



Australian Government



National Skills Commission

Skills Priority List Findings

Electrotechnology and Telecommunications Trades Workers

ANZSCO Sub-Major Group 34

Occupations in Shortage

Of the 15 Electrotechnology and Telecommunications Trades Worker occupations assessed for the 2021 Skills Priority List (SPL), 60% were found to be in shortage, compared with 19% for all occupations (Table 1). Among the Minor Groups, 67% of Electricians occupations were in shortage and 58% of Electronics and Telecommunications Trades Worker occupations were in shortage.

Table 1: Occupations in shortage, Electrotechnology and Telecommunications Trades Workers Sub-Major Group and Minor Groups

ANZSCO Group		No. reviewed	% of reviewed in shortage
341	Electricians	3	67%
342	Electronics and Telecommunications Trades Workers	12	58%
34	Electrotechnology and Telecommunications Trades Workers	15	60%
	All occupations	799	19%

Future Demand

Electrotechnology and Telecommunications Trades Worker occupations are projected to have either strong or moderate future demand, with 20% projected to have strong future

demand, compared with 33% for all occupations (Table 2). All Electricians minor group occupations are projected to have strong future demand, while all Electronics and Telecommunications Trades Worker minor group occupations are projected to have moderate future demand.

Table 2: Future demand, Electrotechnology and Telecommunications Trades Workers Sub-Major Group and Minor Groups

ANZSCO Group		No. of occupations reviewed	Future demand ratings (% of reviewed occupations)		
			Strong	Moderate	Soft
341	Electricians	3	100%	0%	0%
342	Electronics and Telecommunications Trades Workers	12	0%	100%	0%
34	Electrotechnology and Telecommunications Trades Workers	15	20%	80%	0%
	All occupations	799	33%	60%	7%

Of the Electrotechnology and Telecommunications Trades Workers reviewed, two were found to be in shortage with strong future demand:

- Electrician (General)
- Electrician (Special Class).

Results by State and Territory

New South Wales had the highest proportion of Electrotechnology and Telecommunications Trades Worker occupations assessed in shortage (80%), followed by the Northern Territory (67%). Most of the remaining states and territories had 60% in shortage, except for Queensland with 53% in shortage. It should be noted that the variation across the states and territories, at least in part, reflects differences in the stakeholder input received.

Predicted Fill Rates

Incorporating many labour market indicators, including data from the NSC's Survey of Employers who have Recently Advertised (SERA) where available, the predicted fill rate has been formulated by the NSC to predict the percentage of vacancies filled by employers for a particular occupation over the 12 month research period.

The predicted vacancy fill rates for Electrotechnology and Telecommunications Trades Worker occupations fall within the broad range of 40% to 79%. Almost half (47%) of

occupations in this group had predicted fill rates of 60% to 69%, with 40% having predicted fill rates at the lower range of 40% to 49%.

Survey of Employers

The Survey of Employers who have Recently Advertised (SERA) is a key component of the SPL analysis. Between July 2020 and April 2021, the NSC contacted employers who had advertised vacancies across 7 Electrotechnology and Telecommunications Trades Worker occupations, to ask about their recent recruitment experience. Many employers experienced recruitment difficulties. Around 47% of employers had unfilled vacancies, with 15% attracting no suitable applicants. Overall, employers filled 53% of their advertised vacancies and received an average of 2.7 suitable applicants per vacancy.

Around 96% of employers required applicants to hold a formal qualification, usually a trade level qualification (e.g. certificate III or IV). Where qualifications were specified, employers received an average of 6.8 qualified applicants per vacancy, however around 60% of these qualified applicants were found to be unsuitable.

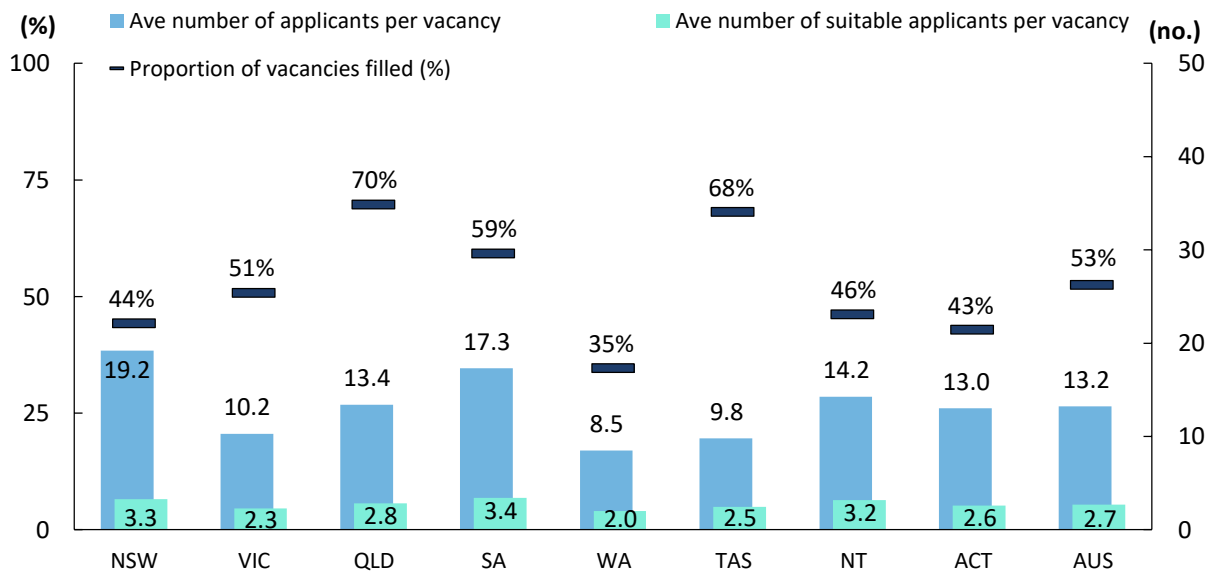
In addition to qualifications, 76% of employers required applicants to have an average of just over two years of relevant work experience and around 45% of employers required applicants to have specialised skills or experience.

The most common reason applicants were found unsuitable when applying for Electrotechnology and Telecommunications Trades Worker vacancies was a lack of general experience in the occupation (mentioned by 59% of employers). Other reasons included insufficient specific skills or experience (48%), lack of qualifications (46%) or performing poorly at one or more stages of the recruitment process (37%).

While employers in regional areas filled more vacancies (56%) than metropolitan-based employers (50%), they generally received fewer applicants, including those who were qualified or suitable.

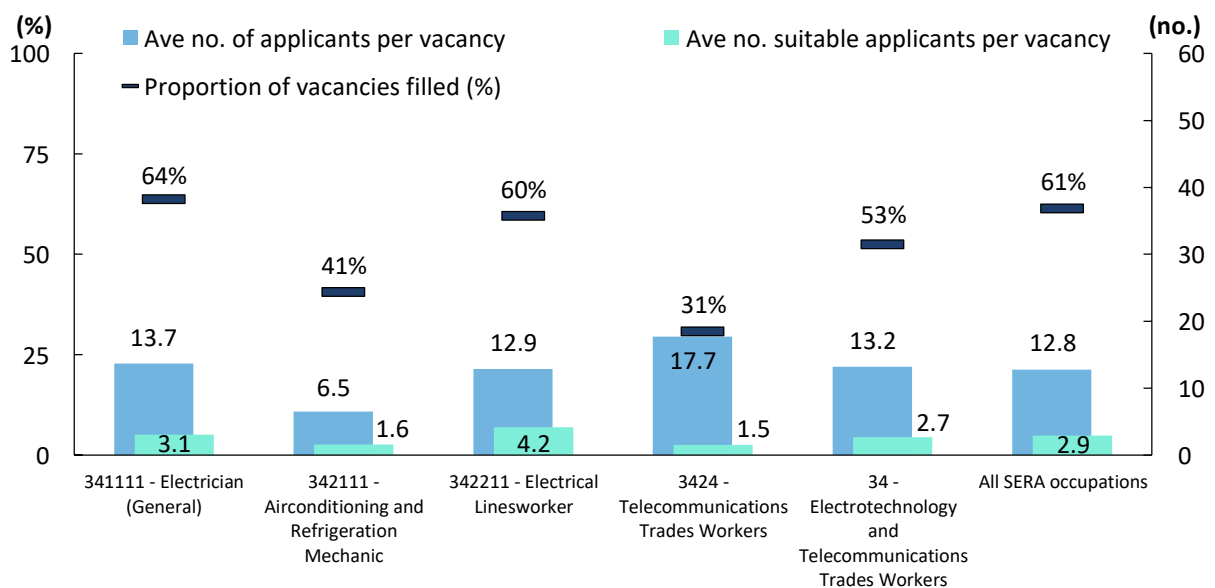
Of the states and territories, employers in Queensland filled the highest proportion of Electrotechnology and Telecommunications Trades Worker vacancies (70%) (Figure 1), followed by Tasmania (68%). Employers in Western Australia filled the lowest proportion of vacancies (35%), had the fewest average number of applicants per vacancy (8.5) and also had the lowest average number of suitable applicants per vacancy (2.0).

Figure 1: Proportion of vacancies filled (%), average number of applicants and suitable applicants per vacancy (no.), surveyed Electrotechnology and Telecommunications Trades Workers, by State and Territory, July 2020 - April 2021



Overall, Electrotechnology and Telecommunications Trades Worker occupations had a lower vacancy fill rate (53%) and lower average number of suitable applicants per vacancy (2.7) compared with all SERA occupations (61% and 2.9, respectively, see Figure 2). Employers had particular difficulty recruiting for Telecommunications Trades Worker occupations, with a vacancy fill rate of 31% and an average of 1.5 suitable applicants per vacancy.

Figure 2: Proportion of vacancies filled (%), average number of applicants and suitable applicants per vacancy (no.), Electrotechnology and Telecommunications Trades Worker occupations, Australia, July 2020 to April 2021



Stakeholder Engagement

Electrotechnology and Telecommunications Trades Worker occupations were raised by a small number of stakeholders through the stakeholder engagement process which formed a key part of the labour market assessments for these occupations. Through the engagement process, representative bodies were able to provide input on occupations through surveys, meetings with the NSC, or other submissions. The Electrotechnology and Telecommunications Trades Worker occupations most frequently reported to have recruitment difficulty were General Electrician and Airconditioning and Refrigeration Mechanic.

Generally, stakeholders reported recruitment difficulty for the occupations nationally and in non-metropolitan areas. The most common reason for recruitment difficulty was a lack of suitable applicants. Difficulty recruiting occurred for both entry level and experienced positions and the most common qualifications required by employers was a full trade qualification (commonly a certificate III).

Recruitment difficulty was largely expected to worsen in the next 12 months and many stakeholders had increased wages to attract employees for vacancies. Stakeholders also reported that engaging with partnerships with universities, VET providers or training providers was used to address the recruitment difficulty more generally.

Demand and Supply

Indicators of the demand for Electrotechnology and Telecommunications Trades Workers are mixed. Employment of these workers has fallen from a peak in November 2020, but employment in May 2021 remained higher than levels recorded over most of the last decade.¹ The number of advertised vacancies for Electrotechnology and Telecommunications Trades Workers increased over the year to June 2021 to an historical high, following a drop in early 2020.²

New supply to Electrotechnology and Telecommunications Trades Worker occupations is often through apprenticeships. The number of people completing apprenticeships in Electrotechnology and Telecommunications Trades decreased by 24% over the five years to March 2021.³ The number of people commencing relevant apprenticeships, however, has increased recently (up by 16% over the year to March 2021), which may lead to increased supply over the next few years. Notably, apprenticeship commencements have increased

¹ ABS, Labour Force, May 2021, National Skills Commission trend

² National Skills Commission, Internet Vacancy Index, June 2021, trend

³ NCVET, Apprentices and Trainees, March 2021

significantly since the introduction of the Boosting Apprenticeships Commencements (BAC) measure in October 2020.

Temporary skilled migration is also a source of supply for a range of Technicians and Trades Worker occupations, including Electrotechnology and Telecommunications Trades occupations. The number of temporary skilled visa holders in the Technicians and Trades Workers major group has fallen since early 2020, down by around a quarter, further limiting supply to this labour market.⁴

⁴ Department of Home Affairs, Temporary resident (skilled) visa holders in Australia, June 2021 (subclasses 457 and 482)

Appendix – SPL Occupation Findings for Electrotechnology and Telecommunications Trades Worker Occupations

Occupation		Current Labour Market Ratings and Future Demand Rating									
ANZSCO	Occupation	National Labour Market Rating	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	National Future Demand
341111	Electrician (General)	S	S	S	NS	S	S	S	S	S	Strong
341112	Electrician (Special Class)	S	S	S	S	S	S	S	S	S	Strong
341113	Lift Mechanic	NS	NS	NS	NS	NS	NS	NS	NS	NS	Strong
342111	Airconditioning and Refrigeration Mechanic	S	S	S	S	S	S	S	S	S	Moderate
342211	Electrical Linesworker	S	S	S	S	S	S	S	S	S	Moderate
342212	Technical Cable Joiner	S	S	S	S	S	S	S	S	S	Moderate
342311	Business Machine Mechanic	NS	NS	NS	NS	NS	NS	NS	NS	NS	Moderate
342312	Communications Operator	NS	NS	NS	NS	NS	NS	NS	NS	NS	Moderate
342313	Electronic Equipment Trades Worker	NS	S	NS	NS	NS	NS	NS	NS	NS	Moderate
342314	Electronic Instrument Trades Worker (General)	NS	S	NS	NS	NS	NS	NS	NS	NS	Moderate
342315	Electronic Instrument Trades Worker (Special Class)	NS	S	NS	NS	NS	NS	NS	S	NS	Moderate
342411	Cabler (Data and Telecommunications)	S	S	S	S	S	S	S	S	S	Moderate
342412	Telecommunications Cable Joiner	S	S	S	S	S	S	S	S	S	Moderate
342413	Telecommunications Linesworker	S	S	S	S	S	S	S	S	S	Moderate
342414	Telecommunications Technician	S	S	S	S	S	S	S	S	S	Moderate

Ratings: S – Shortage; NS – No Shortage