

Entry Level Forestry Skills Project

Summary of Feedback, Responses and Actions - Validation



7 July 2021

Draft qualifications, units of competency and skill sets for the Entry Level Forestry Skills project were made available on the [Skills Impact website](#) for stakeholder review and validation from 22 June to 14 July 2021. Please visit the website to view a full list of the documents that were submitted for consultation during this phase.

Feedback was received from a variety of stakeholders around the country via email, the Skills Impact Feedback Hub, webinars, phone and email, as follows:

	ACT*	NSW	NT	Qld	SA	Tas	Vic	WA	National
Industry (employer / employee)									**
Industry association									
Union***									
Registered Training Organisation (RTO)									
Government department									

* No feedback has been received from ACT because there is no forestry sector in this jurisdiction.

** Feedback received from national forestry service provider organisations.

*** The Construction Forestry Maritime Mining and Energy Union has been kept informed but have not provided any specific feedback on components at this stage.

Below is a summary of the feedback raised for the draft qualifications, units of competency and skill sets reviewed and developed for the Entry Level Forestry Project and how these have been dealt with. This involves a consideration of the information provided, views of industry stakeholders and from people who are part of the Subject Matter Expert Working Group (SMEWG) process. Resolutions are constructed to consider the needs and views of stakeholders to the extent possible, and to comply with the *Standards for Training Package 2012*. The resolutions may represent a compromise on one or more stakeholder views with the aim of a workable outcome for industry, State and Territory Training Authorities (STAs) and training providers.

Acronyms - PC – Performance Criteria, PE – Performance Evidence, KE – Knowledge Evidence, AC – Assessment Conditions, SMEs – Subject Matter Experts, SMEWG – Subject Matter Expert Working Group

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Summary of Feedback on Draft Qualifications

Endorsement Statements

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Industry (WA)	I can confirm that in my view this final draft meets the needs of industry.	Noted. Thank you for your endorsement.
Industry Association (QLD)	I can confirm the final draft qualifications meet the needs of our industry.	Noted. Thank you for your endorsement.
RTO (QLD)	I consider the draft qualifications and units of competency an outstanding achievement.	Noted. Thank you for your endorsement.
RTO (QLD)	I am OK with most of the changes and components proposed [in reference to the three FWP projects].	Noted. Thank you for your endorsement.
Industry (QLD)	Yes, fine by us. The Certificate II and III specialisations provide the required mix of competencies for a career path in one of the following sectors of the forestry industry - nursery production, silviculture, or harvesting and haulage.	Noted. Thank you for your endorsement.
RTO (SA)	We are happy with the qualifications.	Noted. Thank you for your endorsement.
Industry (NSW)	The qualifications look good for the nursery specialisation, providing flexibility to choose from a range of units.	Noted. Thank you for your endorsement.
Industry (WA)	The Cert II/III do provide the required mix [of units/skills].	Noted. Thank you for your endorsement.
RTO (VIC)	We endorse the proposed changes	Noted. Thank you for your endorsement.
Government Department (WA)	On review of the validation drafts we note our draft 1 feedback has been considered, thank you.	Noted. Thank you for your endorsement.
RTO (TAS)	It is reassuring to know that any feedback is taken seriously, to the point that we can see the changes are being made on our recommendations.	Noted. Thank you for your endorsement.

FWP2XX21 Certificate II in Forest Operations

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
RTO (NSW)	Qualification approved in validation	Noted. Thank you for your endorsement.

FWP3XX21 Certificate III in Forest Operations

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
RTO (NSW)	Qualification approved in validation	Noted. Thank you for your endorsement.

Summary of Feedback on Draft Skill Sets

Endorsement Statements

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Industry (QLD)	This skill set titled <i>Entry into Forestry Roles Skill Set</i> is a good opportunity for new recruits to learn fundamental forest industry knowledge and general technical, health and safety, and communication skills necessary for entry into specialised and non-specialised forestry careers.	Noted. Thank you for your endorsement.
Industry (WA)	As far as I am aware, WA RTOs do not own or have access to a simulator and therefore would be unable to use this skillset as it is.	Thank you for your comment. To our knowledge, most harvesting equipment producers provide simulators as a training solution, which may present an opportunity for collaboration among local technology suppliers, training providers and employers.

Summary of Feedback on Draft Units of Competency

General comments

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Industry (WA)	There seems to be no reference to The Code of Practice for Timber Production in Western Australia or the equivalent in other states. Ditto for Codes of Safety.	Thank you for your comment. The FWP units include reference to industry codes in practices in their Knowledge Evidence, where applicable. However, references to specific or state-based codes cannot be included as these are national skill standards that must be universally applicable,

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
		allowing training providers to tailor the content to the regional industry needs.
	Industry have raised that they are confused why there are tickets for Truck Drivers and Excavators but no tickets for Harvesters or Forwarders.	<p>Thank you for your comment. Licensing is managed by a professional association or occupational licensing authority and not part of the training package development work. The units of competency only identify and advise where occupational licensing requirements apply. This is normally included in the Application section.</p> <p>To our knowledge, the forest industry in some states uses the FOLS Skills Verification Program, which requires that everyone engaged in tree harvesting obtain a FOLS endorsement (verified competency) to operate tree felling and harvesting equipment.</p>
	In regards to entry level qualifications, the majority of feedback from industry is that it is the employability skills that are challenging to manage and teach in comparison to technical skills. Can I confirm that the Core Skills For Work Framework Core Skills for Work Developmental Framework - Department of Education, Skills and Employment, Australian Government (dese.gov.au) has been considered in the Units of Competency?	Thank you for your comment. The Foundation Skills session in each unit of competency identifies and describes the language, literacy, numeracy and employment skills that are essential for performance in the unit but are not explicit in the performance criteria. We use the Australian Core Skills Framework (ACSF) to map foundation skills.
	Following consultation with both industry and RTOs, my general understanding is that industry would prefer First Aid as a core unit and RTOs prefer as an elective.	Thank you for your comment. While we understand this view, the general preference was that <i>HLTAID001 Provide First Aid</i> should be an elective unit in the Certificate II and III in Forest Operations, for reasons described in the preceding feedback report. This and all other pertinent first aid units will remain available as electives within forestry operations qualifications.

Safety and Environment - Revised Units of Competency

Endorsement Statements

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Industry (National)	I have looked at all the documents and links you have sent me and am totally satisfied with the results, changes, and opportunities for consultation throughout or at various stages of the project.	Noted. Thank you for your endorsement.
Government department (QLD)	I have reviewed the units of competency [safety] and think the mapping of the skills and knowledge has been done very well.	Noted. Thank you for your endorsement.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Industry (NSW)	I don't have any comments all looks good [about the safety units].	Noted. Thank you for your endorsement.

FWPCOR2XXX Follow workplace health and safety policies and procedures

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Industry (TAS)	Unit endorsed in validation	Noted. Thank you for your endorsement.
RTO (NSW)	Unit endorsed in validation	Noted. Thank you for your endorsement.

FWPCOR3XXX Apply safety health and environment policies and procedures

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Industry (TAS)	Unit endorsed in validation	Noted. Thank you for your endorsement.
RTO (NSW)	Unit endorsed in validation	Noted. Thank you for your endorsement.

FWPCOR2XXX Follow environmental protection procedures

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
RTO (NSW)	Unit endorsed in validation	Noted. Thank you for your endorsement.

FWPCOT3XXX Apply cultural heritage protection requirements

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
RTO (NSW)	Unit endorsed in validation	Noted. Thank you for your endorsement.
RTO (VIC)	Regarding PE 2.1: Victoria has the Aboriginal Heritage Act 2006 and Aboriginal Heritage Regulations 2018 that sets out areas of cultural heritage sensitivity, including land within 200 metres of named waterways and within 50 metres of	Thank you for your comments. The Application has been amended to clarify that the work task of cultural heritage protection entails compliance with the requirements outlined in the forest operational plan and maps. PC2.2 has also been amended as follows:

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
	<p>registered Aboriginal cultural heritage places. Cultural heritage management plans, prepared by a cultural heritage advisor, are required for high impact activities. Identifying and locating cultural heritage is a specialist area. See https://www.aboriginalvictoria.vic.gov.au/aboriginal-culture-and-heritage.</p> <p>There is a similar unit in the AHC training package - AHCILM401 - Protect places of cultural significance. A high level of cultural awareness and the need to observe cultural protocols have been stated in the application.</p>	<p><i>2.2 Locate cultural heritage, including Indigenous cultural heritage, sites and/or objects in and near the work site, as shown in the forest operational plan and maps</i></p>

Forest Nursery Production Operations – New Units

Endorsement Statements

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Industry (TAS)	I believe the qualifications and competencies should deliver the requirements for many companies within the industry. Robust discussions and points of view were taken into consideration.	Noted. Thank you for your endorsement.
Industry (NSW)	Satisfied with the new units. All are relevant and well covered. I am happy with the information that was provided to me.	Noted. Thank you for your endorsement.
Industry (VIC)	Thank you for the opportunity to provide feedback to you regarding the course structure. This has enabled the course to be tailored to the needs of what our business, let alone the industry requires.	Noted. Thank you for your endorsement.

FWPFGM3XXX Operate automated seed sowing line for containerised forest seedling production

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Industry (SA)	Re. KE - Could delete dot point 3 (decrease in the occurrence in skips) as it is covered in dot point 5	Suggestion adopted. Thank you for your feedback.

FWPFGM3XXX Operate automated topping system for tree production nursery

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Industry (SA)	Unit endorsed	Noted. Thank you for your endorsement.

FWPFGM3XXX Manage mother plants

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Industry (SA)	Unit endorsed	Noted. Thank you for your endorsement.

FWPFGM3XXX Identify, evaluate and mark quality seed trees

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Industry (SA)	Unit endorsed	Noted. Thank you for your endorsement.

FWPFGM3XXX Apply knowledge of tree stock growing in a forest nursery

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Industry (SA)	Unit endorsed	Noted. Thank you for your endorsement.

FWPFGM2XXX Apply tree seed treatment

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Industry (SA)	Unit endorsed	Noted. Thank you for your endorsement.

FWPFGM2XXX Prick out and transplant seedlings

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Industry (SA)	Unit endorsed	Noted. Thank you for your endorsement.

FWPFGM2XXX Follow quality procedures in forest nursery production

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Industry (SA)	Re. KE, remove dot point regarding leaf color as this varies between species; health is also covered at dotpoint 1.	Suggestion adopted. Thank you for your feedback.

Silviculture - Revised Units of Competency

Endorsement Statements

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Industry (WA)	I have had a response from industry with interests in Silviculture and they are impressed with the outline for the Cert II and Cert III qualifications.	Noted. Thank you for your endorsement.

FWPCOT2XXX Navigate in forest areas

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
RTO (NSW)	Unit approved in validation	Noted. Thank you for your endorsement.

FWPCOT2XXX Select and mark trees for tending operations

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
RTO (NSW)	Unit approved in validation	Noted. Thank you for your endorsement.

FWPCOT3XXX Apply sustainable silviculture methods and techniques

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
RTO (NSW)	Unit approved in validation	Noted. Thank you for your endorsement.

FWPFGM2XXX Plant trees by hand

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
RTO (NSW)	Regarding PC2.4 - Distribution of stock usually done by other staff not tree planters.	Thank you for your feedback. The PC has been amended as follows: <i>2.4 Confirm that required tree stock is distributed across the site ready for planting</i>

FWPFGM4XXX Plan for and coordinate thinning operations in a native forest or plantation

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
RTO (NSW)	Regarding PC1.1 - Typically person organising thinning is not the person who measures the stand. That information is provided by the planning team	Thank you for your feedback. The PC has been amended as follows: <i>1.1 Identify stand to be thinned and confirm stand measurements provided by the planning team</i>
	Regarding PC2.4 - Person marking trees not typically the person organising the thinning event	Thank you for your feedback. The PC has been amended as follows: <i>2.4 Confirm tree marking prior to treatment according to workplace procedures</i>

FWPFGM4XXX Plan for and coordinate forest site preparation operations

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
RTO (NSW)	Unit approved in validation	Noted. Thank you for your endorsement.

Fire Control - Revised Units of Competency

General feedback

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Industry (WA)	Can I please confirm that the fire units are OK to use in a WA context and that consideration has been given to the extreme fires early 2021 in Gidgegannup WA.	<p>Thank you for your comment. The content of FWPCOR2XXX Follow fire prevention procedures and FWPCOR3XXX Assess fire risk has been revised in response to recommendations received. These units have been updated to focus on the skill requirements in fire prevention and fire risk assessment in forestry operations, rather than on the broader forest and wood processing industry. The revised version reflects the skills and knowledge required to apply fire prevention procedures and continually monitor and assess the potential for fire as part of forestry operations.</p> <p>The Forest Management and Harvesting Industry Reference Committee has proposed a new project for development in 2021-22, with the topic Responding and Assisting in Bushfires. This project will examine in greater detail the skills required to respond to and assist in bushfires.</p>

FWPCOR2XXX Follow fire prevention procedures

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Industry (TAS)	Unit endorsed in validation	Noted. Thank you for your endorsement.
RTO (NSW)	Unit endorsed in validation	Noted. Thank you for your endorsement.

FWPFGM2XXX Detect fires in a native forest or plantation

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Industry (QLD)	The unit looks good and covers what we would expect.	Noted. Thank you for your endorsement.
RTO (NSW)	Unit endorsed in validation	Noted. Thank you for your endorsement.

FWPCOR3XXX Assess fire risk

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
RTO (NSW)	Unit approved in validation	Noted. Thank you for your endorsement.

Industry Knowledge, Work effectiveness and Quality Work – New Units of Competency

FWPHAR2XXX Operate a simulated forest machine

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
RTO (NSW)	Happy to support	Noted. Thank you for your endorsement.

Industry Knowledge, Work effectiveness and Quality Work – Revised Units of Competency

FWPCOR2XXX Work effectively in the forest and forest products industry

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
RTO (NSW)	Unit approved in validation	Noted. Thank you for your endorsement.

Four Wheel Drive Operations - Revised Units of Competency

Endorsement Statements

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
RTO (NT)	I was pleased to be able to be a part of this and thank you for all your work. I'm glad the changes were limited to what has happened.	Noted. Thank you for your endorsement.
RTO (VIC)	The units are looking good.	Noted. Thank you for your endorsement.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
RTO (QLD)	Apart from these minor changes (available below) I believe that these four units, Perform complex four wheel drive operations, Recover four wheel drive vehicles, Operate a four wheel drive vehicle in a towing situation, Operate a four wheel drive on unsealed roads as presented in this final draft are satisfactory and suitable for the requirements of industry.	Noted. Thank you for your endorsement.
Industry Association (National)	I and the organisations I work for fully endorse the new four-wheel drive units.	Noted. Thank you for your endorsement.
RTO (QLD)	I am quite satisfied with the process undertaken for reviewing and updating these units of competency. There was ample opportunity for input, and appropriate specialist and trainer views were sought. The units as drafted are considered quite appropriate for Four Wheel Drive Queensland and our RTO.	Noted. Thank you for your endorsement.

FWPCOT3XXX Perform complex four wheel drive operations

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
RTO (QLD)	Remove reference to “snow” from PE	Adopted. The word “snow” is now removed from the PE.
	Knowledge should be equal to what must be performed therefore change KE to - greater than 15 degrees	Adopted. Relevant KE items have been amended to say “greater than 15 degrees”, consistent with PE.
RTO (QLD)	Knowledge evidence <ul style="list-style-type: none"> driving ascents and descents up to <u>greater than</u> 15 degrees performing a safe stop and start forward down a slope (up to <u>greater than</u> 15 degrees) 	Adopted. Relevant KE items have been amended to say “greater than 15 degrees”, consistent with PE.
RTO (NSW)	Application section Amend the second point to read “The unit applies to individuals who operate four wheel drive vehicles in a	Adopted. All suggested industry sectors have been included.

Stakeholder Comments and Identified Issues	Consideration and Proposed Resolution
<p>variety of work settings and industry sectors <u>including forestry, agriculture, construction, tourism and energy.</u>"</p>	
<p>Application section</p> <p>"Individuals seeking recognition for this unit should have prior experience in operating four wheel drive vehicles on unsealed surfaces" is far too loose.</p> <p>What determines prior experience? Driving on an unsealed road once? I know there is a reluctance for whatever reason to have a pre requisite but inclusion of this sentence assumes there has to be some initial knowledge and the only way a training provider can guarantee any formal recognition of prior experience is via the competency based training regime, hence why we must support this with a prerequisite of training in a competency based form in the operation of a 4wd vehicle prior to undertaking this particular competency – otherwise we undermine our own credibility.</p> <p>Recommended wording: "Individuals seeking recognition for this unit must have completed formal training in any other competency based course that includes operation of a four wheel drive vehicle on unsealed roads or in four wheel drive terrain."</p>	<p>Thank you for your comment. There were extensive discussions with the project participants regarding the inclusion of prerequisite units, and due to potential barriers to delivery, the following solution was discussed and agreed upon:</p> <ul style="list-style-type: none"> • adding additional knowledge items to the unit to cover the essential and basic knowledge required to drive a four wheel drive vehicle; • recommending that training providers utilise whatever methods they deem appropriate to determine whether the learner has adequate skills to be safely trained in complex four wheel drive operations; • ensuing that individuals begin this unit of competency with a recognised or provisional driver's licence. <p>All the above are reflected in the Application and Knowledge Evidence sections of the unit.</p>
<p>Performance Criteria</p> <p>Item 1.5 should be amended to read as follows " 1.5 Secure loads according to safety, environmental and regulatory requirements"</p> <p>Reason: to maintain consistency with the wording used in the Unsealed road driving competency.</p>	<p>Adopted. PC 1.5 has been amended as follows:</p> <p style="text-align: center;"><i>1.5 Secure loads according to safety, environmental and regulatory requirements</i></p>
<p>Performance Evidence</p> <p>Third dot point add the word "or" so sentence should read "used traction aids and/or brakes when driving ascents and descents greater than 15 degrees "</p> <p>Reason: not all vehicles have traction aids</p>	<p>Adopted. PE dot point has been amended as follows:</p> <ul style="list-style-type: none"> • <i>used traction aids and/or brakes when driving ascents and descents greater than 15 degrees on one occasion</i>

Stakeholder Comments and Identified Issues	Consideration and Proposed Resolution
<p>Performance Evidence</p> <p>In dot point 5 delete the third dot point “use of terrain selection system if fitted”.</p> <p>Reason: this is repeated in dot pint 5 under this evidence “activation of traction control or terrain selection mode if fitted and where effective – this amendment eliminates repetition/duplication.</p>	<p>Adopted. The PE regarding the use of terrain selection system if fitted has been deleted as suggested.</p>
<p>Performance Evidence</p> <p>Final dot point, delete the word “different” amend to read as follows “completed two water crossings of at least axle depth”.</p> <p>Reason: it is not necessary to perform different water crossings and for some providers in central Australia it will be very difficult to have two different crossings.</p>	<p>Adopted. PE dot point has been amended as follows:</p> <ul style="list-style-type: none"> • <i>completed two water crossing of at least axle depth.</i>
<p>Knowledge Evidence</p> <p>Under “procedures for” the 5th dot point says driving ascents and descents up to 15 degrees and yet the Performance Evidence says greater than 15 degrees – we need to be consistent and as this is a competency for complex four wheel drive operation. We should use the “greater than 15 degrees” approach - Amend to read “Greater than 15 degrees”.</p>	<p>Adopted. Relevant KE items have been amended to say “greater than 15 degrees”, consistent with PE.</p>
<p>Knowledge Evidence</p> <p>Next dot point has the same issue, amend the bracketed words to read “(greater than 15 degrees)”</p>	<p>Adopted. Relevant KE items have been amended to say “greater than 15 degrees”, consistent with PE.</p>
<p>Knowledge Evidence</p> <p>Next dot point “driving in loose ground including mud and sand” is too prescriptive and some training providers have expressed issues about being able to always have mud or sand on hand. Therefore, it should be amended to read as follows “driving on loose ground such as mud, sand, rock, side slope, rutted, snow (at least three of these conditions should be driven), this is also in keeping with the same subject matter in the Performance Evidence.</p>	<p>Adopted. KE item has been amended as follows:</p> <ul style="list-style-type: none"> • <i>driving in loose ground such as mud and sand</i>

FWPCOT3XXX Recover four wheel drive vehicle

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
RTO (QLD)	Remove words “when to start and” from PC 3.2: 3.2 Establish <u>when to start and</u> when and by what means to start and stop the recovery	Adopted. PC3.2 has been corrected as follows: <i>3.2 Establish when and by what means to start and stop the recovery</i>
RTO (QLD)	Perf Criteria 3.2 Establish when to start and when and by what means to start and stop the recovery 4.2 Establish when and how to start <u>and</u> stop the recovery	Adopted. PC3.2 and PC4.2 have been corrected as follows: <i>3.2 Establish when and by what means to start and stop the recovery</i> <i>4.2 Establish when and how to start and stop the recovery</i>
RTO (NSW)	Application Add “Individuals should have completed training in a related 4wd vehicle operation capability to a nationally recognized standard” Reason: we can’t expect individuals to recover a 4wd vehicle from four wheel style terrain if they don’t know how the vehicle operates or have not had formal training in that operation.	Thank you for your comment. There were extensive discussions with the SMEWG regarding the inclusion of prerequisite units, and due to potential barriers to delivery, the following solution was discussed and agreed upon: <ul style="list-style-type: none"> • adding additional knowledge items to the unit to cover the essential and basic knowledge required to drive a four wheel drive vehicle; • recommending that training providers utilise whatever methods they deem appropriate to determine whether the learner has adequate skills to be safely trained in complex four wheel drive operations; • ensuing that individuals begin this unit of competency with a recognised or provisional driver’s licence. All the above are reflected in the Application and Knowledge Evidence sections of the unit.
	Elements/Performance Criteria Item 1.1 Mentions that the individual needs to “determine the recovery load of vehicle ”. Comment – This is impossible, it is not practical and it is at odds with an Australian standard on the use of recovery straps. To explain – a google search of how to determine a recovery load involving a vehicle stuck in soft ground reveals the following:-	Following further consultations and feedback from the SMEWG, PC 1.1 has been amended as follows to include reference to recognised formula used to estimate recovery load: <i>1.1 Determine the Gross Vehicle Mass (GVM) and estimate the recovery load on the vehicle using a recognised formula</i> The following dot points were also added to the Performance Evidence: <ul style="list-style-type: none"> • <i>estimated the recovery load using a recognised formula</i> • <i>determined the Gross Vehicle Mass (GVM) of the vehicle/s in the recovery</i> • <i>determined the rating of the equipment being used</i> • <i>determined the most appropriate recovery strategy to be used</i>

Stakeholder Comments and Identified Issues

Consideration and Proposed Resolution

The formula to be used requires the user to establish the GVM of the stuck vehicle – (printed on the vehicle specification sheet).

Then Multiply that GVM by a loading given to different levels of bogging which ranges from 0.1 up to 2 times depending on how bogged the actual vehicle is and the type of terrain it is bogged in. However, this formula specifically assumes that all wheels are equally bogged for this calculation to be accurate – the problem here is that a bogged vehicle will virtually **never** have all 4 wheels equally bogged and, in fact in most cases, only one or two wheels may be bogged, this means the formula will always be inaccurate and useless.

Finally the gradient needs to be taken into account – the steeper the gradient the higher the number is used to determine the formula –without proper measuring equipment an individual would be guessing the gradient – a highly impractical and therefore dangerous method to calculate the load.

I did work through the formula using a standard vehicle’s gvm of 3000kg and assumed the all 4 wheels were evenly stuck and a gradient of 15 degrees was used – this meant the strap I should be using had to be rated to 9750kg. Therein lies the next problem with calculating the recovery load – There is an Australian standard that must be displayed on all recovery straps sold in Australia, it is found in this legislation “**Consumer Goods (Motor Vehicle Recovery Straps) Safety Standard 2017**”, it states the Minimum Breaking Strength (MBS) and how to calculate it. This MBS is calculated as being 2-3 times the GVM of the lightest vehicle in the recovery. Therefore, in my above scenario the MBS of a strap for a vehicle with a GVM of 3000kgs must be between 6000-9000kgs only and not 9750kg as the formula which is not an Australian standard has determined.

We can’t be training people in something that defies an Australian standard and something that uses a formula that is basically flawed from the start and uses calculations that need proper measuring equipment to

The following was added to the Knowledge Evidence:

- *recognised formula used to estimate the recovery load and what variables apply to this formula*

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
	<p>calculate, not when any failure caused by miscalculation could result in a person's death.</p> <p>We must remove the words "recovery load of vehicle and recovery load resistance" from this competency.</p> <p>Therefore, the dot point 1.1 should read "Determine the Gross Vehicle Mass (GVM) of the lightest vehicle to be recovered"</p>	
	<p>Performance Evidence</p> <p>Add the following dot point</p> <ul style="list-style-type: none"> assessed why the vehicle is bogged, taken action to ensure vehicle is in four wheel drive, taken action to clear obstructions from the vehicle, taken action to use traction boards where available, determined safest method of recovery if straps or winches are to be used. 	<p>Adopted. New PE item has been added as follows:</p> <p><i>In conducting each of the above tasks, the individual has:</i></p> <ul style="list-style-type: none"> <i>assessed why the vehicle is bogged, taken action to ensure vehicle is in four wheel drive, taken action to clear obstructions from the vehicle, taken action to use traction boards where available, determined safest method of recovery if straps or winches are to be used</i>
	<p>Performance Evidence</p> <p>In third dot point remove reference to "recovery load" for the reasons stated above</p>	<p>Adopted. The words "recovery load" have been deleted from PE item as suggested.</p> <ul style="list-style-type: none"> <i>determined the appropriate equipment to be used given the Gross Vehicle Mass (GVM), equipment rating and chosen strategy.</i>
	<p>Performance Evidence</p> <p>Remove last dot point "used traction boards during recovery operation "</p> <p>Reason: this is included in the above additional dot point and eliminates duplication.</p>	<p>Adopted. PE dot point regarding "used traction boards during recovery operation" has been deleted.</p>
	<p>Knowledge Evidence</p> <p>In third dot point remove the reference "Formula used to calculate recovery load resistance"</p>	<p>Adopted. KE dot point regarding "Formula used to calculate recovery load resistance" has been deleted.</p>

FWPCOT3XXX Operate four wheel drive on unsealed roads

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
RTO (NSW)	<p>Application section</p> <p>Amend the second point to read “ The unit applies to individuals who operate four wheel drive vehicles in a variety of work settings and industry sectors including forestry, agriculture, construction, tourism and energy”.</p>	Adopted. All suggested industry sectors have been included.
	<p>Performance Criteria</p> <p>Item 4.3 should be amended to read “Use appropriate braking methods (user applied and vehicle controlled function where fitted) to descend a slope</p> <p>Reason: the terminology “use control braking” is not defined anywhere and means different things to different people, braking is not used on ascents either.</p>	<p>Adopted. PC4.3 has been amended as follows:</p> <p style="text-align: center;"><i>4.3 Use appropriate braking methods, user applied and vehicle controlled function where fitted, to descend a slope</i></p>
	<p>Performance Evidence</p> <p>Amend first dot point to read “driven 3 separate ascents and three separate descents less than 15 degrees. In conducting this task the individual has:</p> <ul style="list-style-type: none"> • selected appropriate range and gearing • used foot brake effectively to control descent speed • used vehicle hill descent or similar function where available • used the most appropriate wheel placement” 	<p>Adopted. PE has been amended as follows:</p> <ul style="list-style-type: none"> • <i>driven three separate ascents and three separate descents less than 15 degrees. In conducting this task, the individual has:</i> <ul style="list-style-type: none"> • <i>selected appropriate range and gearing</i> • <i>used foot brake effectively to control descent speed</i> • <i>used vehicle hill descent or similar function where available</i> • <i>used the most appropriate wheel placement</i>
	<p>Knowledge Evidence</p> <p>Delete the mention of Recovery hooks and mounting features from the first dot point.</p> <p>Reason: This is a specific training requirement for vehicle recovery covered in the competency for that skill set , by introducing it here, you are adding a great deal more work on the learning requirements and time required for that learning without providing the full picture in relation to recovery, it simply is not required for this competency.</p>	<p>Adopted. KE dot point has been amended as follows:</p> <ul style="list-style-type: none"> • <i>structural differences between conventional two wheel drive and a four wheel drive including:</i> <ul style="list-style-type: none"> • <i>purpose and use of front wheel hubs</i> • <i>factors affecting tyre selection and pressure</i>
	<p>Knowledge Evidence</p>	<p>Adopted. KE dot point has been added as follows:</p> <ul style="list-style-type: none"> • <i>types of communication equipment including:</i>

Stakeholder Comments and Identified Issues	Consideration and Proposed Resolution
<p>Add "Vehicle/personnel tracking devices" under types of communication equipment.</p> <p>Reason: most corporate organizations have this facility in their vehicles and activation of the device is a requirement for employment, others who may be unaware of this capability should be advised that certain items of equipment are available for this purpose, it is a huge safety issue that can save lives.</p>	<ul style="list-style-type: none"> • <i>personal location beacon (PLB)</i> • <i>phone</i> • <i>radio</i> • <i>vehicle / personnel tracking devices</i>
<p>Knowledge Evidence</p> <p>Under type of Environmental risks, delete "leaking fuel".</p> <p>Reason: this is a very rare occurrence, and if it is argued that it should be included then why not include oil, grease, radiator fluid etc etc, best left out.</p>	<p>Adopted. KE dot point referring to "leaking fuel" has been deleted.</p>
<p>Knowledge Evidence</p> <p>Under tyre management principles, delete changing and maintenance.</p> <p>Reason: The changing of a tyre is not mentioned anywhere else in the Elements. Performance criteria or Performance Evidence. Also, many corporate groups do not permit employees to change tyres on their vehicles, they have specialist response teams for this. The maintenance aspect is also questionable, the only maintenance you can perform on the job would be to adjust tyre pressure, therefore the following is suggested as a replacement for this dot point – "Tyre pressure management principles for varying terrain types"</p>	<p>Adopted. KE dot point has been amended as follows:</p> <ul style="list-style-type: none"> • <i>tyre pressure management principles for varying terrain types</i>
<p>Knowledge Evidence</p> <p>Add the following words to the end of dot point "Principles for effective self-recovery of vehicle": "via driving skills (not the use of recovery equipment such as straps or winches)"</p> <p>Reason: This is not a vehicle recovery course and vehicle recovery using recovery equipment is not mentioned anywhere else in the competency.</p>	<p>Adopted. KE dot point has been amended as follows:</p> <ul style="list-style-type: none"> • <i>principles for effective self-recovery of vehicle via driving skills (not the use of recovery equipment such as straps or winches)</i>

FWPCOT3XXX Operate four wheel drive vehicle in a towing situation

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
RTO (NSW)	<p>Application section</p> <p>Amend the second point to read “ The unit applies to individuals who operate four wheel drive vehicles in a variety of work settings and industry sectors including forestry, agriculture, construction, tourism and energy.</p>	Adopted. Adopted. All suggested industry sectors have been included.
	<p>Elements/Performance Criteria</p> <p>Item 1.5 and 2.2 are the same. Given that securing the load is done prior to driving it should only appear in Element 1 my suggested wording for 1.5 is “Secure load onto trailer in accordance with safety and regulatory requirements”. Delete Performance criteria 2.2 and renumber the following criteria accordingly.</p>	<p>Adopted. PC1.5 has been amended and PC2.2 deleted:</p> <p style="text-align: center;"><i>1.5 Inspect and secure load onto trailer in accordance with safety and regulatory requirements</i></p>
	<p>Performance Evidence</p> <p>Add to the performance evidence list the following “On one occasion correctly couple and uncouple a trailer to the towing vehicle”</p> <p>Reason: as trainers we must ensure that the trainee performs this highly important task correctly.</p>	<p>Adopted. New point added to the PE as follows:</p> <ul style="list-style-type: none"> • <i>correctly coupled and uncoupled a trailer to the towing vehicle</i>
	<p>Knowledge Evidence</p> <p>Under risk management strategies, the dot point “using and maintaining relevant tools, machinery and equipment” - suggest delete this line as it is mentioned again in the last dot point “tools and equipment used when setting up and securing a trailer”</p> <p>Reason: it is not appropriate to introduce other tools machinery and equipment other than that directly related to the towing function and avoids confusion or repetition.</p>	Adopted. KE item regarding “using and maintaining relevant tools, machinery and equipment” has been deleted.

Note: There was no specific feedback on the other skill sets and units of competency that required action.