TRANSPORT AND LOGISTICS IRC

Annual Update to Industry Skills Forecast and Proposed Schedule of Work 2020

IRC Skills Forecast and Proposed Schedule of Work (ISF) are required once every three years. In the intervening years SSOs will report on the research questions listed below.

SSOs can also include additional cases for change to training packages as necessary. This will require evidence on why additional proposal(s) should be considered during an intervening year between the full ISFs (see item 4).

It is important that SSOs work with IRCs and other relevant stakeholders to provide *evidence* demonstrating to the AISC the veracity of claims. Where possible, *statistical data* should be used as an evidential basis.

SECTION A

1. Inform the AISC of any new industry workforce, skills developments or trends to emerge since the submission of a full ISF.

The Transport and Logistics industry is being rapidly transformed by new technologies and automation. Some of the most recent areas of change include:

Automated logistics and warehouses

Logistics and warehousing operations are being rapidly transformed by new technologies and automation. Automation is helping the industry to meet volatile product demands, seasonal peaks and changing consumer delivery expectations. The adoption of robotics enables the industry to meet this growing demand by being more efficient as same-day delivery is becoming the norm.[1] Warehouse robotics can minimise manual labour and optimise operations, using Artificial Intelligence (AI) and machine learning to perform more sophisticated tasks.[2] Robots navigate warehouses using technologies such as Laser Detection and Ranging (LADAR) or Contour Navigation with the help of sensors.[3] Collaborative Robots (Cobots) are already being

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[1] Process Technology. (2019). "Robotic Warehouses to Increase by over 1000% in Six Years." Retrieved from https://www.processonline.com.au/content/factory-automation/news/robotic-warehouses-to-increase-by-over-1000-in-six-years-75299808

[2] Process Technology. (2019). "Robotic Warehouses to Increase by over 1000% in Six Years." Retrieved from https://www.processonline.com.au/content/factory-automation/news/robotic-warehouses-to-increase-by-over-1000-in-six-years-75299808

[3] Gohner, M. (2019). "AGV navigation: what are the possibilities?" Retrieved from https://www.processonline.com.au/content/factory-automation/article/agv-navigation-what-are-the-possibilities--539349648

used in some industries to perform tasks,[4] and they will also be used more increasingly in warehouses alongside humans.[5] Cobots can improve the capacity of warehousing roles by streamlining physical labour processes.[6] The global warehouse robotics market is expected to reach $8 billion by 2025.[7]

Automated Guided Vehicles (AGVs), using laser and vision-based navigation to move around warehouses, can perform pallet transport, storage and retrieval from racks faster and more efficiently, leading to reduced operational costs.[8] Drones are also utilised in warehouses for stocktaking purposes and inventory management. These fully autonomous drones can be connected to AGVs or operate separately to scan up to 10,000 full pallets a day.[9]

The increasing adoption of big data analytics, the Internet of Things (IoT), and digitalisation is remodelling business operations and enabling organisations to ramp up deployment and incorporation of data analytics into their operations and workflows. IoT provides access to real time data that helps the industry to monitor vehicle performance and manage fleet downtime and reduce costs. With freight movement projected to increase by 50% in metropolitan areas and 26% in regional areas by 2056,[10] IoT can optimise fleet movement and business operations. [11] The benefits include

- dynamic routing;
- anticipatory shipping;
- real-time tracking of shipments;
- warehouse-capacity optimisation;
- predictive asset maintenance;
- improved last-mile delivery;
- energy-efficiency management; and
- proactive fault detection and resolution.[12],[13]

The sensors and connected devices can track temperature, quality, battery level, and issues affecting assets, goods, or vehicles in transit. Combining IoT technology with data analytics, logistics organisations can create a virtual representation of their warehouses that monitors and simulates both the physical state and the behaviour of the warehouse assets in real time, leading to increased visibility and more operational efficiency.[14]

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[4] Wilkins, J. (2019). "Automated Pharmaceuticals: How Technological Advances in Automation and Robotics are Benefitting the Pharmaceutical Industry of Today." MHD Supply Chain Solutions, March/April 2019.

[5] Walker, M. (2019). "Spotlight on RROMAT 2019: US Trends in DC Equipment and Digital Consciousness." MHD Supply Chain Solutions, May/June 2019.

[6] MHD Supply Chain Solution. (2019). "The Automation "Intersection: Logistics in Australia and New Zealand Have Arrived at an Automation Intersection." MHDS Supply Chain Solutions, March/April 2019.

[7] Logistics & Material Handling. (2019). "Global Warehouse Robotics Marketworth $8bn by 2025." Logistics and Material Handling Magazine, April/May 2019.

[8] MHD Supply Chain Solution. (2019). "Reduce Operational Cost with AGVS." MHD Materials Handling, Sep/Oct 2019.

[9] ---. (2019). "Stocktaking Drones." MHD Supply Chain Solution, Sep/Oct 2019.

[10] NSW Government. (2018). Future Transport Strategy 2056.

[11] Dyson, C. (2019). "Get Connected." MHD Supply Chain Solutions, Nov – Sep 2019.

[12] Deloitte. (2015). Shipping Smart: IoT Opportunities in Transport and Logistics.

[13] Deloitte. (2017). The Future of Freight: How New Technology and New Thinking Can Transform How Goods are Moved.

[14] Process Technology. (2019). "DHL Builds Digital Twin-Based Smart Warehouse in Singapore." Retrieved from https://www.processonline.com.au/content/materials-handling-logistics/news/dhl-builds-digital-twin-based-smart-warehouse-in-singapore-1211307263

These innovations offer new opportunities, as well as disruptions to organisations, making upskilling and retraining the current and future workforce a priority to keep pace with changes.

Digital Supply chain: New trends

The surge of new technologies and growth of e-commerce continues to transform the supply chain practices. E-commerce is growing in Australia with 864 million parcels shipped in 2018, marking a 10% increase compared to the previous year.[15] This figure is expected to grow to one billion parcels a year by 2021.[16]

E-commerce is reshaping customers' habits as same-day delivery is becoming the expectation. Customers are willing to pay a little more to have their parcels delivered faster[17] or even on the same day. Omni-channel logistics is also growing as customers use multiple channels for their shopping and start and end their purchase at different points, expecting more information, faster delivery, and personalised experience.[18]

Custom-made goods are also growing which means that some products are directly shipped from factories to customers, reducing the need for warehouse storage space. Therefore, the logistics required to support individualised production will increase.[19] Industry 4.0 can help accommodate these changes. Anticipatory logistics is a solution where big data analytics can help determine which logistic services will be needed in the future and in which regions. This allows retailers to predict orders based on previous customer behaviour.[20] AI can reveal everything about an order and make accurate recommendations and predictions based on machine learning, helping organisations transition to data-driven decision making. Therefore, data analytics and AI will help supply chain to predict, assess, and mitigate the risk of supply chain disruptions and reduce the response time.[21]

Increased connectivity is creating more transparency and better information provision. Insightful interpretation of data will offer benefits such as improved monitoring and surveillance technologies, better coordination and communication of connected fleet, dynamic route planning,[22] improved delivery time, and increased customer satisfaction. Remote diagnostics can constantly monitor the condition of trucks, allowing companies to schedule timely repairs and reduce truck downtime.[23]

Organisations need to engage their employees with a robust change management plan to help them upskill and alleviate future risks. The National Action Plan for freight and supply chain

[15] Pitney Bowes. (2019). "Pitney Bowes Parcel Shipping Index Reports Continued Growth Bolstered by China and Emerging Markets." Retrieved from http://news.pb.com/article_display.cfm?article_id=5910

[16] ---. (2019). "Pitney Bowes Parcel Shipping Index Reports Australia's Parcel Shipping Volume Exceeds 63 Million." Retrieved from https://www.pitneybowes.com/au/newsroom/press-releases/pitney-bowes-parcel-shipping-index-reports-australias-parcel-shipping-volume-exceeds-63-million.html

[17] Veenman, M. (2018). "Welcome to the Future." MHD Supply Chain Solutions, Nov-Dec 2018.

[18] Ibid.

[19] Ibid.

[20] Ibid.

[21] O'Conner, P. (2019). "Moving with the Times." MHD Supply Chain Solutions. May-June 2019.

[22] Naido, L. (2018). "AI Power." MHD Supply Chain Solutions, Nov-Dec 2018.

[23] Price Waterhouse Coopers. (2016). Shifting Patterns: The Future of the Logistics Industry.

sector also considers the implementation of new technologies and re-skilling of the workforce a priority.[24]

Blockchain requires new skills and standards

The *National Blockchain Roadmap* has identified the lack of measurable educational standards as a challenge that needs to be addressed through the collaboration of the industry with educational institutions in order to identify the required skills for blockchain and develop qualifications.[25]

The use of blockchain-based systems will significantly increase the traceability of goods along the supply chain. This technology distributes transactions across an open or closed ledger, or database, across a network of computers, and tracks these by consensus of all participants, enabling transparency and transaction history. This will add value by identifying the origin of goods, price, date, location, quality and state of products, reducing fraudulent supply of counterfeit goods, and enabling higher levels of customer satisfaction.[26] Australia conducted a successful experiment of shipping a 17-tonne cargo to Germany on blockchain technology[27] in 2018.

The implementation of such new technologies will require the workforce to be equipped with the right skills to perform their tasks, helping to maximise efficiency and ensure compliance.

2. Qualification utilisation:

Identify circumstances in which employers:

- employ people with VET qualifications
- do not employ people with VET qualifications

Qualification utilisation by occupational group

Machinery Operators and Drivers are the largest occupational group in the Transport and Logistics industry, making up more than half of the industry workforce (50.3%). Nearly three quarters (73.8%) of this group is comprised of only three occupations; Truck Drivers, Taxi Drivers and Bus and Coach Drivers. About a third of this group (33.1%) hold a VET qualification, but a clear majority (57.1%) hold no qualification at all. The next largest group, Clerical and Administrative Workers, comprise nearly a quarter of the workforce (23.6%) and again, nearly a third hold a VET qualification (32.7%) and a majority hold no qualification (54%). This group is also dominated by a small number of occupations, with Couriers and Postal Deliverers, Transport and Despatch Clerks and Mail Sorters making up more than half of the group (56.5%). Around a third of Managers also hold a VET qualification (34.8%), though a larger proportion than the earlier groups hold a tertiary qualification (24.4%). Labourers make up the next largest group (4.5%) and are the group most likely to hold no qualifications (59.6%). Again, about a third hold a VET qualification (33.2%). Each of the remaining occupational groups makes up less than

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[24] Transport and Infrastructure Council. (2019). National Freight and Supply Chain Strategy: National Action Plan. Australian Government: Canberra.

[25] Department of Industry, science, Energy and Resource. (2020). The National Blockchain Roadmap: Progressing towards a Blockchain-Empowered Future. Canberra: Australian Government

[26] Carrick, B. (2018). "The Big 3." MHD Supply Chain Solutions, (March).

[27] Nott, G. (2018). "CBA Helps Ship 17 Tonnes of Almonds on the Blockchain." Retrieved from https://www.cio.com.au/article/644491/cba-helps-ship-17-tonnes-almonds-blockchain/

4% of the Transport and Logistics workforce and is unlikely to hold a qualification in the TLI Training Package.

Utilisation of qualifications by occupational groups (Transport and Logistics)

Source: Census 2016
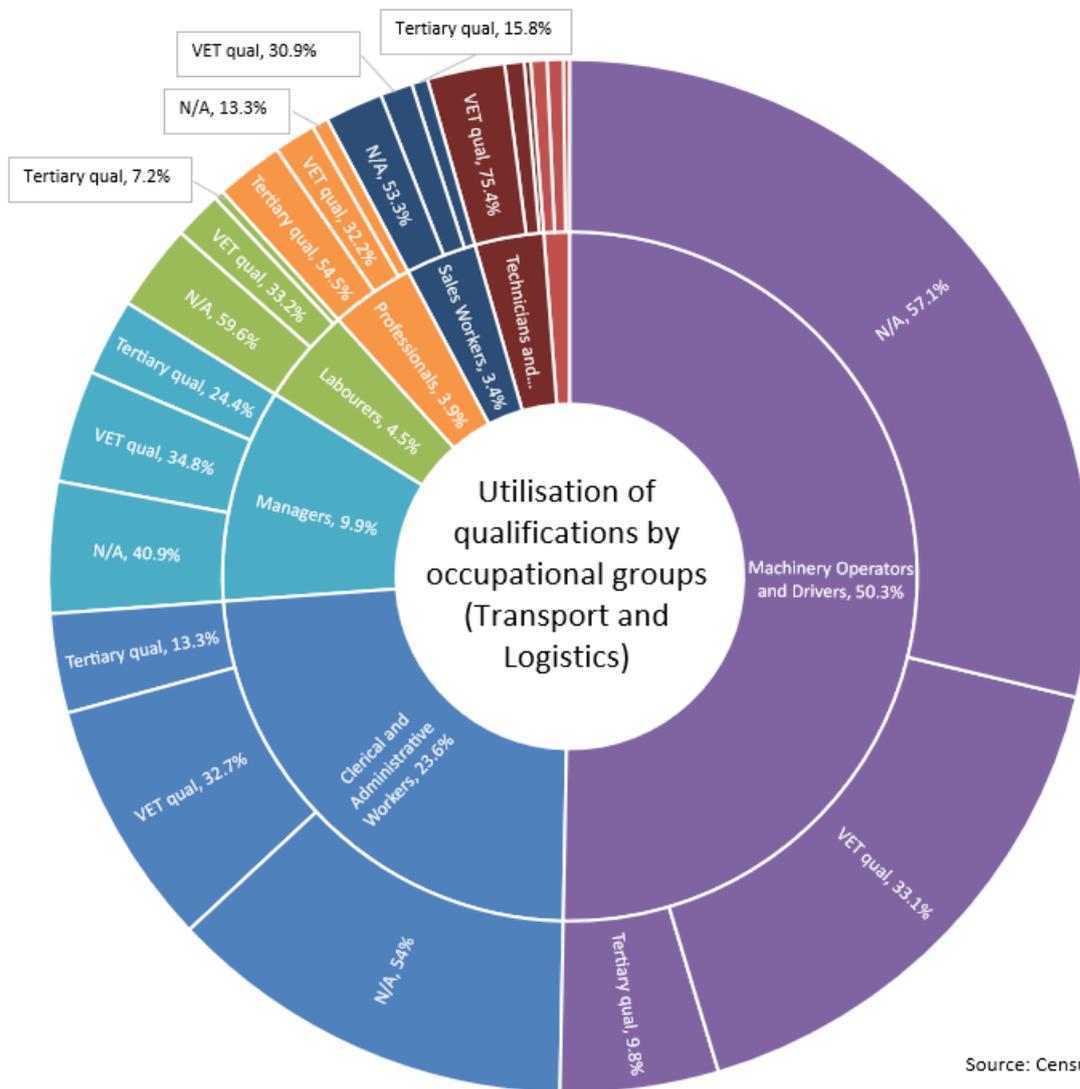
3. Are employers using training outside the national system and if so, why?

Accredited course	2015	2016	2017	2018
10227NAT - Course in Foundation Skills for Learner Drivers	218	358	316	196
22335VIC - Certificate III in Public Transport Customer Service and Compliance	0	0	0	16

The Transport and Logistics industry provide specific training to their staff that is outside the national system. This includes training on their enterprise Safety Management System, induction

training and specific training on any plant or machinery that they use. There are also a lot of learner car and motorcycle courses that provide foundation skills to assist in providing new drivers the driving skills and knowledge required to pass a licence test in the relevant State or Territory. NSW TAFE has an accredited course for this.

4. Identify qualifications with low and no enrolments. Provide reasons and evidence for the need to retain/delete these qualifications.

The following three TLI qualifications have had zero enrolments for the last four years but had a minor update in 2018 to improve include revised Units of Competency.

- TLI41515 Certificate IV in Materiel Logistics (Scheduled for Review 2020/21)
- TLI50716 Diploma of Bus and Coach Operations (Scheduled for Review 2021/22)
- TLI50515 Diploma of Deployment Logistics (Scheduled for Review 2021/22)

Of the 68 TLI Units of Competency that have had zero enrolments in the last four years, 26 are currently in draft to improve industry relevance. The remaining units are listed below. The IRC will look at the below Units of Competency in the following projects:

Driving Operations Review:

- TLIB3017 Assemble and dismantle boom or jib
- TLID3049 Pack and wrap furniture and effects for international removals
- TLID3051 Segregate waste according to waste types
- TLIF3014 Operate as an offsider in the waste management industry

The following will be deleted post the transition period for TLI Release 6.

- TLIW2019 Apply surface coatings using a spray gun
- TLIW2022 Manufacture pallets using automated methods
- TLIW2024 Dock boards using computer programmed machinery
- TLIW3007 Code and coordinate video-coding operations
- TLIW3008 Carry out culler facer canceller operations

The Following will be reviewed in the Diploma of logistics, Deployment Logistics, Materiel Logistics and incorporating the Diploma of Bus and Coach Operations, (Planned 2021/22)

- TLIL5067 Develop a passenger transport plan
- TLIL5068 Implement a passenger transport plan
- TLIP4010 Assess lift requirements and provide quotation
- TLIP4028 Administer international trading accounts
- TLIP5037 Develop workplace policy and procedures

These are also included but are in qualifications done by Defence therefore enrolments are not recorded.

- TLIX5006 Manage verification and validation
- TLIX5014 Manage materiel sustainment operations
- TLIX5020 Develop and review configuration management plans
- TLIX5021 Manage configuration management processes
- TLIX5025 Provide specialist configuration management advice
- TLIX5037 Plan logistics support for deployed operations
- TLIX5038 Organise the deployment and delivery of logistics support
- TLIX5039 Plan and conduct road convoy
- TLIX5041 Organise supply support on deployment
- TLIX5043 Conduct maintenance on deployed operations
- TLIX5044 Organise health support operations
- TLIX5045 Manage and monitor catering on deployed operations
- TLIX6046 Plan deployed logistics support for significant operations
- TLIX6047 Monitor and provide logistics staff support for significant deployed operations
- TLIX6048 Manage the deployment and delivery of logistics support
- TLIX6049 Undertake provisioning in support of deployed operations
- TLIX6051 Plan maintenance for deployed operations
- TLIX6052 Plan health support for deployed personnel
- TLIX6053 Coordinate health support operations

The following units with zero enrolments are proposed for review as part of TLI41515 Certificate IV in Materiel Logistics in the Logistics and Warehousing project. This qualification is primarily aimed at Defence personnel who are exempt from reporting enrolments.

- TLIX4007 Implement and monitor integrated logistics support plans
- TLIX4008 Conduct integrated logistics support activities
- TLIX4011 Conduct logistics support analysis activities
- TLIX4016 Implement and monitor materiel sustainment plans
- TLIX4022 Implement and monitor configuration management plans
- TLIX4024 Apply configuration management processes and procedures
- TLIX4026 Apply codification and cataloguing processes and procedures
- TLIX4033 Apply technical regulatory framework compliance management systems
- TLIX4034 Apply technical risk management systems and techniques

Qualification enrolments by state/territory

Qualification enrolments in Queensland have fallen significantly in the last four years (-68.2%) driven primarily by a decline in government funding at the unit level. 97.5% of the decline in TLI unit enrolments in Queensland was attributable to a decline in government funding which fell 80% in four years while domestic fee for service enrolments fell 7.5% in the same period. Enrolments in Western Australia have also declined steadily, falling by more than 20% since 2015. Again, this was led by a decline in government funding which fell at nearly twice the rate of domestic fee for service enrolments. Declines in Victoria and South Australia between 2015 and 2016 appear to have stabilised and qualification enrolments in New South Wales have grown 48% since 2015.

Qualification enrolments by State/Territory
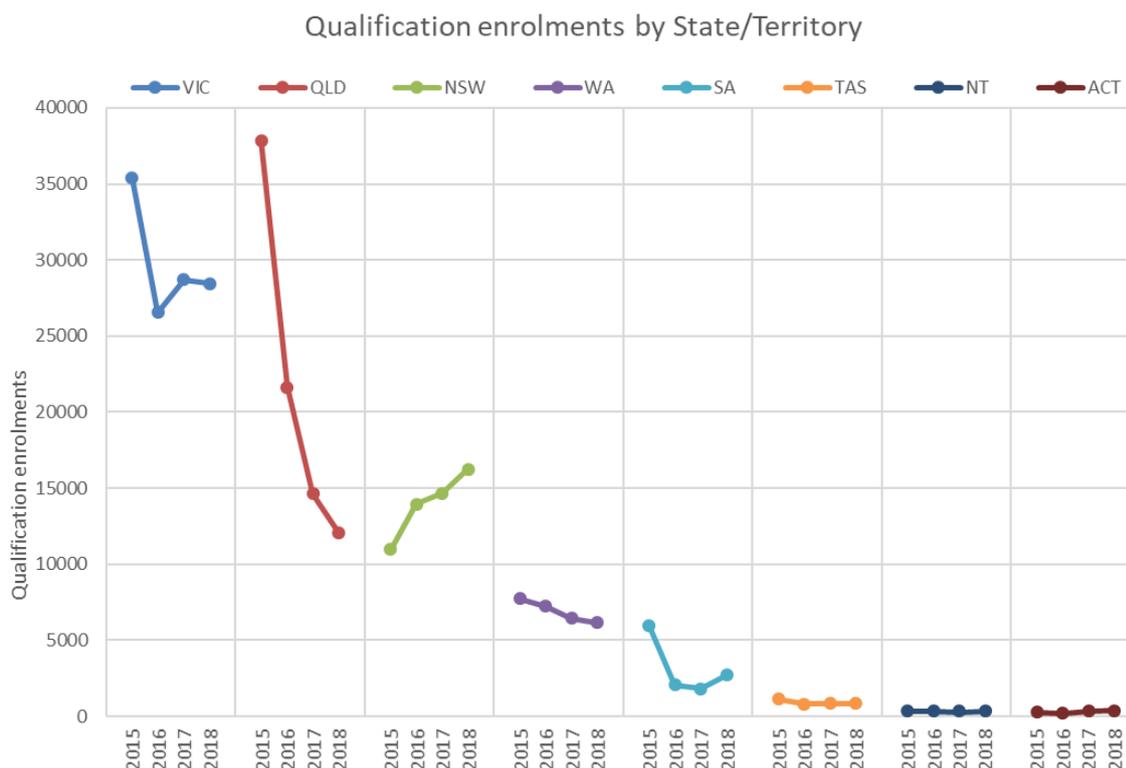
Source: NCVER VOCSTATS

5. Reasons for non-completion of qualifications and skill sets (including micro-credentials). Where students' complete qualifications or skill sets, what was the purpose of undertaking them (e.g. finding employment, upskilling)?

Data on reasons for non-completion are unfortunately not available at the qualification and Skill Set level in Total VET Activity (TVA) data. Our analysis relates to the study reason of students that passed, failed or withdrew from units of competency.

The top two reasons given for study are quite dominant in the data. Being a requirement of one's job accounts for nearly 40% of the known reasons given for study while getting a job accounts for more than 30%. Comparing those reasons, students that chose the job requirement were more likely to pass than those that studied to get a job (40%|30%) and less likely to withdraw (28%|42%). Failure rates showed almost no difference between the two. Outside of job requirements, self-improvement in general was another strong predictor of pass rates, in particular wanting extra skills for one's job (93.7% of students who chose the reason passed), getting a better job (92.2%), or developing an existing business (93.2%).

Study reason	Passed	Failed	Withdrawn
It was a requirement of my job	139412	1161	7432
To get a job	104465	1168	11107
I wanted extra skills for my job	38184	515	2069

Other reasons	20539	1208	1946
For personal interest or self-development	15166	313	1789
To get a better job or promotion	12148	300	728
To try a different career	9187	247	978
To develop my existing business	3322	78	166
To get into another course of study	3288	33	336
To start my own business	1765	57	211

6. Identify, where possible, opportunities for use of cross-sector units developed by the AISC.

The following endorsed Cross Sector units may be suitable for future use in TLI qualifications and Skill Sets and will be considered by the TLI IRC for inclusion where applicable. This will allow for the removal of superfluous Units of Competency from the TLI Training Package.

All currently endorsed Cross Sector units

- BSBXCM301 - Engage in workplace communication
- BSBXCM401 - Apply communication strategies in the workplace
- BSBXCM501 - Lead communication in the workplace
- BSBXDB301 - Respond to the service needs of customers and clients with disability
- BSBXDB401 - Develop and implement recruitment processes that are inclusive of people with disability
- BSBXDB501 - Support staff members with disability in the workplace
- BSBXDB502 - Adapt organisations to enhance accessibility for people with disability
- BSBXTW301 - Work in a team
- BSBXTW401 - Lead and facilitate a team
- TAEXDB401 - Plan and implement individual support plans for learners with disability
- TAEXDB501 - Develop and implement accessible training and assessment plans for learners with disability

7. If there are jobs that have experienced changes in skill requirements, provide evidence for these changes and their impact.

Technology advancements and changing job roles are the key driver behind the projects identified for the 2020/21 year. Warehouse automation is increasing the capacity of warehouses and the logistics industry are upgrading technology to assist with freight tracking. The existing workforce will require specific digital skills to maximise the benefits of the technology.

AUSTRALIAN
INDUSTRY
STANDARDS

8. Identify barriers to employers hiring apprentices and trainees. Are employers using alternative pathways/labour strategies to address these barriers?

There are no traditional apprenticeships in the Transport and Logistics' industry nationally, but traineeships are commonly used. The use of the traineeships will continue as enterprises use this as a way of introducing new workers and upskilling existing staff.

9. Other relevant activities.

N/A

SECTION B
STAKEHOLDER CONSULTATION

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

Stakeholders involved in the consultation process:

13 IRC Members

2037 AIS TLI Transport and Logistics Training Package subscribers

8 State Training Authorities

Ongoing Consultation
The AISC seeks to ensure SSOs undertake broad and meaningful (e.g. face-to-face) industry consultation, including rural, regional and remote stakeholders.

Provide details of employers and businesses for each sector and state that SSOs have met with as part of:

1. ongoing engagement and validation with industry and stakeholders
2. collection of industry intelligence
3. promotion of the VET system
4. cultivating and maintaining networks and partnerships with industry including engagement in rural and regional areas.

Entity Name	Sector	State	Rural/Regional/Remote	Activity
Americold Logistics Ltd	T&L	National	Rural/Regional	1,2
Australian Road Safety Foundation	T&L	National	Rural/Regional/Remote	1,2,4

Australian Trucking Association	T&L	National	Rural/Regional/Remote	1,2,3,4
Bestrane	T&L	National	Rural/Regional/Remote	1,2
Boral	T&L	Multi-State	Rural/Regional	1,2,3
BP	T&L	National	Rural/Regional/Remote	1,2,4
Bradley Project Management	T&L	Multi-State		1,2,3,4
College of Innovation and Industry Skills	T&L	Multi-State		1,2,4
CQUniversity	T&L	State	Rural/Regional/Remote	1,2,4
De Bruyn's Transport	T&L	State	Rural/Regional	1,2,3,4
Department for Industry and Skills SA	T&L	State	Rural/Regional	1,2,3,4
Department of Employment, Small Business and Training	T&L	State		
Department of Planning Transport & Infrastructure (DPTTI) South Australia	T&L	State	Rural/Regional	1,2,3,4
Department of Transport and Main Roads QLD	T&L	State	Rural/Regional	1,2,3,4
Department of State Development, Manufacturing, Infrastructure and Planning (DSDMIP) QLD	T&L	State	Rural/Regional	1,2,3,4
DP World Fremantle	T&L	State	Rural/Regional	1,2,3,4
ECL Group Australia	T&L	National	Rural/Regional/Remote	1,2,3,4
Flexible Training Solutions	T&L	State	Rural/Regional/Remote	1,2,3,4
Forklift Licence Centre	T&L	State	Rural	1,2
Gallagher Group Limited	T&L	Multi-State	Rural/Regional	1,2
Hevilift Corporate	T&L	National	Rural/Regional/Remote	1,2,3,4

Inter-Alliance Logistics	T&L	Multi-State	Rural/Regional/Remote	1,2
IOR Petroleum	T&L	Multi-State	Rural/Regional/Remote	1,2
JCC Suntech Pty Ltd TAS Petroleum Tank Technologies	T&L	Multi-State	Rural/Regional/Remote	1,2,4
JKR Training for Business Pty Ltd	T&L	State		1,2
Kiah Consulting	T&L	State		1,2
Kings Transport	T&L	National	Rural/Regional/Remote	1,2,3,4
Crane Industry Council of Australia	T&L	National	Rural/Regional	1,2,3,4
Linfox	T&L	State	Rural/Regional/Remote	1,2,3,4
LINX Cargo Care	T&L	National	Rural/Regional/Remote	1,2,3,4
Manuvr Consulting Pty Ltd / University of Tasmania	T&L	State	Rural/Regional	1,2
Murray Mallee Training Company	T&L	State		1,2
My Freight Career Pty Ltd	T&L	Multi-State	Rural/Regional/Remote	1,2,3,4
Northern Territory Road Transport Association	T&L	Multi-State	Rural/Regional/Remote	1,2,3,4
North Regional Tafe	T&L	Multi-State	Rural/Regional/Remote	1,2,3,4
OPEC Systems Pty Ltd	T&L	Multi-State		1,2
Petrol Services Australia	T&L	Multi-State	Rural/Regional/Remote	1,2,4
RAV DG Services	T&L	State		1,2
Rivet Energy	T&L	National	Rural/Regional	1,2,4
RMIT University	T&L	Multi-State	Rural/Regional	1,2
Russell Transport	T&L	Multi-State	Rural/Regional	1,2,3,4

Simon National Carriers	T&L	Multi-State	Rural/Regional/Remote	1,2,3,4
Summit Global logistics	T&L	Multi-State	Rural/Regional	1,2
SwitchCo	T&L	Multi-State	Rural/Regional	1,2
TAFE NSW	T&L	Multi-State	Rural/Regional/Remote	1,2,3,4
Tanknology Australia	T&L	Multi-State	Rural/Regional	1,2,
Tankreline	T&L	Multi-State	Rural/Regional	1,2
Toll	T&L	Multi-State	Rural/Regional/Remote	1,2,3,4
Tomkinson Global Logistics	T&L	National	Rural/Regional	1,2
Training Alliance Group; Carey Training	T&L	State		1,2,3
Transport Workers Union (TWU)	T&L	Multi-State	Rural/Regional/Remote	1,2,3,4
Transport for NSW	T&L	National	Rural/Regional	1,2,3,4
Transport Compliance Safety Training Pty LTD	T&L	Multi-State		1,2,3
Victorian Transport Association (VTA)	T&L	Multi-State	Rural/Regional	1,2,3,4
WiseTech GLOBAL	T&L	Multi-State	Rural/Regional	1,2
Wodonga TAFE	T&L	Multi-State	Rural/Regional	1,2,3,4

SECTION C

PROPOSED NEW WORK

2020–21

Logistics and Warehousing - Review and Development

A revision and amalgamation of two Certificate I qualifications; the Certificate I in Logistics and the Certificate I in Warehousing Operations. Also, the revision and amalgamation of the three Certificate IV's; the Certificate IV in Logistics, Certificate IV in Material Logistics and the Certificate IV in Warehousing Operations. This project will facilitate a more aligned pathway for workers and allow greater transition of workers across multiple sectors of the transport and logistics industry. These qualifications combined had 9,937 enrolments in 2018 and have had 60,920 enrolments in the last 4 years.

2021-22

Logistics and Warehousing - Review and Development

A revision and amalgamation of the three Diploma qualifications, Diploma of Logistics, Diploma of Deployment Logistics and the Diploma of Material Logistics. This project will facilitate a more aligned pathway for supervisors/managers and allow greater transition across multiple sectors of the transport and logistics industry.

Transport and Logistics - Review and Development

A revision and amalgamation of the three Certificate IV qualifications in Transport and Logistics, Road Transport - Car Driving Instruction, Road Transport - Heavy Vehicle Driving Instruction and Road Transport - Motorcycle Riding Instruction. This project will facilitate a more aligned pathway for driver trainers and allow greater transition of vehicle instructors across multiple drive training sectors of the transport driving Instruction industry.

2022-24

TLI Transport and Logistics Training Package

There are no TLI Transport and Logistics Training Package products currently identified for review or development during this forecast period. TLI Transport and Logistics Training Package qualifications, Skill Sets and Units of Competency that have not been subject to review or development in the last 4 years may require to be reviewed in this period.

Where imported 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.

2020-21 PROJECT DETAILS

LOGISTICS AND WAREHOUSING – REVIEW AND DEVELOPMENT

Description

This project will review and amalgamate the Certificate I in Logistics and the Certificate I in Warehousing Operations. Also, review and amalgamate the three Certificate IV in Logistics and Warehousing qualifications, and the associated Units of Competency. This review and development will create single industry qualifications at Certificate I and IV levels providing the necessary skills and knowledge to meet the current and future skills needs of entry-level workers and team leaders/supervisors in logistic and warehousing roles. The Units of Competency will be reviewed, and development completed to ensure the effects of task automation, and emerging technologies are included for industry use. This alignment will allow the removal of superfluous qualifications from the national register.

Rationale

The Transport and Logistics IRC and industry requires flexible pathways, along with the need to incorporate technology advancements in these sectors are the key drivers of this review. This process has been successfully undertaken on the Certificate III in Supply Chain Operations and is also currently a Certificate II project. It will also address Chain of Responsibility (CoR) regulatory requirements.

Few warehouses today are simply storage spaces, but instead host multiple value-adding processes, such as just-in-time packaging, assembly, product customisation, and in some cases, customer collection services. Many warehouse operations are currently being disrupted by the development of advanced robotic systems, the most basic of which use digital add-on systems to transform forklifts and other types of material handling equipment (MHE) assets into robots. Technological advancements in Automated Picking Tools, Automatic Guided Vehicles (AGVs), Automated Inventory Control Platforms and integrated Warehouse Management Systems all require new skills and knowledge that the logistics and warehouse operators now need to operate the incorporated technologies.

For customers it is now possible to track shipments in real-time (and with greater precision) during transportation. These technologies provide better visibility, facilitate improved communication between the distribution centres (warehouses) and logistics operators by allowing stakeholders in the distribution chain to access the current location of orders at any given time. Industry expects to be able to utilise the available technologies and have the workforce with the skills and knowledge to use it.

Without this revision and development, industry will find it increasingly difficult to generate workforce capacity to operate warehouses and the logistics required to move and deliver the growing freight task.

Ministers' Priorities Addressed

- The project does propose removal of obsolete and superfluous qualifications from the National Register
- The project will ensure that more information is made available about Supply Chain 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 in the Transport and Logistics industry
- 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 TLI Transport and Logistics Training Package

Consultation Plan

AIS will:

- Undertake consultation on behalf of the IRC with industry stakeholders and all State Training Authorities
- Seek public feedback and input into development of material throughout 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 and progress of the project, through AIS website and newsletter, electronic direct mail, social media and other communication channels.
- Conduct initial consultation with stakeholders to identify and invite key representatives to establish the Technical Advisory Committee (TAC)
- Conduct face to face consultation and engagement sessions as required
- Facilitate TAC meetings to undertake review and development work
- Communicate the process of drafting Training Package materials (Qualifications/ Units of Competency/Skill Sets), and seek feedback from stakeholders to validate draft material through email, the AIS website and other communication channels throughout the review process

Scope of Project

To amalgamate the Certificate I in Logistics and the Certificate I in Warehousing Operations Warehousing into one qualification to meet the needs of Industry. Also amalgamate the Certificate IV in Logistics, the Certificate IV in Warehousing Operations and the Certificate IV in Materiel Logistics. The possibility of incorporating the Transport Scheduler qualification will also be considered whilst doing this review. Relevant regulatory requirements and technology changes will be included in the related Qualifications, Units of Competency and Skill Sets. Where imported Units of Competency have been superseded these Units will also be updated. Additionally, any superfluous Units of Competency will be removed from the national register.

The Projects is planned to be undertaken from June 2020, with a Case for Endorsement planned for submission by 30 October 2021

Training Package
TLI – Transport and Logistics Training Package

Qualifications
Qualifications to be reviewed:
- TLI11315 Certificate I in Logistics
- TLI11215 Certificate I in Warehousing Operations
- TLI42016 Certificate IV in Logistics
- TLI41816 Certificate IV in Warehousing Operations

- TLI41515 Certificate IV in Materiel Logistics

Units of Competency

Units of Competency to be reviewed:

71 Units of Competency to be reviewed
Up to four new Units of Competency to be developed

Skill Sets

6 Skill Set to be reviewed:

- TLISS00092 Mentoring Skill Set
- TLISS00093 Integrated Logistics Support Inventory Controller Skill Set
- TLISS00095 Integrated Logistics Support Practitioner Skill Set
- TLISS00096 Logistics Configuration Management Skill Set
- TLISS00098 Logistics Inventory Controller Skill Set
- TLISS00101 Logistics Sustainment Practitioner Skill Set