

A group of public safety professionals, including firefighters, a police officer, and a soldier, are posed in front of a fire truck. The scene is outdoors on a paved surface with orange traffic cones. The fire truck in the background has a license plate that reads 'XLU 359'.

AUSTRALIAN
INDUSTRY
STANDARDS
SES

SKILLS FORECAST 2019

PUBLIC SAFETY

INDUSTRY REFERENCE COMMITTEE



Cover Page image
Image source AFAC

Australian Industry Standards acknowledges and thanks those organisations who supplied images to be used in this report. Public Safety Image on page 18, 27 - Metropolitan Fire and Emergency Services Board .

CONTENTS

4

EXECUTIVE SUMMARY

6

**IRC
SKILLS FORECAST**

7

**PUBLIC SAFETY IRC SKILLS
FORECAST**

8

**PUBLIC SAFETY
INDUSTRY REFERENCE
COMMITTEE**

10

**PUBLIC SAFETY
INDUSTRY OVERVIEW**

28

**EMPLOYMENT AND SKILLS
OUTLOOK**

38

**2018 INDUSTRY SKILLS
FORUMS**

39

**INDUSTRY LEADERS'
DINNERS**

40

REFERENCES

42

**PROPOSED SCHEDULE OF
WORK - DEF**

44

**PROPOSED SCHEDULE OF
WORK - POL**

46

**PROPOSED SCHEDULE OF
WORK - PUA**

78

**AUSTRALIAN INDUSTRY
STANDARDS**

EXECUTIVE SUMMARY

The 2019 Public Safety Skills Forecast seeks to identify the skills needs for the immediate future and forecast what will be required over the period 2019-2023. This forecast also updates and builds on previous Skills Forecast projections. Information for this forecast emanated through research and extensive industry consultations including an industry survey, Australian Industry Standards Industry Skills Forums held in every Australian capital city during 2018, and the Australasian Fire and Emergency Service Authorities Council (AFAC) – Fire & Emergency Management Conference 2018 held in Perth.

The Public Safety industry employs nearly 178,000 people in full-time jobs, 19,850 people in standby/reserve positions, and approximately 230,000 volunteers. The industry has an estimated annual revenue of \$54.21 billion, adding over \$32 billion to the Australian economy in 2018-19.

Australia's Public Safety industry is diverse and comprises police, fire and land management agencies, maritime rescue, emergency services, emergency management agencies, biosecurity agencies, the Australian Defence Force, intelligence organisations, and associated administrative and support functions.

In recent years the public safety industry recognised the need for police and defence to have separate training packages to ensure legislative and government policy changes were swiftly incorporated into their training. More recently, the Public Safety Industry Reference Committee acknowledged that fire may also be better served with a separate training package. This acknowledgement recognises that fire is a high-risk occupation that requires adherence to a uniquely methodical management of training. Discussions regarding the concept continue within the public safety industry.

The Public Safety IRC have identified a range of industry challenges facing public safety agencies and enterprises, including financial and economic factors, strategic issues, health and wellbeing and the increasing use of new technologies across industry sectors. The emergence of automated cars and increasing adoption of electric and hybrid vehicles pose an increasingly significant risk to public safety agencies, particularly emergency responders. Risks and opportunities are also anticipated by the exponential development of nascent technologies such as 3D printing, Internet of Things (IoT), artificial intelligence, remotely-piloted aircraft (drones), automation, blockchain, cyber security, and the consequent need for greater digital literacy within public safety.

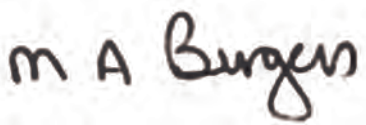
The Australian Defence Force (ADF) is currently enhancing the skills of Military Justice System practitioners, developing professionalisation pathways for Defence Force Recruiters, and reviewing and further developing Defence's Explosive Ordnance capabilities. Defence is continually reviewing skills across a wide range of Defence occupations and roles including a focus on national cyber security capabilities.

Australian Police are currently address emerging challenges to policing practices through improved investigation, management, negotiation and intelligence skills and ensuring those skills align with the Australia New Zealand Policing Profession Framework.



National biosecurity agencies will further develop biosecurity response capabilities through the development of skills for the provision of timely and accurate information to public safety agencies, media organisations and the public during a biosecurity response operation.

As the Public Safety industries address these challenges, it is critical that Australian Public Safety, Defence and Police agencies prepare for the rapid changes and a growing need to anticipate skilling issues.



Mark Burgess

Public Safety IRC Chair

This IRC Skills Forecast was agreed to by the Public Safety IRC on 29 April 2019.



THE PUBLIC SAFETY IRC HAVE IDENTIFIED A RANGE OF INDUSTRY CHALLENGES FACING PUBLIC SAFETY AGENCIES AND ENTERPRISES, INCLUDING FINANCIAL AND ECONOMIC FACTORS, STRATEGIC ISSUES, HEALTH AND WELLBEING AND THE INCREASING USE OF NEW TECHNOLOGIES ACROSS INDUSTRY SECTORS.



IRC SKILLS FORECAST

The Industry Reference Committee (IRC) Skills Forecasts focus on the prioritisation of the skill needs of the industry sectors each IRC has responsibility for. They are developed and reviewed annually and submitted on behalf of the IRC to the Australian Industry and Skills Committee (AISC) for approval.

The document is deliberately brief. It does not seek to identify every issue within every sector. It is a snapshot of a continually evolving story that is intended to alert and inform a wide audience and enhance the industry's capacity to act.

IRCs are required to consult broadly with stakeholders to ensure a whole-of-industry view about the opportunities and challenges for the workforce and the Training Package review work necessary to meet industry needs. The information is then used to develop the four-year IRC Proposed Schedule of Work.



More information on the National Schedule can be found at: www.aisc.net.au/content/national-schedule.

PUBLIC SAFETY IRC SKILLS FORECAST

This annual IRC Skills Forecast will be submitted by the Public Safety IRC to the AISC for approval.

The IRC Skills Forecast identifies the priority skill needs of the Public Safety industry following a research and stakeholder consultation process conducted by Australian Industry Standards (AIS) on behalf of the IRC.

Once approved by the AISC, the IRC Skills Forecast informs the development of a four-year rolling National Schedule for review and development work within the DEF Defence, POL Police, and PUA Public Safety Training Packages.

PUBLIC SAFETY INDUSTRY REFERENCE COMMITTEE

The Public Safety IRC has been assigned responsibility for the DEF Defence, PUA Public Safety, and POL Training Packages.

More information about the Public Safety IRC and its work can be found here: www.australianindustrystandards.org.au/committee/public-safety-industry-reference-committee/

PUBLIC SAFETY IRC MEMBERS

Mark Burgess (Chair)

Police Federation of Australia

Lynda Douglas (Deputy Chair)

Department of Defence

Jean Dyzel

Australia New Zealand Policing Advisory
Agency (ANZPAA)

Sandra Lunardi

Australasian Fire and Emergency Service
Authorities Council (AFAC)

Brendan Angwin

United Firefighters Union (UFU)

Carola Washbourne

Emergency Management

Ian Gabites

Volunteer Firefighting

Jason Males

Department of Agriculture and Water
Resources

John Scully

Defence Force Welfare Association

Neville Kitchin

Community and Public Sector Union

Paul Wallworth

Australian Council of State & Territory
Emergency Services (ACSES)

Stephen Leahy

Aquatic and Marine Search and Rescue

For more information please contact:

Greg Spence

Public Safety Industry Manager
Australian Industry Standards
M 0427 990 147
E greg.spence@australianindustrystandards.org.au

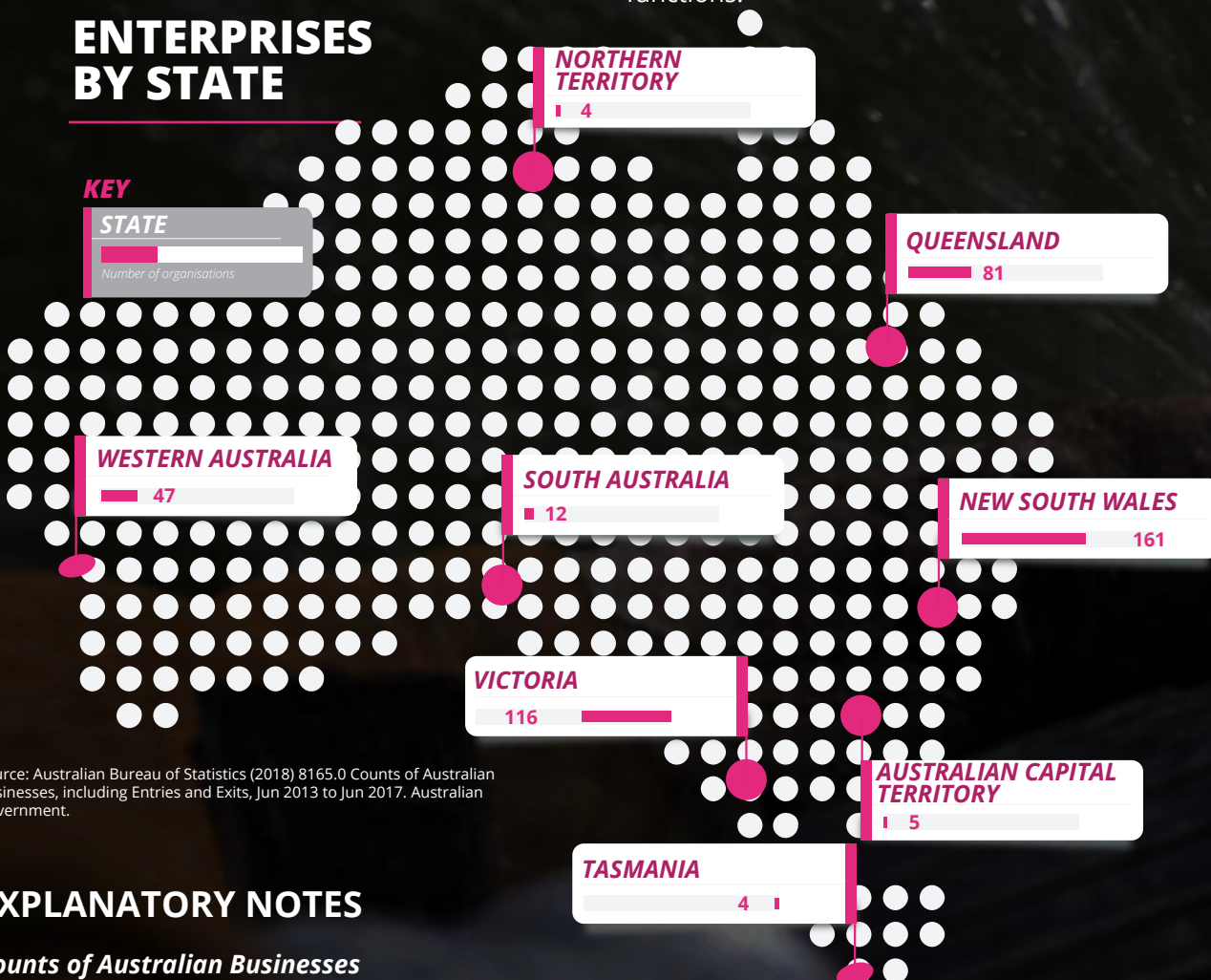


PUBLIC SAFETY INDUSTRY OVERVIEW

The Public Safety industry employs nearly 178,000 people in full-time jobs, 19,850 people in standby/reserve positions, and approximately 230,000 volunteers. The industry has an estimated annual revenue of \$54.21 billion, adding over \$32 billion to the Australian economy in 2018-19.

Australia's Public Safety industry is highly diverse, and comprises police, fire and rescue services, maritime rescue, emergency services and emergency management agencies, the Australian Defence Force, and intelligence organisations, including associated administrative and support functions.

ENTERPRISES BY STATE



Source: Australian Bureau of Statistics (2018) 8165.0 Counts of Australian Businesses, including Entries and Exits, Jun 2013 to Jun 2017. Australian Government.

EXPLANATORY NOTES

Counts of Australian Businesses

The Counts of Australian Businesses data uses a top down approach where industries are primarily classified by the single predominant industry class associated with a business' ABN. A limitation of this approach is that organisations with a presence in several States/Territories will be counted only once. This can lead to enterprise figures appearing low for a given state/territory, but it's not that there are no enterprises existing in the state/territory, it's that the headquarters are located elsewhere. A further consideration is that organisations in more than one industry will also be only counted in one industry.

Exemptions

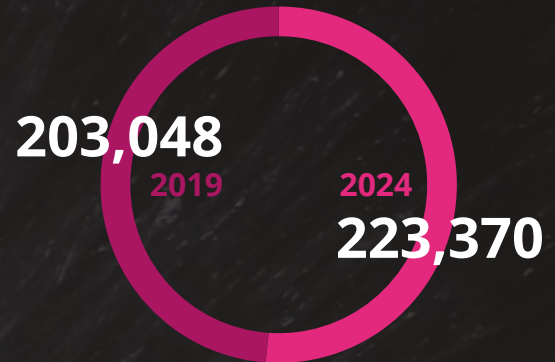
Police Services, Fire Protection and Other Emergency Services are excluded from this dataset.

WORKFORCE AGE

AT 43.4 YEARS OLD, THE TYPICAL WORKER IS **3 YEARS, 6 MONTHS** OLDER THAN THE NATIONAL AVERAGE.

THE WORKFORCE IS AGEING AT **1.7 TIMES** THE NATIONAL RATE

WORKFORCE SIZE



BUSINESS COMPOSITION

335
SMALL
BUSINESS

89
MEDIUM
BUSINESS

7
LARGE
BUSINESS

GENDER DISTRIBUTION

71%  **23%** 



EMPLOYMENT
GROWTH TO 2024

2.1%

INDUSTRY VALUE YEAR 2018-19

REVENUE
\$54.21B

**+\$32.34B
TO GDP**

12

KEY PUBLIC SAFETY STAKEHOLDERS

EMPLOYERS

- ▶ ACT Parks and Conversation Service
- ▶ Australian Red Cross
- ▶ Australian Road Rescue Organisation
- ▶ Department of Defence
- ▶ Forestry Corporation of New South Wales
- ▶ Forestry SA
- ▶ Forestry Tasmania
- ▶ Geoscience Australia
- ▶ HQ Plantations Pty Ltd
- ▶ Life Saving Victoria
- ▶ Melbourne Water
- ▶ New South Wales State Emergency Service
- ▶ State Emergency Services
- ▶ Surf Life Saving Australia
- ▶ Tasmania State Emergency Service
- ▶ Victoria State Emergency Service

EMPLOYER REPRESENTATIVES

- ▶ Australasian Fire and Emergency Service Authorities Council
- ▶ Australian Council of State Emergency Services
- ▶ Australian Institute for Disaster Resilience

- ▶ Australia New Zealand Council of the Police Profession

EMPLOYEE REPRESENTATIVES

- ▶ Australian Professional Ocean Lifeguard Association Inc.
- ▶ Australian Services Union
- ▶ Community and Public Sector Union
- ▶ Defence Force Welfare Association
- ▶ National SES Volunteers Association
- ▶ Police Federation of Australia
- ▶ Public Service Association NSW
- ▶ United Firefighters Union of Australia

LICENSING / REGULATORY

- ▶ Australian Maritime Safety Authority
- ▶ Safe Work Australia

GOVERNMENT

- ▶ Attorney-General's Department, Emergency Management Australia
- ▶ Brisbane City Council
- ▶ Bureau of Meteorology
- ▶ Department of Agriculture and Water Resources
- ▶ Department of Conservation New Zealand

- ▶ Department of Environment, Land, Water and Planning - VIC

- ▶ Department of Environment, Water and Natural Resources - SA
- ▶ Department of National Parks, Sport and Racing, Queensland Parks and Wildlife Service
- ▶ Department of Parks and Wildlife - WA
- ▶ Federal, State/Territory Departments
- ▶ Ministry of Defence and Emergency Management
- ▶ NSW Department of Industry - Mines Safety Operations
- ▶ Office of Environment and Heritage - NSW
- ▶ Parks and Wildlife Service - TAS
- ▶ Parks Australia
- ▶ Parks Victoria

INDUSTRY ADVISORY

- ▶ State Industry Training Advisory Boards (ITABS)

TRAINING ORGANISATIONS

- ▶ TAFEs, Private RTOs, Enterprise RTOs

DEF DEFENCE TRAINING PACKAGE

THE DEF DEFENCE TRAINING PACKAGE COMPRISES

48

QUALIFICATIONS

14

SKILL SETS

483

UNITS OF COMPETENCY

and associated assessment requirements and covers military skills on land, in the air and on water, explosive ordnance, sensor operations, electronic forensics, simulator maintenance, range control, management (in areas such as intelligence, procurement, contracting, risk management, planning, policy development, OH&S etc.), institutional and operational chaplaincy.

The DEF Defence Training Package provides the only nationally recognised Vocational Education and Training (VET) qualifications for occupations involved in the manufacture, storage, distribution, maintenance and use of explosives, mechanic, health officer, combat system operations, sensor operations, electronic forensics, simulator maintenance, range control for land, sea and air, management, work health and safety and pastoral care chaplaincy.

The DEF Defence Training Packages contain the following qualifications:

CERTIFICATES

- Certificate I in Defence Force Cadets
- Certificate II in Military Skills
- Certificate II in Explosive Ordnance Manufacture
- Certificate II in Explosive Ordnance
- Certificate III in Explosive Ordnance Operations
- Certificate III in Air Dispatch
- Certificate III in Explosive Ordnance Maintenance
- Certificate III in Explosive Ordnance Manufacture
- Certificate III in Explosive Ordnance Proof and Experimental
- Certificate III in Field Petroleum Operations
- Certificate III in Defence Public Affairs
- Certificate III in Sensor Operations
- Certificate III in Preventive Health
- Certificate IV in Electronic Forensics
- Certificate IV in Explosive Ordnance Manufacture
- Certificate IV in Simulator Maintenance
- Certificate IV in Defence Public Affairs
- Certificate IV in Performance Based Contracting
- Certificate IV in Explosive Ordnance Proof and Experimental

14

- Certificate IV in Test and Evaluation
- Certificate IV in Defence Reporting
- Certificate IV in Defence Paralegal Services
- Certificate IV in Preventive Health
- Certificate IV in Psychological Support
- Certificate IV in Range Control
- Certificate IV in Defence Financial Administration
- Certificate IV in Intelligence Operations
- Certificate IV in Work Health Safety
- Certificate IV in Explosive Ordnance Operations
- Certificate IV in Explosive Ordnance Maintenance
- Diploma of Enterprise Architecture Practice
- Diploma of Range Control and Management
- Diploma of Simulator Maintenance
- Diploma of Leadership
- Diploma of Evaluations
- Diploma of Electronic Forensics
- Diploma of Institutional and Operational Chaplaincy
- Diploma of Preventive Health
- Diploma of Compliance
- Diploma of Explosive Ordnance Proof and Experimental
- Graduate Certificate in Explosive Ordnance
- Graduate Diploma of Explosive Ordnance

DIPLOMA - ADVANCED DIPLOMA

- Diploma of Defence Public Affairs
- Diploma of Defence Financial Management
- Diploma of Test and Evaluation
- Diploma of Explosive Ordnance Manufacture
- Diploma of Defence Paralegal Services
- Diploma of Explosive Ordnance



**THE DEFENCE TRAINING PACKAGE IS
ON THE SCOPE OF REGISTRATION OF 36
REGISTERED TRAINING ORGANISATIONS.**

POL TRAINING PACKAGE

The POL Training Package provides nationally recognised Vocational Education and Training (VET) qualifications for policing occupations in areas such as community engagement, intelligence, search and rescue, forensics, investigation, negotiation, prosecution and protective services.

The POL Training Package contains the following qualifications:

CERTIFICATES

- Certificate II in Community Engagement
- Certificate III in Aboriginal Community Policing
- Certificate III in Police Liaison
- Certificate IV in Protective Services
- Certificate IV in Aboriginal Community Policing

DIPLOMA - ADVANCED DIPLOMA

- Diploma of Police Bomb Technical Response
- Diploma of Police Intelligence Practice

THE POL POLICE TRAINING PACKAGE COMPRISES

26
QUALIFICATIONS

2
SKILL SETS

146
UNITS OF COMPETENCY
and associated assessment
requirements.



16

- Diploma of Police Search and Rescue Coordination (Marine/Land)
- Diploma of Policing
- Diploma of Forensic Investigation
- Advanced Diploma of Human Source Management
- Advanced Diploma of Police Search and Rescue Management
- Advanced Diploma of Forensic Investigation
- Advanced Diploma of Undercover Operations (Operative/Controller)
- Advanced Diploma of Police Supervision
- Advanced Diploma of Police Negotiation
- Advanced Diploma of Police Investigation
- Advanced Diploma of Police Witness Protection
- Advanced Diploma of Surveillance
- Advanced Diploma of Police Intelligence Operations
- Advanced Diploma of Police Close Personal Protection
- Graduate Certificate in Police Management
- Graduate Certificate in Police Prosecution
- Graduate Certificate in Police Investigation
- Graduate Certificate in Forensic Fingerprint Investigation
- Graduate Certificate in Crime Scene Investigation
- Graduate Certificate in Forensic Firearm Examination

PUA12 PUBLIC SAFETY TRAINING PACKAGE

The PUA12 Public Safety Training Package provides the only nationally recognised Vocational Education and Training (VET) qualifications for occupations involved in aquatic rescue, aquatic search and rescue, emergency communications centre operations, community safety, biosecurity response operations, leadership, emergency management, search and rescue – management, firefighting operations, supervision and management, firefighting and emergency operations and fire investigation.

The PUA12 Public Safety Training Package contains the following qualifications:

CERTIFICATES

- Certificate II in Public Safety (SES)
- Certificate II in Public Safety (Aquatic Rescue)
- Certificate II in Public Safety (Firefighting Operations)
- Certificate II in Public Safety (Firefighting and Emergency Operations)
- Certificate III in Public Safety (Aquatic Search and Rescue)
- Certificate III in Public Safety (Firefighting and Emergency Operations)
- Certificate III in Public Safety (Biosecurity Response Operations)
- Certificate III in Public Safety (Emergency Communications Centre Operations)
- Certificate III in Public Safety (Community Safety)
- Certificate III in Public Safety (SES Operations)
- Certificate III in Public Safety (SES Rescue)
- Certificate III in Public Safety (Firefighting Operations)
- Certificate IV in Public Safety (SES Leadership)
- Certificate IV in Public Safety (Emergency Communications Centre Operations)
- Certificate IV in Public Safety (Disaster Victim Identification Operations)

THE PUA12 PUBLIC SAFETY TRAINING PACKAGE COMPRISES

38

QUALIFICATIONS

26

SKILL SETS

338

UNITS OF COMPETENCY

and associated assessment requirements and covers firefighting and emergency operations, search and rescue, SES operations, community safety, aquatic search and rescue, and biosecurity.

18

- Certificate IV in Public Safety (Community Safety)
- Certificate IV in Public Safety (Biosecurity Response Leadership)
- Certificate IV in Public Safety (Firefighting Supervision)
- Certificate IV in Public Safety (Aquatic Search and Rescue Management)
- Certificate IV in Public Safety (Leadership)

DIPLOMA - ADVANCED DIPLOMA

- Diploma of Public Safety (Emergency Management)
- Diploma of Public Safety (Firefighting Management)
- Diploma of Public Safety (Community Safety)
- Diploma of Public Safety (SES Operations Management)
- Diploma of Public Safety (Search and Rescue - Coordination)
- Diploma of Public Safety (Biosecurity Response Management)



- Advanced Diploma of Public Safety (Emergency Management)
- Advanced Diploma of Public Safety (Fire Investigation)
- Advanced Diploma of Public Safety (Search and Rescue - Management)
- Advanced Diploma of Public Safety (Firefighting Management)
- Advanced Diploma of Public Safety (Disaster victim identification coordination)
- Advanced Diploma of Public Safety (Community Safety)

THE PUA12 PUBLIC SAFETY TRAINING PACKAGE IS ON THE SCOPE OF REGISTRATION OF 290 REGISTERED TRAINING ORGANISATIONS.

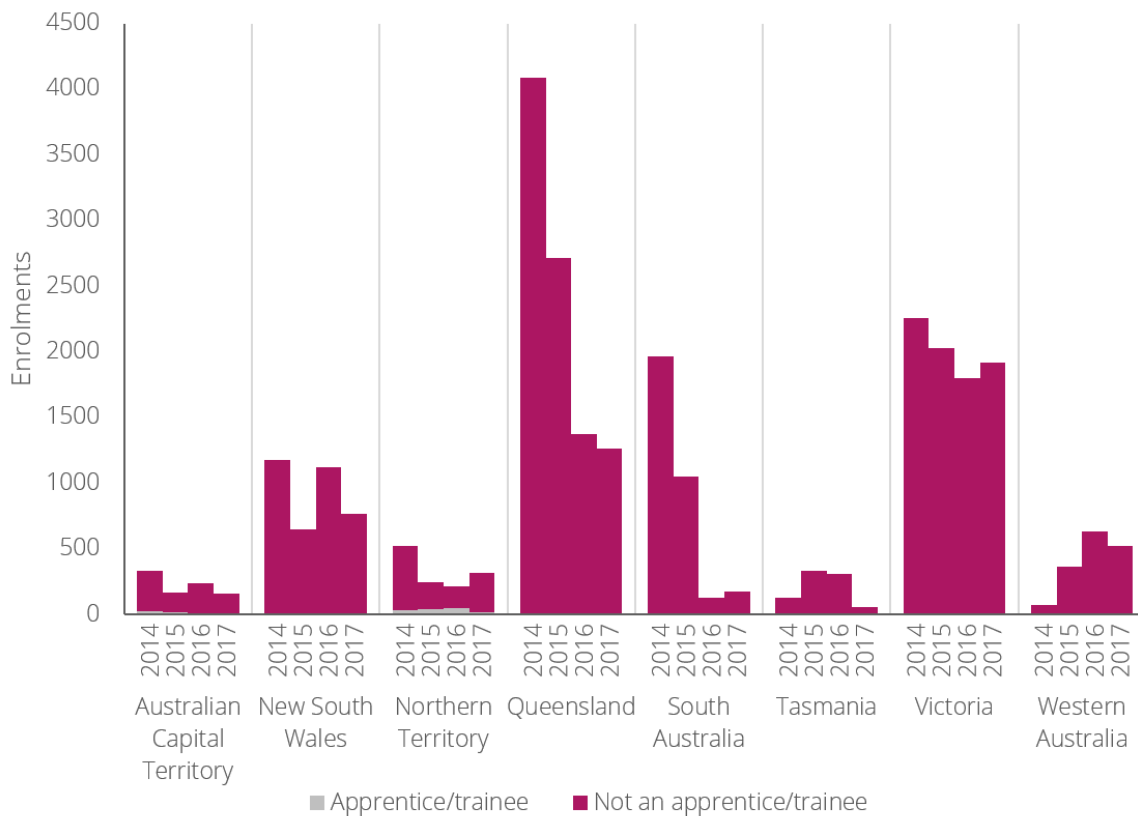


TRAINING DATA

The charts below investigate commencing qualification enrolments by apprentice/trainee status in each State and Territory along with Unit enrolments by delivery type over four years. At the national level, qualification enrolments in the PUA12 Training Package have decreased by just over 50% over the last four years while Units of Competency enrolments have increased by the same percentage.

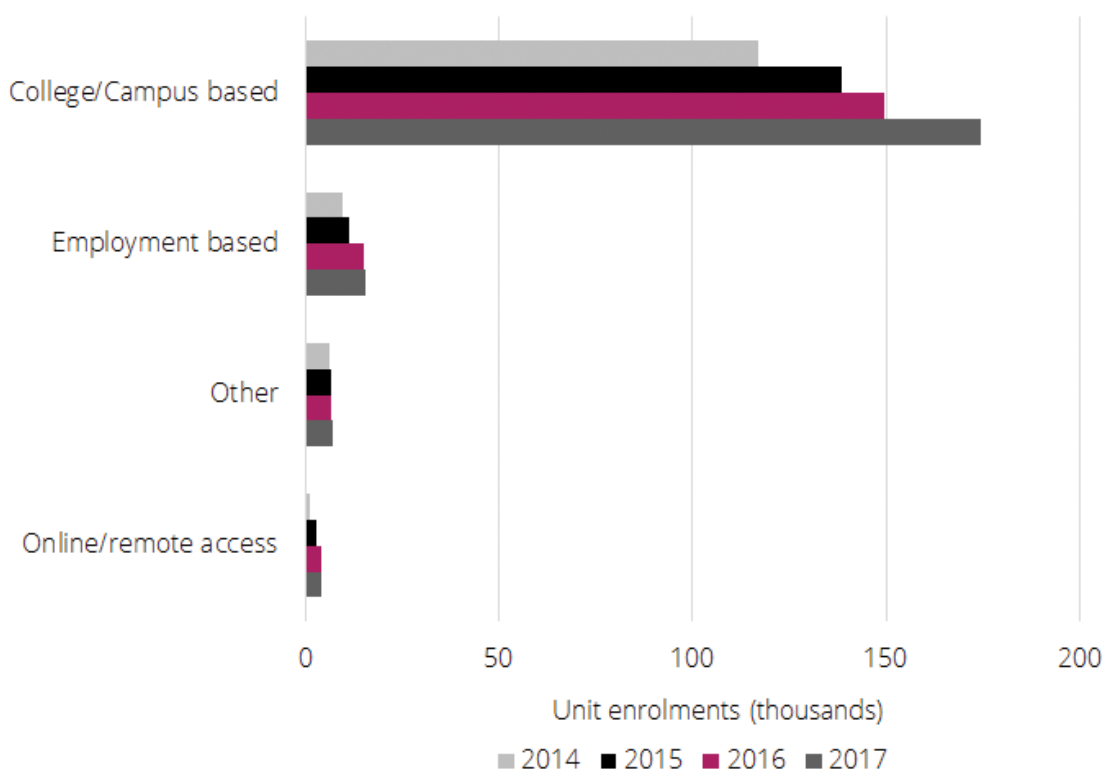
Due to security and operational requirements, Defence and Police manage their training requirements internally and are not included in publicly available, funded training programs. Enrolment data for DEF and POL are therefore absent from the following training data.

QUALIFICATION ENROLMENTS BY STATE/TERRITORY



Commencing enrolments for PUA12 qualifications have declined in most States/Territories in Australia, but most significantly in Queensland and South Australia where enrolments have declined by 69% and 91%, respectively, since 2014. Conversely, enrolments in WA are more than six times larger than they were in 2014, despite declining slightly from 2016.

UNIT ENROLMENTS BY DELIVERY TYPE



Since qualification enrolments have declined so significantly, it may be a little surprising to see Unit enrolments increasing in the same period. What the graph doesn't show is that the number of PUA12 Units being delivered outside of qualifications accounts for 58% of all PUA12 Unit enrolments and such Unit enrolments have nearly doubled since 2014.

EXPLANATORY NOTES

Training Charts

The Training and the Total VET Activity (TVA) data is collected from all types of training providers and not only those in receipt of Commonwealth or State funding. TVA data collection commenced in 2014. For Enrolments by Delivery type 'Other' includes; Recognition of Prior Learning (RPL), Credit Transfers and Units where the mode of delivery is mixed.

Exemptions

Where the submission of training data to TVA conflicts with defence or national security legislation or jeopardise the security or safety of personnel working in defence, border protection, customs or Australian police departments, an exemption from reporting training data is available.

Organisations that deliver training for vital services to the community (such as emergency, fire, first aid and rescue organisations) may have received an exemption to submit data to TVA. From 1 January 2016 however, the exemption from reporting applies only in respect of training activity not delivered on a fee-for-service / commercial basis.

CHALLENGES AND OPPORTUNITIES

FINANCIAL AND ECONOMIC FACTORS

Australia's economy has now completed its 27th consecutive year of economic growth. The current and projected risk to the continuation of that growth is high. While growth from non-mining business, investment, household consumption, public final demand and export have sustained us through the wind-down of the mining boom,¹ other factors, some outside Australia's control, threaten our economic well-being. The key risks are a market crash brought on by the escalating trade war between China and the USA and the increasing threat of cyber-attack.

At present, government policy has the shorter-term objective of facilitating Australia's transition from a resource and commodities-based economy into a technologically and innovation-based, services-oriented economy. Productivity growth is at the core of both short-term and longer-term challenges.²

Most organisations within the Public Safety sector are state, territory or federally funded. Governments continue to demand better outcomes for less investment and continue to seek new solutions to complex problems. Innovation and efficiency are the pre-requisites for ensuring they have the productivity-boosting policies in skills, trade and the workplace that will drive investment and jobs is essential. However, state, territory and federal governments continue to face the reality of population growth and climate change.

The cost of training, in terms of budget and time, continues to be the biggest challenge for training. Most training is undertaken to meet skill requirements that mitigate risk and to comply with regulations.³ Financial pressures and the transitioning economy also mean there is less money in training budgets; this impacts not only the type of training that is delivered (classroom or on-the-job) but also the method of delivery. Innovative training design leads to making training more accessible in the workplace and at home using technology. On-line training and testing are growing rapidly in all Public Safety agencies, as well as the increased use of workplace training simulations.

STRATEGIC ISSUES

Australia has 54 Natural Resource Management (NRM) regions,⁴ which are defined by catchments and bioregions. Many activities of organisations and ecosystem services within the NRM regions are vulnerable to impacts of climate change. These NRM regions are grouped into 'clusters' which largely correspond to the broad-scale climate and biophysical regions of Australia. The clusters are diverse in their history, population, resource base, geography and climate. Therefore, each cluster has a unique set of priorities for responding to climate change.

Public Safety organisations that provide services within these clusters will face challenges that may be unique to that discrete, local environment. Adapting to these challenges in the future will be of key importance to agencies, jurisdictions and organisations seeking to plan the delivery of services across a broad sector of Australian society.

Throughout 2015-2017, emergency service agencies around Australia participated in workshops hosted by the Bushfire and Natural Hazards CRC to consider the major issues in natural hazards emergency management.

Recognising that a large segment of the Australian community is not active in their own preparedness for emergencies and natural disasters, the National Strategy for Disaster Resilience (NSDR) purposely advocates for the community to be active participants in their own resilience. This represents a major policy shift in emergency management moving from the traditional position of the emergency services serving the community, to where the community is empowered to act as its own agent in emergency management.⁵

There are a series of community engagement activities that the emergency management sector utilises to build community resilience. All of these activities centre on the concepts of shared responsibility and community resilience which encourages the active participation of individuals, businesses and communities in government processes and in this case emergency management and the preparedness for emergencies.⁶



Australia's national defence strategic outlook to 2035⁷ includes many challenges which require preparation. While there is a remote prospect of a military attack by another nation on Australian territory in the foreseeable future, Australia's strategic planning is not limited to defending national borders. Strategic planning recognises the regional and global nature of Australia's strategic interests and the different sets of challenges created by the behaviours of countries and non-state factors such as terrorists.

Australians will continue to be threatened by terrorism at home and abroad.⁸ The spread of extremism and violence will be worsened by foreign terrorist fighters returning from conflicts to their countries of origin, including Australia and other nations in our region, and terrorist attacks by individuals inspired and radicalised by extremist messages. Over the next 20 years, terrorism will continue to evolve in ways which threaten Australia's interests. Within Australia, Police and Defence will provide critical capabilities as part of our national counter-terrorism arrangements.⁹

The geopolitical landscape is currently uncertain under the current United States presidency and China's actions in the South China Sea, as well as North Korea's nuclear threats and the pending UK 'Brexit' from the EU. American foreign policy is evolving and still has some way to play out

regarding how it affects Australia's security role in the region under the current administration.¹⁰ There is also concern that China is using its economic power, ostensibly through the Belt and Road initiative, to further its strategic ends¹¹ in the Pacific region. It is further exacerbated by China's current trade war with the United States.

According to the Productivity Commission, changes in the frequency, intensity, location and timing of extreme weather events are likely to be how most Australians experience climate change.¹² Their report outlines a range of policy reforms to help households, businesses and governments deal with current climate variability and extreme weather events. A subsequent Senate Inquiry made recommendations that "Australian governments specifically address issues of compatibility and capacity to facilitate the most effective interoperability of emergency service organisations and their key personnel, especially for fire services" to reduce the impact and costs of such events now and into the future.¹³

24

NEW TECHNOLOGIES

The exponential advances in new technologies provide enormous challenges and opportunities globally. Much of the emerging technology has still to have its full potential exploited. It is particularly true of technologies such as 3D printing, Internet of Things (IoT), remotely piloted aircraft (drones), artificial intelligence (AI), augmented reality, blockchain, cyber security, robotics, geospatial mapping and monitoring of global information systems. There is a real risk that these technologies may outstrip our capacity to train and/or acquire the skills required to manage new work, or threats. Among the challenges of automation, there can also be expected to be a degree of deskilling.

New technologies promise to reshape markets in what many are calling the Fourth Industrial Revolution. Technologies being developed and deployed to solve problems have caused rapid societal shifts, creating new problems in their wake. Widespread breaches of personal data and automation-related job changes have made 'Big Tech' the subject of increased government oversight, but policy is not keeping pace with technology.¹⁴

To exploit opportunities to participate in these new technologies will require fundamental shifts in corporate awareness of exactly what those opportunities are. Concerning AI, this means an understanding of deep learning theory, deep reinforcement training, lean and augmented data learning and hybrid learning models, amongst others. Regarding blockchain, there needs to be a move away from the mindset that it only relates to cryptocurrency. In the future blockchain will be used to manage critical functions such as risk, compliance, legal and evidentiary integrity.

Language, literacy and numeracy (LLN) in VET is important at all levels including traineeships, apprenticeships, certificate/diploma programs, and degree and postgraduate programs.¹⁵ Now, and into the future, digital literacy will also be a pre-requisite for many job roles, including in public safety. Digital literacy is more than knowing how to use a word processor or a spreadsheet – it means being able to find, evaluate, create and communicate information, requiring both cognitive and technical skills¹⁶ – the management of data will determine the success of most public safety operations whether it be fire (GIS, geospatial



mapping, drones), Police (drone monitoring and surveillance, evidence management, event planning) or Defence (GIS, geospatial mapping, drones).

The increasingly rapid development of new technologies has an upside and downside for public safety – as much as it provides better tools for policing and defence. It also presents greater challenges in combatting technology-related crime, including cybercrime, propaganda (foreign interference in public affairs including elections) and terrorism encouraged by the radicalisation of young people through social media.

Around the world, forward-thinking public safety agencies are adopting innovative technologies like biometrics, body-worn cameras and new forms of digital weaponry to protect citizens. At the same time, new data and video analytics technologies, which process large volumes of data and make predictions around future events, are rapidly becoming one of the most important pieces of the public safety puzzle.¹⁷

The demand for aerial intelligence gathering has grown significantly. It was scheduled for use in firefighting in some Australian States from 2017 and beyond and is being used and being considered for use by some Australian police agencies to supplement their current air capabilities. This demand will require new Skill Sets within policing and firefighting, whilst Defence is already rapidly expanding its use of remotely piloted aircraft across Army, Navy and Air Force.



The Foreign Affairs, Defence, and Trade References Committee Report 'Use of unmanned air, maritime and land platforms by the Australian Defence Force' of June 2015 made nine recommendations regarding the deployment of drones by the Defence Forces. In Recommendation two, the Committee recommended that the Australian Defence Force acquire armed, unmanned platforms when the capability requirement exists, and the Australian Government make a policy statement regarding their use. Moreover, Recommendation Three stated that the Australian Defence Force should notify the Australian Government of measures taken to address any identified gaps (in) training and dissemination programs regarding the law of armed conflict and international humanitarian law when armed unmanned platforms are acquired.

Public safety organisations increasingly recognise the importance of drone technology in their operations. It will increase the demand for specialised training and acquisition of qualifications such as the CASA Remote Pilot Licence (RePL).

FIRE INDUSTRY

In recent years, the public safety industry recognised the need for police and defence to have separate training packages to ensure legislative and government policy changes were swiftly incorporated into their training. More recently, the Public Safety Industry Reference Committee acknowledged that fire may also be better served with a separate training package. This acknowledgement recognises that fire is a high-risk occupation that requires adherence to a uniquely methodical management of training.

FIRE SAFETY IN BUILDING AND CONSTRUCTION

The 2014 fire at the Lacrosse apartment building in Melbourne's Docklands, the 2017 Grenfell Tower catastrophe in the United Kingdom, the Christmas 2018 evacuation of the Opal Tower apartment building under stress in New South Wales and the 2019 Neo200 Tower blaze in Spencer Street, Melbourne, underscore the reality and potential for catastrophe and the shortcomings within the building and construction industry.

The Grenfell Tower fire tragedy has been a wake-up call for many institutions, governments and organisations in Australia.¹⁸ The Victorian Cladding Taskforce, created in July 2017 after the fatal Grenfell fire reported on the extent of

26

non-compliant cladding across Victoria. Up to 1,400 buildings in Victoria could have potentially dangerous panelling similar to the one found in London's Grenfell Tower and Melbourne's Lacrosse building fires.¹⁹ The Queensland Non-Conforming Products Audit Taskforce – Status report of 2017 identified around 12,000 private buildings likely to require review and expect up to around 10 per cent of privately-owned buildings across Queensland may need some detailed assessment.²⁰

In mid-2017 the Building Ministers' Forum (BMF) requested that an assessment of the effectiveness of compliance and enforcement systems for the building and construction industry be undertaken nationally. In February 2018, the final report by Mr Peter Shergold AC and Ms Bronwyn Weir focussed on shortcomings in the implementation of the National Construction Code (NCC).²¹ The goal of the assessment was to enhance public trust through effective implementation of building and construction standards that protect the interests of those who own, work, live, or conduct their business in Australian buildings. The report contained 24 recommendations, including specific recommendations that are relevant to AFAC member agencies. Recommendation 2 is that each jurisdiction requires building approval documentation to be prepared by appropriate categories of registered practitioners, demonstrating that the proposed building complies with the National Construction Code. Recommendation 8 is that, consistent with the International Fire Engineering Guidelines, each jurisdiction requires developers, architects, builders, engineers and building surveyors to engage with fire authorities as part of the design process.

There is an opportunity to build the capability of fire safety personnel to work with building practitioners in the design phase of building and construction to ensure that Building fire safety requirements are met consistently with the requirements of the National Construction Code.

AVIATION ROLE IN THE FIRE INDUSTRY

In 2011, the review of the Fire Aviation Training and Assessment Framework (FATAF), which aims to achieve a national approach to the training and assessment of aviation-related roles in fire and emergency management, identified a shortage of aviation personnel to fulfil critical aviation roles. It is anticipated this is likely to increase over time. The current National Aerial Firefighting Centre (NAFC) formed by the Australian States and Territories in July 2003 provides a national cooperative arrangement for combating bushfires. It achieves this by facilitating the coordination and procurement of a fleet of highly specialised firefighting aircraft that are readily available for use by State and Territory emergency service and land management agencies across Australia. NAFC also plays a key role in ensuring the sharing of aerial firefighting resources between emergency service and land management agencies throughout Australia, and in the development of national protocols and systems for aerial firefighting.²² The role aviation plays in the broader fire and emergency management industry will place increasing demands on the recruitment and specialist training of personnel. Nationally accredited training will also be essential to meet demand.

The 2018 Review of Aviation Roles in Fire and Emergency Management – Part 1, undertaken by Dobbin Consulting on behalf of AFAC and the NAFC (National Aerial Firefighting Centre) aims to achieve a national approach to the training and assessment of aviation-related roles in fire and emergency management. The review looked at the Fire Aviation Training and Assessment Framework (FATAF) and explored the aviation-related roles used by AFAC member agencies and suggested those to be included in an updated FATAF. It also identified relevant Civil Aviation Safety Authority (CASA) licence and certification requirements, and the available training for these roles within the Aviation Training Package (AVI).²³

The report found that most AFAC member agencies use aviation-related roles to assist with managing fire, but are increasingly using aviation to help manage a broader range of emergencies. The current FATAF is very fire focused and more flexible training pathways are increasingly required.

Also, the use of nationally accredited training is fundamental to aviation-related skills being transferable across jurisdictions, and between the fire/emergency management industry and the broader aviation industry. The use of nationally accredited training also underpins other industry initiatives such as the Emergency Management Professionalisation Scheme (EMPS).²⁴

AUTOMATION – SELF DRIVING VEHICLES AND MANAGEMENT OF CRASHES INVOLVING ELECTRIC AND HYBRID VEHICLES.

Vehicle automation comes with additional risks not usually associated with non-automated cars, including increased hardware and software failures, malicious hacking and increased risk-taking when the driver feels safer and takes additional risks.²⁵

In 2017, trials using self-driving cars were announced in Victoria and South Australia in cooperation with major car manufacturers. While both states require people to be behind the wheel, ready to take control, the laws of both states are yet to address the complexities of control, responsibility and enforcement fully.

Arising out of the rapid technological advances in vehicle automation and design are the risks involved in the management of electrified vehicles in road crashes. A 2012 report by the Society of Automotive Engineers (SAE) in the US highlighted risks to first responders and tow operators from potential electric shock from damaged systems not disengaged during or immediately after a crash.

The training of emergency services personnel, and greater public awareness of the hazards involved will require urgent assessment, e.g. bystanders unaware of the danger, who seek to assist injured persons in an electrified vehicle, could be subject to serious injury including electrocution.

In hybrid vehicles, there is the added complication in high impact collisions of components breaking free, causing high voltage sparks and ignition of fuel sources.



EMPLOYMENT AND SKILLS OUTLOOK

EMPLOYMENT DEMOGRAPHICS

The following charts provide an overview of the Defence, Police, and Public Safety workforce at a glance. These include workforce by State/Territory, gender-composition by employment type, and the projected employment for the next three years.

PUBLIC SAFETY WORKFORCE BY STATE/TERRITORY (2009 – 2018)

Though employment in New South Wales is showing a moderate decline in the last decade, this trajectory is not corroborated in the Census data. Instead it appears that the chosen years (2009 and 2018) coincide with the high point and low point of natural variation within the data for that State. Further, the size of the Public Safety workforce usually correlates strongly with population growth and as such, we expect the New South Wales workforce to reflect such growth.

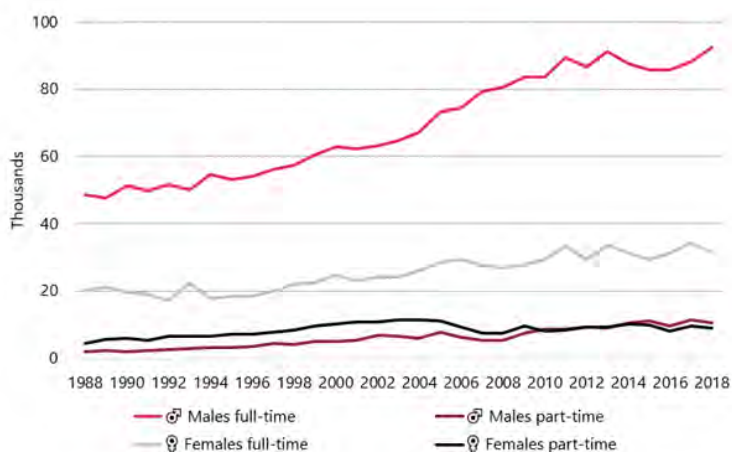
Source: Australian Bureau of Statistics (2017)
6291.0.55.003 - Labour Force, Australia, Detailed.
Australian Government.



GENDER BY EMPLOYMENT TYPE

The proportion of females in the Public Safety workforce has fallen slightly from 33% in 1988 to 28% today. While there is no indication in the data that the proportion of females will increase, there is some evidence that females are at least keeping pace with males entering the workforce at 2% per annum for the last decade.

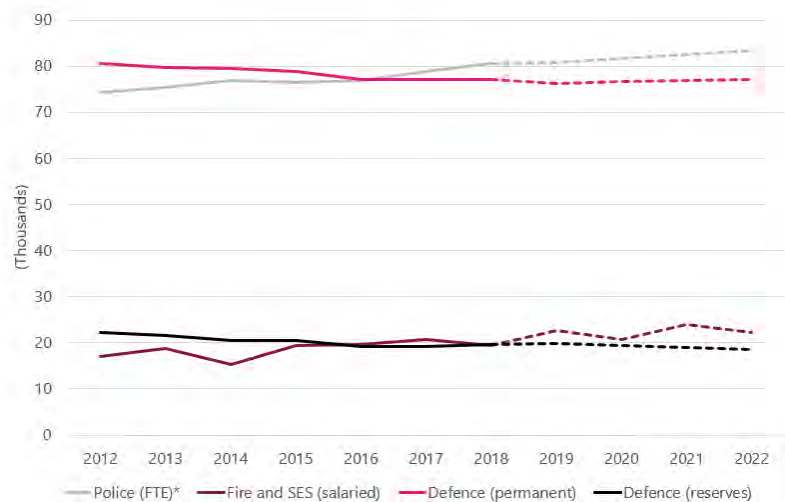
Source: Australian Bureau of Statistics (2017)
6291.0.55.003 - Labour Force, Australia, Detailed.
Australian Government.



PROJECTED AND HISTORICAL PUBLIC SAFETY WORKFORCE (2012 – 2022)

Excluding Reserves, the forward estimate for Defence permanent forces projects an increase of 1.32% by 2022 and a slight decrease in APS staff over the same period. To maintain the historical trend, salaried Firefighting and SES workforces would need to grow by around 4 per cent per year for the four years to 2022. Police are expected to grow by 3.6 per cent over the same period.

Source: Defence Portfolio Budget Statements, Police State and Territory Annual Reports, Report on Government Services (RoGS)



EXPLANATORY NOTES

Labour Force Data

Outside of Census years, the size of an industry's workforce is established by the Australian Bureau of Statistics using the Labour Force survey. This dataset provides a 30-year view of the industry where, like the Census, industry is assigned at the discretion of the individual respondent. Given that the survey is sample-based, it should also be understood that the smaller the industry being measured, the larger the margin of error.

The scope of the Labour Force survey is limited to the civilian population of Australia and therefore members of permanent defence forces are excluded from the survey.

Police State and Territory Annual Reports

*Full Time Equivalent. Headcount data is reported in Western Australia in place of FTE data.

PUBLIC SAFETY INDUSTRY SKILL SHORTAGES

On behalf of the Public Safety IRC, AIS conducted an online survey for stakeholders, 11 September 2018 and 14 January 2019. The IRC sought feedback on the current skill shortages and the reasons for the shortages, as perceived by industry stakeholders.

PUBLIC SAFETY SKILL SHORTAGES

69.6% per cent of respondents reported experiencing a skills shortage in the last 12 months. The occupations reported as being in shortage were:

- 1** EDUCATORS, TRAINERS AND ASSESSORS
- 2** MANAGEMENT (GENERAL)
- 3** ADMINISTRATION
- 4** VEHICLE OPERATION
- 5** FIREFIGHTERS (AUXILIARY, VOLUNTEER)

REASONS FOR SHORTAGE

Employers identified the following reasons for the shortage with the most frequent response listed first:

- 1** COST/TIME TO ACHIEVE THE REQUIRED QUALIFICATION
- 2** COMPETITION FROM OTHER ORGANISATIONS
- 3** WAGES / SALARIES CONSIDERED TOO LOW
- 4** AGEING WORKFORCE / CURRENT STAFF RETIRING
- 5** HIGH STAFF TURNOVER

**CONTEMPORARY PUBLIC SAFETY ROLES REQUIRE
A PROFESSIONAL AND FLEXIBLE WORKFORCE
WITH AN EXPANDED RANGE OF SKILLS**

PRIORITY SKILLS

The priority skills of the Public Safety industry are drawn from stakeholder responses to the Public Safety IRC Skills Forecast survey conducted between 11 September 2018 and 14 January 2019.

SKILL CATEGORY

In order of priority to the industry, the following skills were identified from the survey as the most important for the Public Safety industry.

- 1** HEALTH/SAFETY
- 2** SEARCH AND RESCUE
- 3** EMERGENCY RESPONSE
- 4** FIRE FIGHTING
- 5** COMMUNITY ENGAGEMENT

GENERIC SKILLS

The Generic Skills listed are provided to AIS by the Department of Education and Training. Within the survey, the IRC asks stakeholders to rank these skills in order of importance to the industry. Ranking of the 12 generic workforce skills in order of importance to the Public Safety industry are as follows.

- 1** MANAGERIAL / LEADERSHIP
- 2** COMMUNICATION / VIRTUAL COLLABORATION / SOCIAL INTELLIGENCE
- 3** TECHNOLOGY
- 4** DESIGN MINDSET / THINKING CRITICALLY / SYSTEM THINKING / SOLVING PROBLEMS
- 5** LANGUAGE, LITERACY AND NUMERACY (LLN)
- 6** LEARNING AGILITY / INFORMATION LITERACY / INTELLECTUAL AUTONOMY AND SELF-MANAGEMENT
- 7** ENVIRONMENTAL AND SUSTAINABILITY
- 8** CUSTOMER SERVICE / MARKETING
- 9** SCIENCE, TECHNOLOGY, ENGINEERING, MATHEMATICS (STEM)
- 10** DATA ANALYSIS
- 11** FINANCIAL
- 12** ENTREPRENEURIAL

WORKFORCE SUPPLY SIDE CHALLENGES AND OPPORTUNITIES

AGEING WORKFORCE

Population ageing is largely a positive outcome, primarily reflecting improved life expectancy. However, population growth and ageing will affect labour supply, economic output, infrastructure requirements and governments budgets.²⁶ The median age (the age at which half the population is older, and half is younger) of the Australian population has increased by three years over the last two decades, from 34 years in 1997 to 37 years in 2017.²⁷

Overall, there is an increasing upward trend in the average age of the workforce in Public Safety with an increasing bulge in the 55–60 years of age population. People are staying in their jobs longer.²⁸

The Federal Government in the 2014-5 Budget stated that they intended to increase the Age Pension qualifying age to 70 years by 2035. This will impact how employers engage with older workers. Future workers, both young and old, will be better educated than previous generations. Higher levels of tertiary education are strongly associated with greater labour force participation.²⁹

Public Safety roles, by nature, encompass high-stress occupations. An ageing workforce presents challenges regarding health, the volume of retirements and consequential loss of organisational and industry specific knowledge, as well as a loss of mentors. Emphasising leadership and management development in a much younger cohort will be essential to be able to maintain effective services. Strategies to retain the experienced older worker will also need to be developed.

Contemporary Public Safety roles require a professional and flexible workforce with an expanded range of skills, knowledge and supporting resources to meet the changing demand for Public Safety services. Agencies, jurisdictions and organisations are focussing on the capability to enhance service delivery and promote efficiencies in achieving desired outcomes. Capability is articulated as a key

mechanism covering people and supporting resources to build on strengths, managing transitions and change, and supporting long-term planning.

Workplace health remains an important consideration for the Public Safety sector. Recent reviews and reports have served to strengthen internal consideration of work health and safety, mental health and gender equality within Defence, Public Safety and Policing organisations.^{30 31 32 33}

HEALTH AND WELLBEING

'Answering the Call' report emanated from a national survey as part of Beyond Blue's National Mental Health and Wellbeing Study of Police and Emergency Services, funded by Beyond Blue and the Bushfire and Natural Hazards Cooperative Research Centre.

The national survey of police, fire, ambulance and SES staff and volunteers revealed more than 123,000 of them were diagnosed with mental health problems. It also showed 39% of employees (about 45,200), and 33% of volunteers (about 78,600) were professionally diagnosed with a mental health condition, compared with 20% of all adults in Australia.

Eighteen per cent of ambulance employees and four per cent of fire and rescue workers suffered the same abuse. Twenty-five per cent of police, 13 per cent of ambulance employees and four per cent of fire and rescue workers were physically attacked or assaulted sometimes, often or very often.

Included among the recommendations were: under the leadership of the Australian Government, all governments – federal state and territory – should work together on a national policy approach and funded action plan which ensures adequate resourcing, and a coordinated and sustainable approach to reduce the high rates of psychological distress, PTSD and suicide behaviours, and to support workplace mental health and wellbeing in the police and emergency

services sector. Ensuring that adequate funding is provided to police and emergency service agencies is important to enable the findings from this research to be embedded into their unique workplace mental health and wellbeing strategies. The Australian Government should lead the establishment of a funded national approach, implemented locally, to better support post-service employees and retirees from the police and emergency services workforce, including providing clinical and psychosocial services.³⁴

PROFESSIONALISATION

Currently, major initiatives are occurring in Defence, Fire, Emergency Management and Emergency Services toward greater professionalisation, involving programs to accredit personnel who have completed a process to recognise their skills, abilities and experience nationally. These initiatives include the AFAC Emergency Management Professionalisation Scheme and Defence Professionalisation program for the APS (Job Families Strategy).

The Australia New Zealand Policing Profession Framework replaces the Australia New Zealand Police Professionalisation Strategy 2013-2018 which has previously directed the work on Police qualifications and Units of Competency. The new Framework was developed by the Australia New Zealand Council of the Police Profession (ANCoPP). ANZCoPP's remit includes the development, establishment, maintenance and approval of police education and training products. The remit of ANZCoPP together with the new Framework will direct the progress work in relation to the POL Training Package.

As Defence adopts new and more complex capabilities, the demands on the integrated workforce will increase. New technologies will require new skills and will increasingly rely on the diverse range of skills of the integrated workforce. To meet these demands, the Federal Government will undertake the largest single re-balance of the integrated Defence workforce in a generation through the implementation of the First Principles Review.

WORKFORCE OPTIMISATION

The Australian Public Service Commission (APSC) Workplace Diversity Program aims to include, as much as possible, the diversity of the Australian community into its workplace and activities. This program provides a benchmark for Public Safety organisations around Australia.

The sector has a diverse workforce and consequently faces language, literacy, and numeracy (LLN) challenges. Ensuring resources are learner-centred and meet the diverse needs of workers requires diverse strategies to address these needs.

In Public Safety, workforce optimisation and the building of capability has been the focus over recent times. Workforce optimisation encapsulates all strategic directions currently supported across all levels of government such as:

- ▶ Workforce diversity
- ▶ Flexible work arrangements
- ▶ Inclusive culture
- ▶ Gender equity

It is acknowledged within the context of public safety, that some of these strategic directions are to be pursued, but not at the expense of the quality of the service that members of the community receive or expect. Further, this commitment to workforce optimisation and the building of capability should not take place at the expense of lowering of standards as set by the Public Safety stakeholders.

Recent changes to Defence policy include provisions for women to serve in frontline combat roles. Implementation of these policy changes is ongoing and is designed to increase the female participation rate across many traditionally male-dominated occupations and roles.

Gender, cultural and linguistic diversity within the fire and emergency services is an area of focus nationally and locally. Initiatives are occurring both at the national and local level to respond to the needs of a diverse and geographically-dispersed workforce.

Male Champions of Change (MCC): Fire and Emergency was established in April 2017 with

34

support from the Australasian Fire and Emergency Services Authorities Council (AFAC). Its Progress Report 2017–18 outlined the industry's concern that women represent only 22% of the workforce across staff and volunteers and only 7% are in management roles. AFAC Council joined the MCC strategy in 2017 looking for a fresh and coordinated approach to tackling these issues. As a part of this, male leaders are expected to support their women peers to shift the current system which perpetuates inequality. The report states that attracting more women is a major strategic workforce planning issue for the sector and that the traditional roles of firefighter and emergency service responder are evolving rapidly, particularly as the work extends into the fire and emergency prevention, preparedness, incident response and recovery. This demands new and different skills and capabilities in the industry.³⁵

Defence will also seek to enhance the recruitment of Indigenous Australians and Australians from culturally and linguistically diverse backgrounds in both the ADF and APS. The Defence APS has increased its annual intake of Indigenous trainees and is making greater use of special measures to attract Indigenous staff. These initiatives will be complemented with retention measures, including career development and mentoring programs.³⁶

VET REFORM

Due to the specific nature of the workforce skills required by Defence, Police, Fire, Emergency Services and Emergency Management agencies, the significant burden for review and development of Training Packages and Training Package products is undertaken by these respective agencies, at considerable cost to the Public Safety sector. This requirement does not necessarily apply to the same extent in other industry sectors.

Public Safety stakeholders at the 2018 AIS Skills Forums identified the need for greater integration of VET and Higher Education in the coming years. Whilst the value of VET is recognised for its contribution to developing 'hard', or applied skills, 'soft' skills such as cultural and social awareness and development of emotional intelligence are most often seen to be addressed by higher education. VET has an equally important role to play in the development of soft skills to assist in the development and assimilation of new technologies into mature industries such as Public Safety.

The 2018 AIS Industry Skills Forum on Public Safety also discussed the impact of new technologies and digital transformation. For industry to respond, it must be prepared to look at new approaches to training and education. One such approach discussed is micro-credentialling; the process of earning a mini-degree or certifications in a specific topic area. They can either be broad, or specific. It is expected that relevant jobs and experience would accompany the accretion of skills through micro-credentials and Skill Sets. Employers may be more willing to support workers undertaking short, sharp courses rather than long courses and qualifications.

ATTRACTION, RECRUITMENT AND RETENTION ISSUES

Attracting and retaining the future Defence workforce continues to be a major challenge. Being an employer of choice for Australians in a more competitive labour market will require fundamental changes to how Defence plans, manages and supports its people. Defence has proposed a program of recruitment, training, and targeted occupation role retention to support this growth.³⁷

To grow and advance the female workforce in Defence, the industry is focussing on attraction, recruitment and retention of women, the removal of barriers to progression, and facilitating development through mentoring and development opportunities. Defence APS graduate recruitment will continue to include a focus on increasing the representation of women at this important entry point to the APS.³⁸

Technological advancements will result in policing needing to continue in their efforts to procure and adopt new technology in enhancing their capabilities rapidly – this will require police to seek out the right expertise and recruit highly skilled personnel. As such, police will compete with other public safety agencies and wider commercial organisations in seeking out highly skilled individuals to fill these workforce requirements.

The 2018 AIS Industry Skills Forum on Public Safety included input from young and very experienced workers and also students from secondary schools. For the youth of today, a lifetime career in the same organisation or discipline is not a consideration. They expect to have many careers over their lifetime. Industry can expect a higher turnover of workers in the future.

VOLUNTEERS

There is ongoing concern regarding the recruitment and retention of volunteers. The pool of volunteers is shrinking and may present a serious problem if emergencies continue to get bigger and longer in duration. This is exacerbated by the inconsistency of training across public safety and emergency management agencies, and is causing concern as there is the need for mandatory assessment.³⁹

Industry stakeholders continually cite many factors as key reasons for these difficulties, including:

- ▶ Personal and individual costs, both time and money to train, or to become trainers
- ▶ A lack of understanding/recognition of the role of volunteers
- ▶ A lack of motivation for volunteers to complete personal training
- ▶ Shortage of trainers and the unmet demand for training
- ▶ Lack of online training and other interactive methodologies
- ▶ Access to training and the distance required to travel to complete compliance

STAKEHOLDER CONSULTATION

An extensive consultation process has been undertaken in the development of the Skills Forecast and Proposed Schedule of Work.

Among many issues and sensitivities raised throughout the consultation process, the top three key themes that emerged were:

Public Safety

- ▶ Technology including cyber security and digital literacy

Evolving technology and the impact this will have for jobs in the Public Safety sector has been identified as a major issue. Digital literacy and cyber security will be key requirements in workforce capability requirements in the future.

- ▶ Recruitment including volunteers

Recruitment and retention of personnel with knowledge and skills for Public Safety roles, particularly volunteers are a major issue. Many emergency organisations rely on volunteers to assist in difficult situations; it is expensive to train them and therefore retention is important.

- ▶ Training and lifelong learning

Training is extremely important for Public Safety personnel, including volunteers, as they must train in preparation for emergencies. Lifelong learning is now a requirement for personnel however, volunteers do not always have the time to meet the training commitments asked of them and organisations are struggling to fund the programmes.

Police

- ▶ Soft Skills

The Police sector previously employed people with measurable attributes and continue to focus on soft skills that are not easily measurable such as social skills, relatability, communication, willingness to learn, team work, problem solving, initiative, time management, ability to transfer and adapt skills to different environments/situations. There needs to be a strong emphasis on staff retention, mentoring and coaching and passing on the skills and knowledge of more experienced employees.

- ▶ Technology

The introduction of different technologies in the Police sector has created more complex work because there is more data and evidence in multiple electronic formats to filter through. Exponential developments in technology means there is the need to develop the person in conjunction with the new technology.

- ▶ Cyber Security

Cyber security and the ethics and legalities surrounding data and artificial intelligence (AI) collection, confidentiality and storage are an emerging challenge for the Police sector. Social media is also now being used in industry as a job tool requiring new capabilities and skills. They are also noticing an increased number and frequency of high-quality phishing emails.

36

Defence

‣ Workforce

There is a greater focus on gender balance and an effort to recruit females into the military. Introduction of technology has opened roles that were traditionally available only to males due to the physical requirements of the job. Army is targeting a younger audience with a keen interest in drone racing. It is believed that group has the skills required to meet the changing workforce.

‣ Soft skills

The technical aspects of some roles are easily trained however capabilities in skills like creativity, data analysis and critical analysis need to feature more in the development of staff and should be more prominent in training packages. There is a need for a more 'strategic corporal' approach to empower and put more decisions on young leaders to better shape them for future decision making. They require the ability to take information in and decipher and process it quickly. Soft skill such as leadership, initiative, situational awareness and contingency management are now more important.

‣ Cyber Security

Accessibility and pervasiveness of technology both internally and externally, poses a huge cyber security challenge. Simple issues such as Facebook status updates or Fitbits relaying real-time, high quality data in high threat environments to drones tapping into satellites. There is potential for chaos and dangerous situations if technology is compromised. There is an increased requirement to be able to investigate weaknesses in own technology and how they may be compromised, as well as the skills to develop strategies or technology to defend against such an attack.

Stakeholders involved in the consultation process:

12

IRC Members (see listed earlier in the Skills Forecast)

639

AIS PUA Public Safety Training Package subscribers

8

State Training Authorities

AIS Industry Skills Forum, Public Safety Industry breakout sessions were attended by representatives/s from the following organisations:

- ASQA
- Australian Vocational Education and Training Research Association (AVETRA)
- CQ University
- Community Services and Health Industry Training Board
- Country Fire Authority
- Darwin High School
- Department of Agriculture
- Department of Jobs and Small Business
- Department of Planning and Environment
- Department of Primary Industry and Resources
- Education Services Australia
- Emergency Services Telecommunications Authority
- Empire Institute of Education
- Industry Skills Advisory Council NT (ISACNT)
- Life Saving Victoria
- Mercury Institute of Victoria
- Mines Rescue
- Moorabbin Fire Services
- National Centre for Vocational Education Research (NCVER)
- NSW Nurses and Midwives' Association
- Northern Territory Emergency Services
- Northern Territory Police, Fire and Emergency Services
- NSW Fire and Rescue
- NSW Police Force
- NSW Rural Fire Services
- Risa Connections
- Royal Life Saving Australia
- South Australian Country Fire Service
- Safe Work Australia
- School of Isolated and Distance Education
- South Australia Police
- South Metropolitan TAFE
- State Emergency Services
- Surf Life Saving NSW
- Surf Life Saving Queensland
- Surf Life Saving South Australia
- Surf Life Saving Western Australia
- TAFE Community Alliance
- TAFE Directors of Australia
- TAFE QLD
- Tasmania State Emergency Services
- Telstra
- Training Services NSW
- Victoria Police
- Victoria State Emergency Service
- Victorian Curriculum and Assessment Authority
- Western Australia Police

2018 INDUSTRY SKILLS FORUMS



AIS facilitated a series of Industry Skills Forums across the country between September and November 2018. Respected journalist and author Kerry O'Brien moderated the events across all States and Territories that attracted over 1100 people, with an additional audience watching the Melbourne event that was live streamed online.

Attendees represented small, medium and large businesses (both employers and employees), education providers (from high school, the Vocational Education and Training sector and University), unions, State/Territory and Federal Department officials and peak bodies.

The Industry Skills Forums were set up as the central platform in AIS' intelligence gathering activity for 2018 allowing AIS to



identify industry skills needs, now and into the future.

The purpose of the forums was twofold:

To provide participants with the opportunity to directly shape the skills and workforce priorities across a broad range of Australia's industries; and

To provide AIS with the opportunity to capture data and intelligence for the 2019 Skills Forecasts.

Each forum consisted of two Panel discussions, facilitated by Kerry O'Brien. The panels were made up of Industry Leaders and focused on the current challenges facing our industries. Panel One discussed "Industry Leadership - new thinking about jobs and careers". This was followed by Panel Two discussing "Future Skilling our people in an age of digital transformation".

Following the panel sessions, attendees participated in industry-specific breakout sessions, facilitated by AIS Industry Managers. This provided participants with the opportunity to talk about the issues affecting their industry. The discussions kicked off with looking at the impact of new technologies and then focused on the barriers and opportunities to recruiting skilled employees and the emerging skill needs for each industry.



INDUSTRY LEADERS' DINNERS

Industry leaders across AIS' 11 industries met to discuss the high-level workforce and skills issues at a series of Industry Leaders' Dinners hosted by AIS on the evening preceding each 2018 Industry Skills Forum. Attendees from around the country included leaders from Industry, Government, the education sector, and relevant unions. AIS was delighted that the Minister for Jobs and Industrial Relations and Minister for Women, the Hon Kelly O'Dwyer was able to attend the Melbourne dinner.

The dinner meeting discussions were facilitated by Kerry O'Brien and the clear message from attendees was that they provided an excellent opportunity to bring together multiple industries to discuss common workforce development challenges and opportunities.

Many attendees from both the Industry Skills Forums and the Industry Leaders' Dinners



commented on the opportunity that the events provided to engage with industry directly on workforce issues. Kerry O'Brien summarised the sentiment very well when wrapping up the final forum in Adelaide, noting that at every forum around the country, significant issues and ideas were raised about the pathway that we need to take as a nation. He noted that it is critical that these issues have been discussed at this level with the key players and the challenge for AIS now is twofold. The first is to formulate policy advice to take back to government. The second is to continue the conversation.



REFERENCES

- 1 The Commonwealth of Australia (2017) Mid-Year Economic and Fiscal Outlook 2017-18. P.1.
- 2 Kaspura, A. (2017) Engineers Make Things Happen: The need for an engineering pipeline strategy. p.10. Engineers Australia.
- 3 Australian Industry Standards (2018) Public Safety IRC Skills Forecast Survey.
- 4 Climate Change in Australia (no date) Impacts and Adaptation Information for Australia's NRM Regions. Available at: <http://www.climatechangeinaustralia.gov.au/en/impacts-and-adaptation/nrm-regions/>.
- 5 National Research Priorities for Natural Hazards Emergency Management – Issues Priorities and Directions. Bushfires and Natural Hazards CRC. July 2017.
- 6 Ibid
- 7 Australian Government, Department of Defence, Defence Science and Technology Organisation. Forward 2035. 2014.
- 8 Australian Government, 2017 Foreign Policy White Paper. Countering terrorism and violent extremism. 2017.
- 9 Ibid.
- 10 Karp, P., and Hutchens, G. (2016) Five ways in which a Trump presidency could affect Australia. The Guardian. Available at: <https://www.theguardian.com/australia-news/2016/nov/09/five-ways-in-which-a-trump-presidency-could-affect-australia>.
- 11 Australia and the Belt and Road Initiative: An Overview. Australia-China Relations Institute (2017) Available at: https://www.australiachinarelations.org/sites/default/files/20171205%20ACRI%20Facts_Australia%20and%20the%20Belt%20and%20Road%20Initiative_An%20overview.pdf
- 12 Productivity Commission (2012) Inquiry Report: Barriers to effective climate change adaptation. Report No. 59, Final Inquiry Report, Canberra. Available at: <http://www.pc.gov.au/inquiries/completed/climate-change-adaptation/report>.
- 13 Report of the Senate Environment and Communications References Committee (2013) Recent trends in and preparedness for extreme weather events. Commonwealth of Australia. Available at: http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/Completed_inquiries/2010-13/extremeweather/report/index.
- 14 Three trade-offs will shape Big Tech and government responses to artificial intelligence, blockchain, and more. (2018) PWC – Next in Tech. Available at: <https://usblogs.pwc.com/emerging-technology/emerging-tech-balancing-act/>.
- 15 What is meant by LLN?. (2005) RMIT University. Available at: <https://emedia.rmit.edu.au/learninglab/sites/default/files/what%20is%20meant%20by%20LLN2.pdf>.
- 16 Special Report: The Changing Face of Literacy. (2016) Education Week. Available at: <https://www.edweek.org/ew/index.html>.
- 17 Accenture Consulting (no date) Public safety technology and analytics helps cities fight crime and protect residents. Available at: <https://www.accenture.com/au-en/insight-highlights-public-service-technology-analytics>.
- 18 <https://www.engineersaustralia.org.au/News/grenfell-tower-fire-highlights-important-need-engineers-input>
- 19 Victorian Cladding Taskforce – Interim report. Victoria Government. November 2017.
- 20 Queensland Non-Conforming Products Audit Taskforce – Status report. Queensland Government. 2017.
- 21 Building Ministers' Forum. Final Report: Building Confidence – Improving the effectiveness of compliance and enforcement systems for the building and construction industry across Australia. Professor Peter Shergold AC and Ms Bronwyn Weir's. February 2018.
- 22 http://www.nafc.org.au/?page_id=111 on 15 January 2019.
- 23 Review of Aviation Roles in Fire and Emergency Management – Part 1. Undertaken by Dobbin Consulting on behalf of Australian Fire and Emergency Service Authorities Council (AFAC) and the NAFC (National Aerial Firefighting Centre). September 2018.
- 24 Ibid.
- 25 Litman, T. (2017) Autonomous Vehicle Implementation Predictions: Implications for Transport Planning. Victoria Transport Policy Institute (Canada).
- 26 Productivity Commission (2013) An Ageing Australia: Preparing for the Future. Productivity Commission Research Paper Overview, Canberra.
- 27 Australian Bureau of Statistics (2017) Population by Age and Sex, Australia, States and Territories. Available at: <http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/3101.0Feature%20Article1jun%202017?opendocument&tabname=Summary&prodno=3101.0&issue=jun%202017&num=&view=>.
- 28 Australian Bureau of Statistics (2017) 2016 Census – Employment, Income and Education. Australian Government.
- 29 <http://www.pc.gov.au/research/ongoing/report-on-government-services>.
- 30 The Senate (2016) Mental health of Australian Defence Force members and veterans. Foreign Affairs, Defence and Trade Reference Committee. Available at: http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Foreign_Affairs_Defence_and_Trade/ADF_Mental_Health/Report.
- 31 Australian Public Service Commission (no date) Workplace Diversity Program.
- 32 Ibid p.152.
- 33 Department of Defence (2016) Defence White Paper. p.150. Australian Government.
- 34 Answering the call, national survey. Beyond Blue's National Mental Health and Wellbeing Study of Police and Emergency Services – Final report. Beyond Blue, 2018.

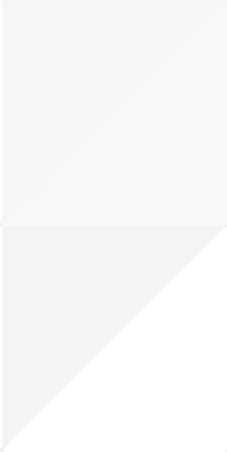
35 Male Champions of Change: Fire and Emergency Progress Report 2017–18. Australasian Fire and Emergency Services Authorities Council (AFAC), 2018

36 Ibid. p.152.

37 Department of Defence (2016) Defence White Paper. p.150. Australian Government.

38 Ibid. p.151.

39 Australian Industry Standards (2018) Public Safety IRC Skills Forecast Survey.



PROPOSED SCHEDULE OF WORK - DEF

KEY DRIVERS - DEFENCE

2019-20 DEFENCE SKILLS

Defence reviewed and transitioned a wide range of Defence qualifications within the PUA12 Public Safety Training Package to the Standards for Training Packages 2012, included within the DEF Defence Training Package Release 1.0 in October 2015.

Ongoing review of all DEF Defence training package material across a four-year cycle as dictated by AISC policy is required to ensure that Defence's current and future capability needs are met beyond 2020. Discrete areas identified for review and development are:

- ▶ Defence Sensor Operations
- ▶ Defence Simulator Maintenance
- ▶ Defence Work Health and Safety
- ▶ Defence Range Control
- ▶ Defence Chaplaincy
- ▶ Defence Evaluations

2020-23 DEFENCE CYBER SECURITY

The 2016 Defence White Paper has directed the ADF to strengthen Defence capabilities, including enhancements to its workforce and systems to deter and defend against the threat of cyber-attack. This includes new cyber security capabilities, including the provision of additional staffing and creation of a joint (Army, Navy and Air Force) cyber security training unit. In addition, each of the Services will increase their number of cyber security personnel, as well as potentially developing single service training options.

PROPOSED RESPONSES - DEFENCE

2019-20 DEFENCE SKILLS - REVIEW AND DEVELOPMENT

The Public Safety IRC has proposed eight projects to develop existing DEF Defence Training Package materials, encompassing seven qualifications, 56 Defence Units of Competency, and two Skill Sets. The Public Safety IRC will undertake consultations with Defence stakeholders, including Defence industry stakeholders through the project's duration. Additional consultation will be undertaken on the IRCs behalf with State Training Authorities and other key stakeholders, including seeking public feedback and input into development of material throughout the project's duration. This project seeks to address the ongoing requirement to review and update DEF Defence Training Package materials previously endorsed in 2015 and ensuring that Defence's current and future capability needs are met beyond 2019-20.

2020-23 DEFENCE CYBER SECURITY - DEVELOPMENT

The Public Safety IRC has proposed a project to develop new Defence Cyber security capabilities, comprising two new AQF Level 4/5 qualifications, up to 24 new Units of Competency and six new Skill Sets. The skill areas will focus on offensive and defensive cyber security capabilities and align with industry best-practice skills where Defence capabilities can be achieved through commercial Information Communication Technology (ICT) skills. The proposed project will also consider the outcomes of the Cyber Security development project currently being undertaken to assess this material for Defence's future cyber security capabilities.

This project will include development of Defence Cybersecurity materials that will be controlled through the Australian Protective Security Policy Framework. Where public and State Training Authority consultation is considered appropriate by Defence, this will be undertaken in accordance with AISC policy.

PROPOSED SCHEDULE OF WORK - POL

KEY DRIVERS - POLICE

2019-20

CRASH INVESTIGATION AND ANALYSIS - DEVELOPMENT

Police investigative processes and analysis of road crash incidents form a fundamental element that contributes significantly to the development of efficient and effective reports on accidents for the Coroner's office and the courts.

To enable this process, Police members require upskilling in these disciplines as they are continuously adopting new technologies to enhance these operational responses.

2020-21

POLICE SEARCH AND RESCUE OPERATIONS - REVIEW

Police has identified search and rescue operations Training Package materials for review during 2020-21.

Due to rapid changes in policing's operating environment police must ensure this area remains relevant are fit for purpose and reflects current and emerging focus on technology. Search and Rescue operations are continuously adopting new technologies to enhance operational responses.

Police undertakes ongoing capability reviews across the Police jurisdictions that may result in POL Police Training Package development outside of the IRC Skills Forecast and Proposed Schedule of Work period.

Where imported elective Units of Competency are identified as either deleted or superseded, the IRC may elect to revise the affected qualification(s) through the IRC minor upgrade process.

PROPOSED RESPONSES - POLICE

CRASH INVESTIGATION AND ANALYSIS - DEVELOPMENT

The Public Safety IRC has proposed this project to develop crash investigation and analysis skills to enable effective and efficient reporting for coronial enquiries and the courts system.

The Public Safety IRC will undertake consultations through the Australian New Zealand Policing Advisory Agency (ANZPAA) and will undertake consultations within state and territory police jurisdictions throughout the project's duration.

Additional consultation will be undertaken on the IRCs behalf with State Training Authorities and other key stakeholders, including seeking public feedback and input into development of material throughout the project's duration.

This project addresses the ongoing requirement to develop POL Police Training Package materials ensuring that Police's current and future capability needs are met beyond 2020.

POLICE SEARCH AND RESCUE OPERATIONS - REVIEW

The Public Safety IRC has proposed one project to develop existing POL Police Training Package materials, within Police search and rescue operations that encompasses two qualifications and 12 associated Units of Competency.

The Public Safety IRC will undertake consultations through the Australian New Zealand Policing Advisory Agency (ANZPAA) and will undertake consultation and engagement within state and territory police jurisdictions throughout the project duration.

Additional consultation will be undertaken on the IRCs behalf with State Training Authorities and other key stakeholders, including seeking public feedback and input into development of material throughout the project duration.

This project seeks to address the ongoing requirement to review and update POL Police Training Package materials previously endorsed in 2015 and ensuring that Police's current and future capability needs are met beyond 2020.

PROPOSED SCHEDULE OF WORK - PUA

KEY DRIVERS - PUBLIC SAFETY

2019-20 COMMUNITY SAFETY

Public Safety training materials were transitioned to the Standards for Training Packages 2012 and are due to be endorsed within the PUA Training Package release 1.0. During this time, it was identified through the TAC process that four qualifications in public safety addressing Community Safety should undergo further development to meet revised community safety regulations and changing industry skills requirements. Units of Competency that form part or all of Skill Sets beyond this project will also undergo detailed review.

2019-20 EMERGENCY MANAGEMENT

Public Safety training materials were transitioned to the Standards for Training Packages 2012 and are due to be endorsed within the PUA Public Safety Training Package Release 1.0.

During this time, it was identified through the TAC consultation process that four qualifications in public safety addressing Emergency Management should undergo further development to meet the evolving role of firefighters and emergency service responders particularly in the work extending into the fire and emergency prevention, preparedness, incident response and recovery. This demands new and different skills and capabilities in the industry. Units of Competency that form part or all of Skill Sets beyond this project will also undergo detailed review.

2019-20 STATE EMERGENCY SERVICES

Public Safety training materials were transitioned to the Standards for Training Packages 2012 and are due to be endorsed within the PUA Public Safety Training Package Release 1.0.

The Australian Council of State and Territory Emergency Services (ACSES) has identified an emerging area of risk to SES volunteers related to the felling and cutting of trees during storm situations. Feedback gathered by member agencies has shown that imported Units of Competency from the Forest and Forest Products (FPI) Training Package within SES qualifications and Skill Set does not adequately address the capability requirement due to the complexity and type of tasks that volunteer members are tasked to perform during an emergency services response, including storm events.

Trees that are damaged during these types of events are often not fully lying on the ground, may be caught within the branches of other trees, or lying across structures and vehicles. In many cases fallen trees in these positions are subject to significant compression forces which are released when using hand tools and chainsaws to fell, cut and release the tree. A range of injuries experienced by SES volunteers has shown that the use of imported Units of Competency does not effectively prepare volunteer members for responding to these types of incidents.

2020-21 DIGITAL LITERACY – SKILL SETS DEVELOPMENT

The management of data will determine the success or otherwise of most public safety operations whether it be fire (GIS, geospatial mapping, drones), Police (remotely piloted aircraft monitoring and surveillance, evidence management, event planning) or Defence (GIS, geospatial mapping, remotely pilot aircraft).

To maximise opportunities and participate in these new technologies it will require fundamental shifts in corporate awareness of exactly what those opportunities are. There are currently no industry plans for Units of Competency to be developed to address the need, however a major cross sector project on big data and cyber security will afford the opportunity for this project to proceed with Skill Sets development with imported units that will be developed to meet this need.

2020-21 FIRE INDUSTRY – ESTABLISHMENT OF FIRE SAFETY TRAINING PACKAGE

In recent years, Australian public safety agencies recognised the need for Police and Defence to have industry-specific national Training Packages to ensure legislative and government policy changes are swiftly incorporated into their training. More recently the Public Safety Industry Reference Committee has acknowledged that the fire sector would also be better served with a separate Fire Safety Training Package.

This explicit acknowledgement by the IRC recognises that the fire sector includes high-risk occupational requirements that require adherence to a uniquely methodical management of industry training that, at times, may place an unnecessary burden on other public safety industry sectors. Achievement of fire-sector specific training and assessment requirements presents significant challenges for non-fire sector sectors that incorporate fire-sector specific Units of Competency and qualifications and presents ongoing training regulatory compliance and implementation issues for users of the Public Safety Training Package.

PROPOSED RESPONSES - PUBLIC SAFETY

2019-20 COMMUNITY SAFETY

The Public Safety IRC has proposed this project to revise four Public Safety qualifications in Community Safety to meet the changing needs of the Public Safety Sector. This will address identified gaps in workforce skill and knowledge requirements of Fire and Emergency Workers to meet community safety regulations and changing industry expectations.

2019-20 EMERGENCY MANAGEMENT

The Public Safety IRC has proposed this project to revise two Public Safety qualifications in Emergency Management to meet the changing needs of the Public Safety Sector. This will address identified gaps in workforce skill and knowledge requirements of firefighters and emergency service responders, particularly in the work extending into the fire and emergency prevention, preparedness, incident response and recovery.

48

2019-20 STATE EMERGENCY SERVICES

The Public Safety IRC has proposed this project to develop up to three new Units of Competency and develop an existing Skill Set to address the capability requirements of State Emergency Services. The project outcomes will address an identified gap in skills and knowledge of volunteer members for the assessment of trees for compression forces, developing a plan for managing compression forces and the use of equipment to stabilise and support trees during an incident response during or after a storm event.

2020-21 DIGITAL LITERACY – SKILL SETS DEVELOPMENT

The Public Safety IRC has proposed this project to develop up to four Public Safety skill sets to ensure they meet the changing needs of the Public Safety Sector and exploit opportunities to participate in these new technologies.

There are currently no Units of Competency in development on this, however a major cross- sector project on big data and cyber security will afford the opportunity for this project to go ahead with Skill Set development on imported units that have been developed to meet this need.

2020-21 FIRE INDUSTRY – ESTABLISHMENT OF TRAINING PACKAGE FOR THE FIRE SECTOR

The Public Safety IRC has proposed this project to establish a Fire Sector Training Package to ensure it meets the changing needs of the Public Safety Fire Sector and enables swift changes within the training package to meet legislative, government policy and the demands of unique methodical management in delivery and assessment of training.

It is proposed that control and management of the Fire Safety Training Package would be within scope of the current Public Safety Industry Reference Committee, with existing industry representation provided by the Australasian Fire and Emergency Service Authorities Council (AFAC), United Firefighters Union Australia (UFUA) and volunteer firefighting expertise positions.

PROPOSED SCHEDULE OF WORK - DEFENCE

2019-20

Defence Skills – Review and development

Defence has identified Training Package materials for review or development during 2019-20. Defence undertakes ongoing capability reviews across the ADF that may result in DEF Defence Training Package development outside of the IRC Skills Forecast and Proposed Schedule of Work period. The six proposed projects will review and develop seven qualifications, 56 Defence Units of Competency, and two Skill Sets. Where imported elective Units of Competency are identified as either deleted or superseded, the IRC may also elect to revise the affected Defence qualification(s) through the IRC minor upgrade process.

Defence Sensor Operations

- One qualification
- 13 Units of Competency

Defence Simulator Maintenance

- Two qualifications
- 11 units of Competency

Defence Work Health and Safety

- One qualification
- 15 Units of Competency
- One Skill Set

Defence Range Control

- One qualification
- Nine Units of Competency

Defence Chaplaincy

- One qualification
- Seven Units of Competency
- One Skill Set

Defence Evaluations

- One qualification
- Six Units of Competency

2020-23

Defence Cyber Security – Development

The 2016 Defence White Paper has directed that the ADF strengthen the Defence cyber workforce and systems to deter and defend against the threat of cyber-attack. This includes a proposed cyber security capability including the provision of additional staffing and creation of a joint cyber security training unit. In addition, each of the Services (Army, Navy and Air Force) will increase their number of cyber security personnel as well as potentially developing single service training options.

There is an identified requirement for the development of additional qualifications at AQF Levels 4 and 5, that address the requirements of an ADF joint cyber security capability. This includes development of new Units of Competency and Skill Sets that align to specific cyber security capabilities.

Defence - Review and development

Defence has identified Training Package materials for review or development during 2020-23. Defence undertakes ongoing capability reviews across the ADF that may result in DEF Defence Training Package development outside of the IRC Skills Forecast and Proposed Schedule of Work period.

Where imported elective Units of Competency are identified as either deleted or superseded, the IRC may elect to revise the affected qualification(s) through the IRC minor upgrade process.

50

2019-20 PROJECT DETAILS

DEFENCE SENSOR OPERATIONS

Description

The project is to review and develop DEF Defence Training Package materials.

Rationale

The project addresses ongoing Defence capability reviews, wider industry practices, or Defence legislative requirements.

Ministers' Priorities Addressed

- ▶ The project does not propose removal of obsolete and superfluous qualifications from the National Register
- ▶ The project will ensure that information is available about Defence training needs, where capability requirements are supported by Defence industry training providers
- ▶ The project may support individuals transitioning Defence acquired skills and knowledge to allied industry sectors
- ▶ The project does not propose creation of Units that can be owned and used by multiple industry sectors, due to the discrete and targeted nature of Defence skills and knowledge
- ▶ The project does not propose the development of additional Skill Sets for Defence
- ▶ The project does not propose the incorporation of existing accredited course materials into the DEF Defence Training Package

Consultation Plan

The Public Safety IRC will undertake consultations with Defence stakeholders, including Defence industry stakeholders through the project's duration.

AIS will undertake consultation on the IRCs behalf with State Training Authorities and other key national stakeholders, including seeking public feedback and input into development of material through the project's duration.

Scope of Project

The project is planned to be undertaken from July 2019 to May 2020, with a Case for Endorsement planned for submission no later than July 2020.

Training Package

DEF Defence Training Package Release 2.1

Qualifications

One qualification to be reviewed

- ▶ DEF33115 Certificate III in Sensor Operations

Units of Competency

13 existing Units of Competency to be reviewed

- ▶ DEFCMM001 Maintain security in a Defence communications and information systems environment
- ▶ DEFCMM004 Conduct operator level maintenance in a Defence environment
- ▶ DEFCMM005 Transmit and receive messages via voice systems
- ▶ DEFGEN001 Work in a team
- ▶ DEFGEN002 Work independently
- ▶ DEFSEN001 Operate a radar system
- ▶ DEFSEN002 Operate a sonar system
- ▶ DEFSEN003 Operate a torpedo fire control system
- ▶ DEFSEN005 Operate decoy systems
- ▶ DEFSEN006 Optimise and monitor sensor display
- ▶ DEFSEN007 Provide general support to combat systems operations
- ▶ DEFSEN008 Support the compilation of the tactical picture
- ▶ DEFSEN004 Operate an electronic support suite

Skill Sets

- ▶ Nil

DEFENCE SIMULATOR MAINTENANCE

Description

The project is to review and develop DEF Defence Training Package materials.

52

Rationale

The project addresses ongoing Defence capability reviews, wider industry practices, or Defence legislative requirements.

Ministers' Priorities Addressed

- ▶ The project does not propose removal of obsolete and superfluous qualifications from the National Register
- ▶ The project will ensure that information is available about Defence training needs, where capability requirements are supported by Defence industry training providers
- ▶ The project may support individuals transitioning Defence acquired skills and knowledge to allied industry sectors
- ▶ The project does not propose creation of Units that can be owned and used by multiple industry sectors, due to the discrete and targeted nature of Defence skills and knowledge
- ▶ The project does not propose the development of additional Skill Sets for Defence
- ▶ The project does not propose the incorporation of existing accredited course materials into the DEF Defence Training Package

Consultation Plan

The Public Safety IRC will undertake consultations with Defence stakeholders, including Defence industry stakeholders through the project's duration.

AIS will undertake consultation on the IRCs behalf with State Training Authorities and other key national stakeholders, including seeking public feedback and input into development of material through the project's duration.

Scope of Project

The project is planned to be undertaken from July 2019 to May 2020, with a Case for Endorsement planned for submission no later than July 2020.

Training Package

DEF Defence Training Package Release 2.1

Qualifications

Two qualifications to be reviewed

- ▶ DEF43215 Certificate IV in Simulator Maintenance
- ▶ DEF53215 Diploma of Simulator Maintenance

Units of Competency

11 existing Units of Competency to be reviewed

- DEFGEN005 Develop relationships with other organisations
- DEFGEN007 Conduct risk assessment in a Defence environment
- DEFSIM001 Fault find and repair simulator power distribution and control systems
- DEFSIM002 Fault find and repair simulator computer systems and peripheral hardware
- DEFSIM003 Fault find and repair simulator image generator and visual display systems
- DEFSIM004 Fault find and repair simulator motion and control loading systems
- DEFSIM005 Fault find and repair simulator sound systems
- DEFSIM006 Fault find and repair simulator weapons systems
- DEFSIM007 Conduct simulator performance evaluation
- DEFSIM008 Work effectively with simulator systems
- DEFSIM009 Operate the simulator for testing purposes

Skill Sets

- Nil

DEFENCE WORK HEALTH AND SAFETY

Description

The project is to review and develop DEF Defence Training Package materials.

Rationale

The project addresses ongoing Defence capability reviews, wider industry practices, or Defence legislative requirements.

Ministers' Priorities Addressed

- The project does not propose removal of obsolete and superfluous qualifications from the National Register
- The project will ensure that information is available about Defence training needs, where capability requirements are supported by Defence industry training providers
- The project may support individuals transitioning Defence acquired skills and knowledge to allied industry sectors

54

- The project does not propose creation of Units that can be owned and used by multiple industry sectors, due to the discrete and targeted nature of Defence skills and knowledge
- The project does not propose the development of additional Skill Sets for Defence
- The project does not propose the incorporation of existing accredited course materials into the DEF Defence Training Package

Consultation Plan

The Public Safety IRC will undertake consultations with Defence stakeholders, including Defence industry stakeholders through the project's duration.

AIS will undertake consultation on the IRCs behalf with State Training Authorities and other key national stakeholders, including seeking public feedback and input into development of material through the project's duration.

Scope of Project

The project is planned to be undertaken from July 2019 to May 2020, with a Case for Endorsement planned for submission no later than July 2020.

Training Package

DEF Defence Training Package Release 2.1

Qualifications

One qualification to be reviewed

- DEF43315 Certificate IV in Work Health Safety

Units of Competency

15 existing Units of Competency to be reviewed

- DEFGEN012 Provide technical advice
- DEFWHS001 Identify and monitor radiation hazards
- DEFWHS002 Develop noise management plans
- DEFWHS003 Apply radio frequency radiation safety procedures
- DEFWHS005 Apply ionising radiation safety procedures
- DEFWHS007 Work safely with lasers
- DEFWHS008 Apply laser safety procedures
- DEFWHS010 Identify confined space
- DEFWHS011 Enter confined space

- DEFWHS012 Test confined space environment
- DEFWHS013 Control entry to confined spaces
- DEFWHS014 Monitor and report on hazardous substances safety
- DEFWHS015 Conduct a work health and safety audit
- DEFWHS016 Conduct work health and safety inspections
- DEFWHS017 Apply knowledge of WHS legislation

Skill Sets

One existing Skill Sets to be reviewed

- DEFSS00014 Enter Confined Space Skill Set

DEFENCE RANGE CONTROL

Description

The project is to review and develop DEF Defence Training Package materials.

Rationale

The project addresses ongoing Defence capability reviews, wider industry practices, or Defence legislative requirements.

Ministers' Priorities Addressed

- The project does not propose removal of obsolete and superfluous qualifications from the National Register
- The project will ensure that information is available about Defence training needs, where capability requirements are supported by Defence industry training providers
- The project may support individuals transitioning Defence acquired skills and knowledge to allied industry sectors
- The project does not propose creation of Units that can be owned and used by multiple industry sectors, due to the discrete and targeted nature of Defence skills and knowledge
- The project does not propose the development of additional Skill Sets for Defence
- The project does not propose the incorporation of existing accredited course materials into the DEF Defence Training Package

56

Consultation Plan

The Public Safety IRC will undertake consultations with Defence stakeholders, including Defence industry stakeholders through the project's duration.

AIS will undertake consultation on the IRCs behalf with State Training Authorities and other key national stakeholders, including seeking public feedback and input into development of material through the project's duration.

Scope of Project

The project is planned to be undertaken from July 2019 to May 2020, with a Case for Endorsement planned for submission no later than July 2020.

Training Package

DEF Defence Training Package Release 2.1

Qualifications

One qualification to be reviewed

- DEF45115 Certificate IV in Range Control

Units of Competency

Nine existing Units of Competency to be reviewed

- DEFGEN008 Treat risk within Defence at an operational level
- DEFGEN010 Supervise equity and diversity in the workplace
- DEFGEN011 Interpret policy, legislation and regulations
- DEFRNG001 Provide technical advice on ranges and training areas
- DEFRNG002 Develop and maintain range standing orders
- DEFRNG003 Approve training area and range activities
- DEFRNG004 Monitor and control training area and range activities
- DEFRNG007 Conduct training area inspections
- DEFRNG009 Supervise contractors

Skill Sets

- Nil

DEFENCE CHAPLAINCY

Description

The project is to review and develop DEF Defence Training Package materials.

Rationale

The project addresses ongoing Defence capability reviews, wider industry practices, or Defence legislative requirements.

Ministers' Priorities Addressed

- ▶ The project does not propose removal of obsolete and superfluous qualifications from the National Register
- ▶ The project will ensure that information is available about Defence training needs, where capability requirements are supported by Defence industry training providers
- ▶ The project may support individuals transitioning Defence acquired skills and knowledge to allied industry sectors
- ▶ The project does not propose creation of Units that can be owned and used by multiple industry sectors, due to the discrete and targeted nature of Defence skills and knowledge
- ▶ The project does not propose the development of additional Skill Sets for Defence
- ▶ The project does not propose the incorporation of existing accredited course materials into the DEF Defence Training Package

Consultation Plan

The Public Safety IRC will undertake consultations with Defence stakeholders, including Defence industry stakeholders through the project's duration.

AIS will undertake consultation on the IRCs behalf with State Training Authorities and other key national stakeholders, including seeking public feedback and input into development of material through the project's duration.

Scope of Project

The project is planned to be undertaken from July 2019 to May 2020, with a Case for Endorsement planned for submission no later than July 2020.

Training Package

DEF Defence Training Package Release 2.1

58

Qualifications

One qualification to be reviewed

- ▶ DEF53415 Diploma of Institutional and Operational Chaplaincy

Units of Competency

Seven existing Units of Competency to be reviewed

- ▶ DEFCHP001 Provide pastoral care
- ▶ DEFCHP002 Provide ethical and pastoral advice
- ▶ DEFCHP003 Plan the delivery of chaplaincy support
- ▶ DEFCHP004 Conduct and facilitate religious observances and activities
- ▶ DEFCHP005 Perform as an effective member of the Chaplains' branch
- ▶ DEFCHP006 Perform the duties of a chaplain in a deployed environment
- ▶ DEFGEN003 Lead a team

Skill Sets

One existing Skill Set to be reviewed

- ▶ DEFSS00012 Defence Chaplain Skill Set

DEFENCE EVALUATIONS

Description

The project is to review and develop DEF Defence Training Package materials.

Rationale

The project addresses ongoing Defence capability reviews, wider industry practices, or Defence legislative requirements.

Ministers' Priorities Addressed

- ▶ The project does not propose removal of obsolete and superfluous qualifications from the National Register
- ▶ The project will ensure that information is available about Defence training needs, where capability requirements are supported by Defence industry training providers
- ▶ The project may support individuals transitioning Defence acquired skills and knowledge to allied industry sectors

- The project does not propose creation of Units that can be owned and used by multiple industry sectors, due to the discrete and targeted nature of Defence skills and knowledge
- The project does not propose the development of additional Skill Sets for Defence
- The project does not propose the incorporation of existing accredited course materials into the DEF Defence Training Package

Consultation Plan

The Public Safety IRC will undertake consultations with Defence stakeholders, including Defence industry stakeholders through the project's duration.

AIS will undertake consultation on the IRCs behalf with State Training Authorities and other key national stakeholders, including seeking public feedback and input into development of material through the project's duration.

Scope of Project

The project is planned to be undertaken from July 2019 to May 2020, with a Case for Endorsement planned for submission no later than July 2020.

Training Package

DEF Defence Training Package Release 2.1

Qualifications

One qualification to be reviewed

- DEF54315 Diploma of Evaluations

Units of Competency

Six existing Units of Competency to be reviewed

- DEFEVL001 Develop an evaluation program
- DEFEVL002 Evaluate and report collected information
- DEFEVL003 Maintain and enhance professional practice
- DEFEVL004 Evaluate a training and assessment system
- DEFEVL005 Evaluate a community-based program
- DEFEVL006 Evaluate business performance

Skill Sets

- Nil

PROPOSED SCHEDULE OF WORK - POLICE

2019-20

Crash Investigation and Analysis - Development

Crash investigation and analysis is an integral part of road safety programs. With a proper understanding of how and why road crashes occur, valid education programs, enforcement strategies and recommendations for improvement can be invoked in a concerted effort to reduce road trauma and inform judicial processes.

To enable this process Police members, require upskilling in these disciplines as they are continuously adopting new technologies to enhance these operational responses.

2020-21

Police Search and Rescue operations – Review and Development

Police has identified Training Package materials for review or development during 2020-21. Police undertakes ongoing capability reviews across the Police jurisdictions that may result in POL Police Training Package development outside of the IRC Skills Forecast and Proposed Schedule of Work period.

Where imported elective Units of Competency are identified as either deleted or superseded, the IRC may elect to revise the affected qualification(s) through the IRC minor upgrade process.

2019-20 PROJECT DETAILS

CRASH INVESTIGATION AND ANALYSIS

Description

This project will develop POL Police Training Package materials related to road crash investigation and analysis, and addresses changing police practices relevant to performing forensic investigation processes at the scene and post scene to analyse and interpret data gathered from forensics.

Rationale

Work on Crash Investigation and Analysis reflects the current and emerging focus on technology.

Crash Investigation and Analysis procedures involves producing forensic maps using software technologies (CAD) and analysing data sets based on investigative approaches to crash application of vehicles and physics of road accident calculations. Police members require upskilling in these disciplines as they are continuously adopting new technologies to enhance operational responses.

There are currently no Police Training Package qualifications, Units of Competency or Skill Sets enabling this specific process to ensure that efficient and effective reports on accidents are developed for judicial purposes.

Ministers' Priorities Addressed

- The project will not propose removal of obsolete and superfluous qualifications from the National Register
- The project will ensure that more information is made available about Public Safety industry operations and training delivery to training providers
- The project will address the needs of individuals and industry and provide transferable skills from one occupation to another within the Public Safety Sector
- The project may support creation of Units of Competency that can be owned and used by multiple industry sectors
- The project may propose the development of additional Skill Sets
- The project does propose the incorporation of existing accredited course materials into the Police Training Package

Consultation Plan

The Public Safety IRC through the Australia New Zealand Policing Advisory Agency (ANZPAA) will undertake consultations within state and territory police jurisdictions through the project's duration.

This project may include confidential POL Police Training Package materials.

Scope of Project

The project is planned to be undertaken from July 2019, with a Case for Endorsement planned for submission by July 2020.

Training Package

POL Police Training Package Release 2.0

Qualifications

Two new qualification to be developed

- POL59999X Diploma of Crash Investigation
- POL69999X Advanced Diploma of Crash Analysis

62

Units of Competency

Eight Units of Competency to be developed

- ▶ POLINV992X Collate and Analyse Crash Investigation Evidence
- ▶ POLINV993X Apply fundamental principles of physics and mathematics to a Crash Investigation
- ▶ POLINV994X Investigate a Crash Incident
- ▶ POLINV995X Apply specialised analysis techniques to a crash investigation
- ▶ POLINV996X Manage quality of a crash analysis
- ▶ POLINV997X Analyse crashes involving heavy vehicles
- ▶ POLINV998X Analyse crashes involving motorcycles
- ▶ POLINV999X Analyse crashes involving pedestrians and bicycles

Skill Sets

One Skill Set to be developed

- ▶ POLSS999X Road Crash Investigator Skill Set

2020-21 PROJECT DETAILS

POLICE SEARCH AND RESCUE OPERATIONS - REVIEW

Description

The project is to review and develop POL Police Training Package materials.

Rationale

A key issue in the policing environment is the increasing rate of change both technologically and socially, requiring adaptability within the workforce and of systems and process. The skills and subsequent police training needed to meet this changing environment requires periodic review and update to ensure police remain responsive to changing community and government requirements and expectations.

The project addresses ongoing Police capability reviews, wider industry practices and Police legislative requirements.

Ministers' Priorities Addressed

- ▶ The project will propose removal of obsolete and superfluous qualifications from the National Register
- ▶ The project will ensure that more information is made available about Public Safety industry operations and training delivery to training providers

- The project will address the needs of individuals and industry and provide transferable skills from one occupation to another within the Public Safety Sector
- The project will support creation of Units of Competency that can be owned and used by multiple industry sectors
- The project does not propose the development of additional Skill Sets
- The project does not propose the incorporation of existing accredited course materials into the PUA Public Safety Training Package

Consultation Plan

The Public Safety IRC through the Australian New Zealand Policing Advisory Agency (ANZPAA) will undertake consultations within state and territory police jurisdictions through the project's duration.

AIS will undertake consultation on the IRCs behalf with State Training Authorities and other key stakeholders, including seeking public feedback and input into development of material throughout the project's duration.

Scope of Project

The project is planned to be undertaken from July 2020 with a Case for Endorsement planned for submission no later than August 2021.

Training Package

POL Police Training Package Release 2.0

Qualifications

2 existing Qualifications to be reviewed

- POL58115 Diploma of Police Search and Rescue Coordination (Marine/Land)
- POL68115 Advanced Diploma of Police Search and Rescue Management

Units of Competency

10 Units of Competency to be reviewed

- POLSAR001 Manage and evaluate search and rescue exercises
- POLSAR002 Manages resources for police search and rescue operations
- POLSAR003 Manage search and rescue media requirements
- POLSAR004 Manage search and rescue operations
- POLSAR005 Undertake marine search and rescue duties
- POLSAR006 Undertake land search and rescue duties

64

- ▶ POLSAR007 Assess search and rescue requirements
- ▶ POLSAR008 Undertake initial search and rescue actions
- ▶ POLSAR009 Coordinate police search and rescue operation
- ▶ POLSAR010 Conclude police search and rescue operation

Shared units will be considered but not amended during this review.

Skill Sets

- ▶ Nil

PROPOSED SCHEDULE OF WORK - PUBLIC SAFETY

2019-20

Community Safety – Review and development

Revised community safety regulations and changing industry skills requirements will require PUA Public Safety Training Package development.

The 'soft' skills of cultural and social awareness and development of emotional intelligence are necessary to assist in the assimilation of those skills into mature industries such as public safety.

This project addresses the need for a review of industry skills that support community safety specifically in relation to access, equity and the traditional position of the emergency services serving the community, to where the community is empowered to act as its own agent.

Emergency Management – Review and development

Revised emergency management regulations and changing industry skills requirements will require PUA Public Safety Training Package development.

This project addresses the need for a review of industry skills that support public safety specifically in relation to emergency management. The traditional roles of firefighter and emergency service responder are evolving rapidly, particularly as the work extends into the fire and emergency prevention, preparedness, incident response and recovery. This demands new and different skills and capabilities in the industry.

State Emergency Services – Review and development

Fallen and damaged trees pose a significant risk to private and public infrastructure and community safety. SES volunteer members routinely respond to community safety risks, including the removal and securing of fallen trees within the community, in a wide variety of environments.

This project addresses an identified gap in the skills and knowledge of SES volunteer members for the assessment of trees for compression forces, developing a plan for managing compression forces and the use of equipment to stabilise and support trees during an incident response during or after a storm event.

2020-21

Digital Literacy – Skill Sets development

The management of data will determine the success or otherwise of most public safety operations whether it be fire (GIS, geospatial mapping, drones), Police (drone monitoring and surveillance, evidence management, event planning) or Defence (GIS, geospatial mapping, drones).

To maximise opportunities and participate in these new technologies it will require fundamental shifts in corporate awareness of exactly what those opportunities are. There are currently no industry plans for Units of Competency to be developed to address the need however current cross sector projects on big data and cyber security may afford the opportunity for this project to develop Public Safety Skill Sets utilising imported Units of Competency developed to meet this need.

Fire Safety Training Package - Review and development

In 2017-2018 the Public Safety Industry Reference Committee acknowledged that the fire sector would be better served with a separate national Training Package. This explicit acknowledgement by the IRC recognises that the fire sector includes high-risk occupational requirements that require adherence to a uniquely methodical management of industry training that, at times, may place an unnecessary burden on other public safety industry sectors. Achievement of fire-sector specific training and assessment requirements presents significant challenges for non-fire sector public safety agencies and organisations that incorporate fire-sector specific Units of Competency and qualifications and presents ongoing regulatory compliance and training implementation issues for existing users of the Public Safety Training Package.

The full scope of this project is yet to be defined, however the IRC will undertake comprehensive industry consultation and engagement through 2019-20 to establish the proposed Fire Safety Training Package model, including identifying existing Public Safety or development of new Fire Safety materials to be included within this Training Package.

2021-23

Public Safety

There are no PUA Public Safety Training Package products currently identified for review or development during the forecast period.

Where imported elective Units of Competency are identified as either deleted or superseded, the IRC may elect to revise the affected qualification(s) through the IRC minor upgrade process.

2019-20 PROJECT DETAILS

COMMUNITY SAFETY - REVIEW AND DEVELOPMENT

Description

This project will review four qualifications associated with Community Safety that addresses changing industry skills requirements to community expectations during an operational response.

Rationale

National Strategy for Disaster Resilience (NSDR) purposely advocates for the community to be active participants in their own resilience. Additionally, the 2018 Australian Industry Skills Forum on Public Safety identified the need for greater integration of emergency services within the community especially prior to, during and post emergency responses.

Additionally, during the PUA12 TAC transition process, it was identified that these qualifications had not been reviewed since 2012. It was also noted that the four qualifications were not in line with revised community safety regulations and will require development.

The 'soft' skills of cultural and social awareness and development of emotional intelligence are necessary to develop and assist in the assimilation of those technologies into the public safety sector. This project will ensure changing industry practices are considered and captured and are in line with community and industry expectations.

Without this revision and update the industry will not have the workforce capacity to implement the appropriate skill solutions within the public safety sector, or to provide a vocational pathway for the training of existing workers to fill the identified skill gaps.

These qualifications are currently funded in;

▶ VIC

Updating imported Units of Competency within these qualifications that have been previously superseded on the National register of VET will also be undertaken during this project.

Ministers' Priorities Addressed

- ▶ The project will not propose removal of obsolete and superfluous qualifications from the National Register
- ▶ The project will ensure that more information is made available about Public Safety industry operations and training delivery to training providers
- ▶ The project will address the needs of individuals and industry and provide transferable skills from one occupation to another within the Public Safety Sector
- ▶ The project will support creation of Units of Competency that can be owned and used by multiple industry sectors

- The project does not propose the development of additional Skill Sets
- The project does not propose the incorporation of existing accredited course materials into the PUA Public Safety Training Package

Consultation Plan

AIS will:

- undertake consultation on the IRCs behalf with all State Training Authorities and other key national stakeholders
- seek public feedback and input into development of material through the project's duration
- communicate to enterprises, State/Territory Training authorities, State/Territory Industry Training Advisory Bodies, Peak Bodies, Registered Training Authorities (RTOs) and other interested parties, of the establishment of the project
- conduct initial consultation with stakeholders to identify and invite key representatives to establish the Technical Advisory Committee (TAC) and posting information about the project on the AIS website and newsletter
- conduct face to face consultation and engagement sessions as required
- conduct the first TAC meeting to explain the process and gather comments/feedback
- communicate the process of drafting, identified Training Package materials (Qualifications/ Units of Competency/Skill Sets), verify and validate this material with stakeholders through email, the AIS website and the AIS newsletter for wider stakeholder involvement, throughout the review process
- continue communication on the project via the AIS website and newsletter.

Scope of Project

The project is planned to be undertaken from July 2019, with a Case for Endorsement planned for submission no later than September 2020.

Training Package

PUA Public Safety Training Package Release 1.0

Qualifications

Four qualifications to be reviewed;

- PUA31412 Certificate III in Public Safety (Community Safety)
- PUA41112 Certificate IV in Public Safety (Community Safety)
- PUA51012 Diploma of Public Safety (Community Safety)
- PUA60712 Advanced Diploma of Public Safety (Community Safety)

68

Units of Competency

55 Units of Competency to be reviewed;

- PUACOM001C Communicate in the workplace
- PUACOM002B Provide services to clients
- PUACOM003B Manage information
- PUACOM004B Manage organisational communication strategies
- PUACOM005B Foster a positive organisational image in the community
- PUACOM006B Plan and conduct a public awareness program
- PUACOM011B Develop community awareness networks
- PUACOM012B Liaise with media at a local level
- PUACOM014B Contribute to community safety
- PUACOM015B Conduct community safety activities
- PUAEME001B Provide emergency care
- PUAEME002C Manage injuries at emergency incident
- PUAEMR026 Treat operational risk
- PUAEMR027 Assess operational risk
- PUAEMR028 Develop emergency management plans
- PUAEMR029 Plan and implement a treatment measure
- PUAFIR206B Check installed fire safety systems
- PUAFIR208B Participate in community safety activities
- PUAFIR301B Undertake community safety activities
- PUAFIR314B Utilise installed fire safety systems
- PUAFIR403B Assess building plans
- PUAFIR404B Inspect dangerous goods facilities
- PUAFIR405B Collect, analyse and provide regulatory information
- PUAFIR501B Conduct fire investigation and analysis activities
- PUAFIR504B Assist with formulation and implementation of plans and policies
- PUAFIR506B Conduct an assessment of a building's performance-based design
- PUAFIR507B Inspect building fire safety systems
- PUAFIR509B Implement prevention strategies
- PUAFIR510B Inspect for legislative compliance
- PUAFIR602B Manage the implementation of community safety strategies
- PUALAW001B Protect and preserve incident scene
- PUALAW003B Give evidence in a judicial or quasi-judicial setting

- PUAMAN002B Administer work group resources
- PUAMAN006B Manage and facilitate change
- PUAOHS001C Follow defined occupational health and safety policies and procedures
- PUAOHS002B Maintain safety at an incident scene
- PUAOHS003B Implement and monitor the organisation's occupational health and safety policies, procedures and programs
- PUAOPE011B Inspect property and facilities
- PUAPRS20529B Manage marketing requirements
- PUATEA001B Work in a team
- PUATEA002B Work autonomously
- PUATEA003B Lead, manage and develop teams
- PUATEA004D Work effectively in a public safety organisation
- PUATEA005A Manage own professional performance
- PUAWER001B Identify, prevent and report potential workplace emergency situations
- PUAWER002B Ensure workplace emergency prevention procedures, systems and processes are implemented
- PUAWER003B Manage and monitor workplace emergency procedures, equipment and other resources
- PUAWER004B Respond to workplace emergencies
- PUAWER005B Operate as part of an emergency control organisation
- PUAWER006B Lead an emergency control organisation
- PUAWER007B Manage an emergency control organisation
- PUAWER008B Confine small workplace emergencies
- PUAWER009B Participate as a member of a workplace emergency initial response team
- PUAWER010B Lead a workplace emergency initial response team
- PUAWER011B Manage workplace emergency initial response teams

Skill Sets

Four Skill Sets to be reviewed;

- PUASS00032 Beach Team Management Skill Set
- PUASS00033 Community Engagement Skill Set
- PUASS00046 SES First Aid and Safety Skill Set
- PUASS00047 SES Induction Skill Set

70

EMERGENCY MANAGEMENT - REVIEW AND DEVELOPMENT

Description

This project will review the qualifications associated with emergency management in the PUA Public Safety Training Package that addresses changing regulatory and industry skills requirements that meet jurisdictional and community expectations during an operational response.

Rationale

During the PUA12 TAC transition process it was identified that these qualifications had not been reviewed since 2012. It was also noted that the two qualifications were not in line with revised emergency management regulations and will require development.

Additionally, throughout 2015-2017, Australia emergency service agencies participated in workshops hosted by the Bushfire and Natural Hazards CRC to consider major issues in natural hazards emergency management.

Emergency management is moving from the traditional position of the emergency services serving the community, to where the community is empowered to act as its own agent in emergency management.

There are a series of community engagement activities that the emergency management sector utilises to build community resilience. All these activities centre on the concepts of shared responsibility and community resilience which encourages the active participation of individuals, businesses and communities in government processes and in this case emergency management and the preparedness for emergencies.

Without this revision and update the industry will not have the workforce capacity to implement the appropriate skill solutions within the public safety sector, or to provide a vocational pathway for the training of existing workers to fill the identified skill gaps.

These qualifications are currently funded in;

- ▶ VIC

Ministers' Priorities Addressed

- ▶ The project will not propose removal of obsolete and superfluous qualifications from the National Register
- ▶ The project will ensure that more information is made available about Public Safety industry operations and training delivery to training providers
- ▶ The project will address the needs of individuals and industry and provide transferable skills from one occupation to another within the Public Safety Sector
- ▶ The project will support creation of Units of Competency that can be owned and used by multiple industry sectors
- ▶ The project does not propose the development of additional Skill Sets
- ▶ The project does not propose the incorporation of existing accredited course materials into the PUA Public Safety Training Package

Consultation Plan

AIS will:

- ▶ undertake consultation on the IRCs behalf with all State Training Authorities and other key national stakeholders
- ▶ seek public feedback and input into development of material through the project's duration
- ▶ communicate to enterprises, State/Territory Training authorities, State/Territory Industry Training Advisory Bodies, Peak Bodies, Registered Training Authorities (RTOs) and other interested parties, of the establishment of the project
- ▶ conduct initial consultation with stakeholders to identify and invite key representatives to establish the Technical Advisory Committee (TAC) and posting information about the project on the AIS website and newsletter
- ▶ conduct face to face consultation and engagement sessions as required
- ▶ conduct the first TAC meeting to explain the process and gather comments/feedback
- ▶ communicate the process of drafting, identified Training Package materials (Qualifications/ Units of Competency/Skill Sets), verify and validate this material with stakeholders through email, the AIS website and the AIS newsletter for wider stakeholder involvement, throughout the review process
- ▶ continue communication on the project via the AIS website and newsletter.

Scope of Project

The project is planned to be undertaken from July 2019, with a Case for Endorsement planned for submission no later than September 2020.

Training Package

PUA Public Safety Training Package Release 1.0

Qualifications

Two qualifications require review:

- ▶ PUA52312 Diploma in Public Safety (Emergency Management)
- ▶ PUA60112 Advanced Diploma in Public Safety (Emergency Management)

Units of Competency

26 Units of Competency to be reviewed;

- ▶ PUACOM007B Liaise with other organisations
- ▶ PUACOM008B Develop and organise public safety awareness programs
- ▶ PUACOM009B Manage media requirements at major incident
- ▶ PUAEMR008B Contribute to an emergency risk management process

72

- ▶ PUAEMR009B Facilitate emergency risk assessment
- ▶ PUAEMR012B Determine treatment options
- ▶ PUAEMR014A Deliver recovery services
- ▶ PUAEMR015A Establish and manage a recovery centre
- ▶ PUAEMR016A Facilitate community involvement in recovery
- ▶ PUAEMR017A Manage recovery functions and services
- ▶ PUAEMR018A Work in an emergency management context
- ▶ PUAEMR021A Facilitate emergency planning processes
- ▶ PUAEMR030 Manage and evaluate emergency management exercises
- ▶ PUAEMR031 Design emergency management exercises
- ▶ PUALAW004B Represent the organisation in a judicial or quasi-judicial setting
- ▶ PUAMAN001B Manage the organisation's public safety responsibilities
- ▶ PUAMAN003B Manage human resources
- ▶ PUAMAN005B Manage projects
- ▶ PUAMAN007B Manage financial resources
- ▶ PUAMAN008B Manage physical resources
- ▶ PUAOHS004B Establish and maintain the occupational health and safety system
- ▶ PUAOPE016A Manage a multi-team sector
- ▶ PUAOPE017A Coordinate resources for a multi-agency incident
- ▶ PUAOPE019A Control a Level 3 incident
- ▶ PUAOPE024A Manage operations for a Level 3 incident
- ▶ PUAPRO001B Promote a learning environment in the workplace

Skill Sets

- ▶ Nil.

STATE EMERGENCY SERVICES - REVIEW AND DEVELOPMENT

Description

This project will review and develop new Units of Competency and develop an existing Skill Set to address the incident response capabilities of State Emergency Services volunteer members.

Rationale

The Australian Council of State and Territory Emergency Services (ACSES) has identified an emerging area of risk to SES volunteers related to the felling and cutting of trees during storm situations. Feedback gathered by member agencies has shown that imported Units of Competency from the Forest and Forest

Products (FPI) Training Package within SES qualifications and Skill Set does not adequately address the capability requirement due to the complexity and type of tasks that volunteer members are tasked to perform during an emergency services response, including storm events.

Trees that are damaged during these types of events are often not fully lying on the ground, may be caught within the branches of other trees, or lying across structures and vehicles. In many cases fallen trees in these positions are subject to significant compression forces which are released when using hand tools and chainsaws to fell, cut and release the tree. A range of injuries experienced by SES volunteers has shown that the use of imported Units of Competency does not effectively prepare volunteer members for responding to these types of incidents.

Ministers' Priorities Addressed

- The project will not propose removal of obsolete and superfluous qualifications from the National Register
- The project will ensure that more information is made available about Public Safety industry operations and training delivery to training providers
- The project will address the needs of individuals and industry and provide transferable skills from one occupation to another within the Public Safety Sector
- The project will support creation of Units of Competency that can be owned and used by multiple industry sectors
- The project does not propose the development of additional Skill Sets
- The project does not propose the incorporation of existing accredited course materials into the PUA Public Safety Training Package

Consultation Plan

AIS will:

- undertake consultation on the IRCs behalf with all State Training Authorities and other key national stakeholders
- seek public feedback and input into development of material through the project's duration
- communicate to enterprises, State/Territory Training authorities, State/Territory Industry Training Advisory Bodies, Peak Bodies, Registered Training Authorities (RTOs) and other interested parties, of the establishment of the project
- conduct initial consultation with stakeholders to identify and invite key representatives to establish the Technical Advisory Committee (TAC) and posting information about the project on the AIS website and newsletter
- conduct face to face consultation and engagement sessions as required
- conduct the first TAC meeting to explain the process and gather comments/feedback
- communicate the process of drafting, identified Training Package materials (Qualifications/ Units of Competency/Skill Sets), verify and validate this material with stakeholders through email, the AIS website and the AIS newsletter for wider stakeholder involvement, throughout the review process
- continue communication on the project via the AIS website and newsletter.

74

Scope of Project

The project will develop up to three new Units of Competency and review an existing Skill Set. The project is planned to be undertaken from July 2019, with a Case for Endorsement planned for submission no later than September 2020.

Training Package

PUA Public Safety Training Package Release 1.0

Qualifications

▶ Nil

Units of Competency

Up to three new Units of Competency to be developed;

- ▶ PUASES999X Assess trees for compression forces
- ▶ PUASES998X Develop a plan for the management of compression forces
- ▶ PUASES997X Use equipment to stabilise and support trees within an incident

Skill Sets

One Skill Set to be reviewed and developed;

- ▶ PUASS00037 Intermediate Tree Operations

2020-21 PROJECT DETAILS

TRAINING PACKAGE FOR THE FIRE SECTOR - REVIEW AND DEVELOPMENT

Description

This project will review and develop PUA Public Safety Training Package materials for inclusion within a proposed new FIR Training Package for the Fire Sector.

Rationale

In 2017-2018 the Public Safety Industry Reference Committee acknowledged that the fire sector may be better served with a separate national Training Package. This explicit acknowledgement by the IRC recognises that the fire sector includes high-risk occupational requirements that require adherence to a

uniquely methodical management of industry training. Achievement of fire-sector specific training and assessment requirements presents significant challenges for non-fire sector sectors that incorporate fire-sector specific Units of Competency and qualifications and presents ongoing training regulatory compliance and implementation issues for users of the Public Safety Training Package.

It is proposed that control and management of the Training Package for the Fire Sector would be within scope of the current Public Safety Industry Reference Committee, with existing industry representation provided by the Australasian Fire and Emergency Service Authorities Council (AFAC), United Firefighters Union Australia (UFUA) and volunteer firefighting expertise positions.

Ministers' Priorities Addressed

- The project will not propose removal of obsolete and superfluous qualifications from the National Register
- The project will ensure that more information is made available about fire safety operations and training delivery to training providers
- The project will address the needs of individuals and industry and provide transferable skills from one occupation to another within the Fire Safety sector
- The project may support creation of Units of Competency that can be owned and used by multiple industry sectors
- The project may propose the development of additional Skill Sets
- The project may propose the incorporation of existing accredited course materials into the FIR Fire Safety Training Package

Consultation Plan

AIS will:

- undertake consultation on the IRCs behalf with all State Training Authorities and other key national stakeholders
- seek public feedback and input into development of material through the project's duration
- communicate to enterprises, State/Territory Training authorities, State/Territory Industry Training Advisory Bodies, Peak Bodies, Registered Training Authorities (RTOs) and other interested parties, of the establishment of the project
- conduct consultation with fire-sector and public safety stakeholders to identify and invite key representatives to establish Technical Advisory Committees (TAC) and posting information about the project on the AIS website and newsletter
- conduct face to face consultation and engagement sessions as required
- conduct the TAC meetings to explain the Training Package development process and gather comments/ feedback
- communicate the process of drafting identified Training Package materials (Qualifications/ Units of Competency/Skill Sets), verify and validate this material with stakeholders through email, the AIS website and the AIS newsletter for wider stakeholder involvement, throughout the review process
- continue communication on the project via the AIS website and newsletter.

76

Scope of Project

The project is planned to be undertaken from July 2019, with a Case for Endorsement planned for submission no later than September 2021.

Training Package

FIR Fire Safety Training Package Release 1.0

Qualifications

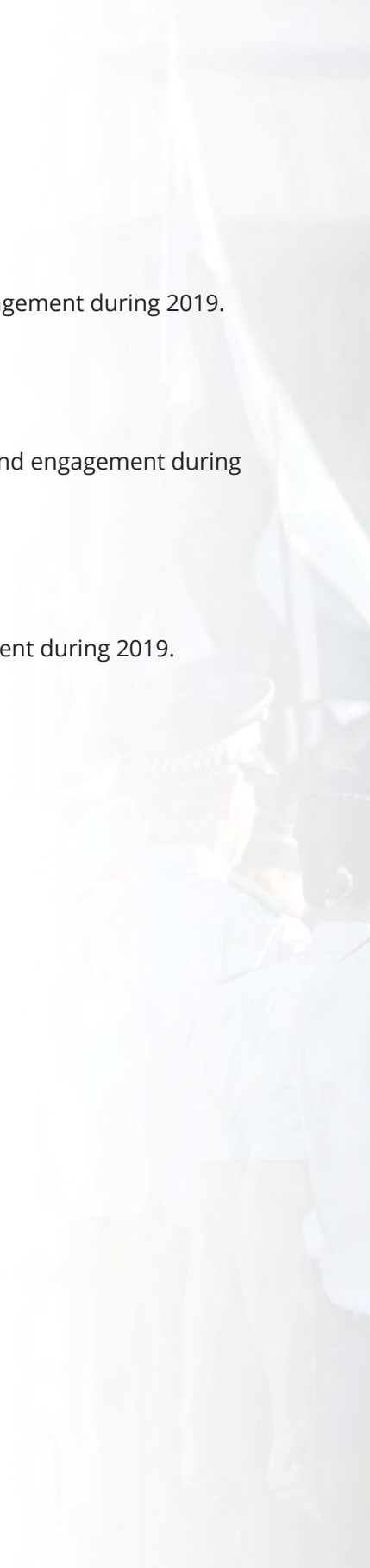
Fire Safety qualifications to be determined through industry consultation and engagement during 2019.

Units of Competency

Fire Safety Units of Competency to be determined through industry consultation and engagement during 2019.

Skill Sets

Fire Safety Skill Sets to be determined through industry consultation and engagement during 2019.





AUSTRALIAN INDUSTRY STANDARDS

Australian Industry Standards (AIS) provides high-quality, professional secretariat services to the Public Safety IRC in our role as a Skills Service Organisation. AIS provide services to eleven allocated IRCs which cover Aviation, Corrections, Gas, Electricity Supply (Generation and Transmission, Distribution and Rail), Electrotechnology, Maritime, Public Safety (including Police, Fire and Emergency Services, Defence), Rail, Transport and Logistics, and Water industries. AIS supports these important industry sectors using our in-house capability and capacity in technical writing, quality assurance, project management and industry engagement in the production of Training Packages.

AIS was established in early 2016, 20 years after its predecessor the Transport and Logistics Industry Skills Council (TLISC) was established in 1996. More information about AIS can be found at <http://www.australianindustrystandards.org.au>.

- ▶ We support industry growth and productivity through our modern innovative approach to establishing skills standards.
- ▶ We provide high-quality, professional secretariat services to help our allocated industry reference committees develop the skills that industry needs.
- ▶ We partner with industry to shape the workforce of the future.

CONTACT US



www.instagram.com/ausindstds/



twitter.com/AusIndStds



www.linkedin.com/company/australian-industry-standards/

www.australianindustrystandards.org.au

enquiries@australianindustrystandards.org.au

