require 224,000 new personnel. ¹⁵ It is argued that as the world fleet becomes dominated by new-generation aeroplanes, reliability will improve and maintenance check intervals will lengthen. ¹⁶ This is balanced with concerns about the consistency in safety standards as the demand for technicians increases and the role becomes more specialised. ¹⁷

ANZSCO code	Occupation	Training Package qualification	Justification/evidence (qualitative and/or quantitative)
721911 – Aircraft Baggage Handler	Baggage Handler, Ground Crew, Load Controller, Works Safety Officer (Airports)	AVI30408 Certificate III in Aviation (Ground Operations and Service) AVI40408 Certificate IV in Aviation (Ground Operations and Service) AVI30713 Certificate III in Aviation (Aerodrome Operations)	<p>A key driver behind ongoing demand for this occupation is airport growth. In 2014, most major capital city airports were in the process of expansion or planning for expansion.¹⁸</p> <p>Airports are becoming multimodal transport and commercial hubs and centres for time-sensitive distribution networks.¹⁹</p> <p>Australia's location in the Asian region coupled with a falling dollar and an increase in travellers from rapidly developing economies mean continued increases in international and domestic passenger movements through Australian airports. Demand for this occupation is set to continue at least in the short term.²⁰ With world air cargo expected to double in the next 20 years there is further scope for growth in the sector's ground crew workforce.²¹</p> <p>This occupation is characterised by high turnover as challenging working conditions²² (long shifts, shift work, physically demanding duties) can impede retention and attraction of workers.²³ Retention of staff would make training more attractive to employers.</p> <p>Rural and remote airports can experience difficulties in competing for skilled staff with other more highly paid industries.</p> <p>Work Safety Officers are responsible for the interaction between construction projects and aerodrome operations. This occupation is in high demand due to the large number of construction projects underway or scheduled at both capital city and regional airports.²⁴</p>

Aviation endnotes

- 1 Freed J. Skytrans goes into administration. *Sydney Morning Herald*. 6 January 2015.
- 2 Pricewaterhouse Coopers. PwC Global Airline CEO Survey 2014. Accessed January 2015. Available from www.pwc.com/gx/en/transportation-logistics/publications/global-airline-ceo-survey-2014.jhtml
- 3 Airbus. *Flying on demand 2014-2033. Airbus Global Market Forecast* (pdf). Accessed 19 January 2015. Available from www.airbus.com/company/market/forecast/
- 4,14,15,16 Boeing Commercial Airplanes. *Current Market Outlook 2014-33* (pdf). *Pilot and technician outlook*. Boeing, Seattle (WA). Accessed 19 January 2015. Available from www.boeing.com/assets/pdf/commercial/cmo/pdf/Boeing_Current_Market_Outlook_2014.pdf
- 5,11,12,13,23 TLISC Aviation E-Scan consultation, November 2014.
- 6 Kuo L. China is trying to scoop up the world's airline pilots to cope with its own shortfall [webpage]. Quartz, published 3 April 2014. Accessed January 2015. Available from qz.com/194407/china-is-trying-to-scoop-up-the-worlds-airlines-pilots-to-cope-with-its-own-shortfall/
- 7,17 Author unknown. 5 things to know about aviation in Asia [webpage]. *News.com.au*. Published 30 December 2014. Accessed January 2015. Available from www.news.com.au/travel/travel-updates/things-to-know-about-aviation-in-asia/story-fnizu68q-1227170489313
- 8 TLISC Aviation Advisory Committee, 12 November 2014.
- 9 McIntosh T. Why a career as a pilot isn't taking off [webpage]. *Sydney Morning Herald*, published 9 May 2014. Accessed January 2015. Available from www.smh.com.au/it-pro/why-a-career-as-a-pilot-isnt-taking-off-20140509-zr8ar.html
- 18 IBISWorld Industry Report I5220. Airport Operations in Australia. IBISWorld, October 2014.
- 19 Truss W. Keynote address to the Tourism and Transport Summit, 29 October 2014, Canberra. Accessed January 2015. Available from www.minister.infrastructure.gov.au/wt/speeches/2014/wts027_2014.aspx
- 20,22 TLISC. *Skills in Demand Survey*. 2015.
- 21 Boeing World Air Cargo Forecast Team. World Air Cargo Forecast 2014–2015 [webpage]. Accessed January 2015. Available from www.boeing.com/boeing/commercial/cargo
- 24 Australian Airports Association. Discussion paper submission to TLISC E-Scan 2015 development.