Horticulture Technology Project

Irrigation



Summary of Feedback, Responses and Actions

March 2019

This project includes the review 4 qualifications, 43 units of competency and 7 skill sets, and the development of 1 new unit of competency and 4 skill sets within the AHC Agriculture, Horticulture, Conservation and Land Management Training Package.

The major points of note regarding the reviewed qualifications, units and skill sets and new units and skill sets are:

- The strengthening of the core units for the qualifications to enable greater alignment with job roles.
- Review of the *Certificate III in Irrigation Technology* to align with the complex nature of the job roles at this level and to enable the qualification to be presented as a trade qualification by Irrigation Australia to the State Training Authorities, as a potential trade qualification.
- Review of current skill sets and development of new skills sets to align with industry certification requirements.
- Qualifications and units have been reviewed and developed to ensure that they cater for the broad nature of the industry.

These qualifications, units of competency and skill sets were developed and reviewed based on the extensive feedback received across Australia from stakeholders. Skills Impact would like to thank all who have given their time to provide feedback for this report.

The draft qualifications, including the new and redesigned units, were available for broader stakeholder consultation and feedback between 16 January and 15 February 2019. 176 responses were received, representing 5 Registered Training Organisations (National, NSW, QLD, VIC, and WA), 12 industry (National, NSW, NT, QLD, SA, VIC and WA), 2 associations (National), 2 government bodies (WA) such as State Training Authorities.

Below is a summary of the issues raised and how these issues have been dealt with. This involves a consideration of the information provided, views of industry stakeholders where known, and views provided by the people who are part of the Subject Matter Expert (SME) Working Group (WG) process. Resolutions are constructed to take into account the needs and views of stakeholders as far as possible, and to comply with the *Standards for Training Packages 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.

The qualifications, skill sets and units of competency are now available to view and validate on the Skills Impact website until 26 March, 2019

Stakeholders Commo	ents and Identified Issues	Consideration and Proposed Resolution
AHC2XX19 Certificate II in Irrigation The majority of feedback received for the Certificate II in Irrigation supported the retention of the qualification, in particular the ability to undertake the qualificatior as a school program to encourage new entrants into the industry.		
 Industry, National Industry, NSW 	Cert II should be transformed into online "new entry" induction/introduction to the irrigation industry.	This feedback has been noted. The decision whether the qualification can be delivered effectively online is an RTO courseware developer function and would be specific to each individual RTO. This information has been passed onto the stakeholder who provided this feedback.
	Despite the low enrolments, there is a place for the new Certificate II. As a business owner, I want the Certificate II available to new industry starters	Feedback adopted, recommendation appreciated.
	If the Certificate II was deleted, we could just move relevant units into the Certificate III	Feedback noted, this could potentially result in the Certificate II being 'nested' within the Certificate III, compromising the integrity of the Certificate III. The Certificate II has received strong support for its retention as a qualification and is therefore not being proposed for deletion.
 Association, National 	With agriculture becoming mandatory for NSW students in years 7 and 8, the Certificate II should remain on scope.	Feedback noted, recommendation appreciated. The Certificate II has received strong support for its retention as a qualification and is therefore not being proposed for deletion.
 Government, WA Industry NSW 	Qualification Description, paragraph 1- use of term 'VET in schools programs'- While this is a commonly used term, there actually is no such program/s. VET is VET. suggest: is suitable for school students.	Feedback adopted, changed to 'suitable for school students.'
	Qualification Description, paragraph 2- 'work health and safety and environmental regulations'- How about: Work must comply with applicable work health, safety, environmental and workplace legislation and regulations.	This feedback has been noted and has been placed on the Skills Impact Issues Register for consideration as it would be applicable cross multiple training packages. Some states not referring to <i>work health and safety</i> but rather <i>occupational health and safety</i> . This has also been included in the Issues Register.

Stakeholders Comments and Identified Issues		Consideration and Proposed Resolution
	(Workplace legislation includes EEO, Harassment and Fair Work.)	
	Having one core Unit seems remarkable. Surely AHCWRK204, AHCWRK205, TLID1001, AHCWRK209 should all be core. Probably AHCMOM203 as well.	The SME WG's advice has been sought to answer this question. They recommended that the following units be placed in the core of the qualification and adjust the packaging rules accordingly: <i>AHCIRG215 Assist with low volume irrigation operations</i> and <i>AHCIRG217 Assist with pressurised irrigation operations</i> .
	Given irrigation is about the distribution of water to enable plants and animals to live and grow, should there not be something about plant and animal production systems?	The SME WG's advice has been sought to answer this question. They agree with the feedback and the following unit has been placed into elective Group B of the qualification - <i>AHCPER209 Recognise characteristics of integrated plant and animal systems</i> .
	CPCPCM2043A Carry out OHS requirements- Why another OHS Unit? The AHC Unit is in the core. The CPC Unit is not applicable to irrigation, eg it includes handling asbestos.	Feedback noted. The reason that this unit must remain is that <i>CPCPCM2043A</i> is a prerequisite to <i>CPCPCM2047A</i> , which remains in the qualification.
	NWP203B Plan and organise personal work activities NWP209B Use maps, plans, drawings and specifications NWP215B Install and replace basic volumetric metering equipment These 3 NWPxxxB Units were deleted on 13 June 2017.	Feedback adopted, <i>NWP203B</i> , <i>NWP209B</i> and <i>NWP215B</i> removed from qualification.
 Industry, NSW 	Failure by committee – Irrigation is licenced in some state, water use is bounded by Federal, State, Local Government or Water Authority regulation. We are Governed by building regulations (Building – Plumbing/ Electrical) and need to acknowledge Standards (as produced by standards Australia and international equivalents) as well as OHS laws regulation amongst other I have missed.	Feedback adopted, the SME WG's advice has been sought to answer the feedback. Their recommendation was that several of the tasks that irrigators perform are licenced or require a licence or certification, however the occupation is not licenced, and the qualifications should be structured accordingly. This has meant including some prerequisite units in the Certificate III to accommodate these licencing needs.

Stakeholders Comments and Identified Issues		Consideration and Proposed Resolution
 Industry, National 	Disagree with XXXX. We already have an extensive irrigation design subject that we control. A CPC subject is controlled by plumbing IRC. We have been burned in Cert III by this problem.	Second piece of feedback noted, recommendation appreciated
• Industry, NT	Certificate II in Irrigation Technology The proposed core unit & electives looks ok for a certificate II level	Feedback noted, recommendation appreciated.
• Industry, QLD	Certificate II should be retained. Great for entry level, great introduction to the industry	Feedback adopted, recommendation appreciated.
• Industry, QLD	In response to XXXX's comment about AHC Pipes 'XXXX, never heard of AC pipe? The unit requires "identification and reporting" of AC products. I would think that's kind of important since there are countless kilometres of active AC pipes in Australian irrigation systems.'	Feedback adopted. The qualifications cater for AC pipes.
• Government, WA	Certificate II in Irrigation Qualification description Can the following be included into the description "Work must comply with work, health, safety, environmental and workplace legislation and regulations"? This will ensure all workplace issues i.e. EEO, Harassment and Fair Work are incorporated in the statement.	This feedback has been noted and has been placed on the Skills Impact Issues Register for consideration as it would be applicable cross multiple training packages. Some states not referring to <i>work health and safety</i> but rather <i>occupational health and safety</i> . This has also been included in the Issues Register.
	Core Units – Why is there only one unit listed as a core unit. Should there be units relevant to irrigation included in the core?	The SME WG's advice has been sought to answer this piece of feedback. Feedback adopted. The following units have been placed in the core of the qualification and we have adjusted the packaging rules accordingly: <i>AHCIRG215 Assist with low volume irrigation operations, AHCIRG217 Assist with pressurised irrigation operations.</i>

Stakeholders Comm	ents and Identified Issues	Consideration and Proposed Resolution
	Group B – CPCPCM2043A should read Carry out WHS requirements	Feedback adopted, unit title changed to 'Carry out WHS requirements',
	I note the following units were deleted on TGA on 13 June 2017 however are list in the electives:	The second piece of feedback has been adopted. The units <i>NWP203B</i> , <i>NWP209B</i> , <i>NWP210B</i> and <i>NWP215</i> have been removed from the qualification.
	 NWP210B Perform basic water quality tests NWP203B Plan and organise personal work activities NWP209B Use maps, plans, drawings and specifications NWP215B Install and replace basic volumetric metering equipment 	
udgement. The major eflect the complexity rrigation industry, par Zealand which under	rity of feedback received for the Certificate III in Irrigation Technolo of the job role and the establishment of the qualification as a trade ticularly its training. This has included negotiating with their peers the Trans-Tasman Mutual Recognition Act 1997 will need to be re	in a wide variety of contexts under broad supervision, using discretion and bgy supported the qualification structure increase in total number of units to e. There has been significant work undertaken to professionalise the in New Zealand, to establish professional trade qualifications in New cognised within Australia. It is envisaged that this qualification will be a or the industry) has commenced work within a number of jurisdictions to
• RTO, WA	In situations where drainage is never installed, why are people being excluded from obtaining this qualification? In the free draining sands of Perth, irrigation installers do not require a drainage unit.	The SME WG's advice has been sought and they agree with the feedback. <i>AHCDRG301</i> has been moved to elective units and packaging rules adjusted accordingly. <i>AHCIRG303 Measure irrigation delivery system performance</i> has been added to the list of core units.
	AHCWRK309 Apply environmentally sustainable work practices. This unit promises so much and provides very little. It is essentially not deliverable and not assessable	The SME WG's Advice has been sought to address this piece of feedback. They considered the feedback and cited examples of where it is being delivered and assessed. They have recommended to leave this unit in the core of the qualification.

Stakeholders Com	ments and Identified Issues	Consideration and Proposed Resolution
	The unit CPCPIG2021A has a pre-requisite unit associated with it.	Feedback adopted, Prerequisite requirements for <i>CPCPIG2021A</i> (<i>CPCPCM2043A</i>) added to Prerequisite requirements table.
	AHCIRG310 Operate and maintain irrigation pumping systems AHCIRG309 Install irrigation pumps Often a job role performed by contractors and not necessarily a job role of those who work with irrigation	The SME WG's advice has been sought to address this feedback. After discussion they have noted that many irrigators perform these roles themselves. Therefore, they have recommended that these units remain in the core of the qualification.
 Industry, National 	Where is AHCWHS301? Shouldn't it be in the core?	The SME WG's advice has been sought to address this feedback. They agree with the feedback and <i>AHCWHS301</i> has been moved into the core of the Certificate III.
	Put AHCIRG310 Operate and maintain irrigation pumping systems into Group A. This subject needs modernising	The SME WG's advice has been sought to address this feedback. After discussion they have advised that this unit remains in the core of the qualification as it is universally integral to irrigation across the industry
	AHCWRK309 Apply environmentally sustainable work practices- Put in Group B. There is environmental in all main subjects so no need to make it core.	The SME WG's advice has been sought to address this feedback. After discussion they have advised that this unit remains in the core of the qualification. With a focus on irrigation practices it is vital that an emphasis on environmental factors remains in the qualifications.
	CPCPCM32043A Carry out WHS requirements- Should be group B as part of Urban installer stream	The SME WG's advice has been sought to address this feedback. They agree with the feedback. The construction and plumbing units have been moved to elective units list and <i>AHCWHS301</i> unit has been moved into core of Certificate III.
	CPCPIG3021A Set out, install and commission irrigation systems- Shouldn't have plumbing subject in Irrigation core. AHCIRG331 already available.	The SME WG's advice has been sought to address this feedback. They agree with the feedback. The construction and plumbing units have been moved to elective units list and <i>AHCWHS301</i> unit has been moved into core of Certificate III.
	AHCIRG325 Operate irrigation technology AHCIRG332 Operate pressurised irrigation systems- Both should be core	The SME WG's advice has been sought to address this feedback. After discussion they have advised that these units remain in the Group A

Stakeholders Comments and Identified Issues		Consideration and Proposed Resolution
		electives as they are not tasks completed by everyone in the job roles that the qualification is targeted at.
Industry, SA	So long as new technologies are available in all qualifications, the units are fine. This is critical As a certified trade, there is greater legitimacy for the field. Potential apprentices will be attracted to an industry that is trade certified as it comes across as a proper career	Feedback adopted, recommendation appreciated.
	With an irrigation specific trade qualification, we can create irrigation specific rules surrounding our practices, strengthening the industry and ensuring that other related trades (plumbing and electrical) cannot push irrigators out of the workplace and out of the market	Feedback noted, recommendation appreciated.
 Association, National 	Install drainage systems should not appear within core units. In most situations it is inapplicable. Suggest "Implement an irrigation schedule" or "Set out, install & comm irrig systems"	The SME WG's advice has been sought to address this feedback. They agree with the feedback. Feedback adopted. The <i>AHCDRG301</i> unit has been moved to elective units and packaging rules adjusted accordingly. <i>AHCIRG303 Measure irrigation delivery system performance</i> added to core units list.
 Industry, National 	Certificate III has the 'meat and potatoes' of the industry skills and knowledge in it	Feedback noted, comment appreciated.
	Drainage units shouldn't be in the core or any qualification	The SME WG's advice has been sought to address this feedback. They agree with the feedback. <i>AHCDRG301</i> moved to elective units and packaging rules adjusted accordingly.
	Industry needs an apprenticeship system. Employers are screaming out for it as it will boost their business and give their apprentices the correct skills required to do the jobs at hand. Industry should push for this to be a trade qualification. We're ready	Feedback noted, recommendation appreciated.

Stakeholders Comments and Identified Issues		Consideration and Proposed Resolution
	If RTO's do not pick up the Certificate III, and if it doesn't become a trade qualification, we will lose prospective new industry people. Issue will be that across Australia there is low industry density, so fewer RTO's will be likely to deliver the qualification as there is no base where student numbers will be high	Feedback noted, recommendation appreciated.
	Any unit with plumbing pre-requisites is causing headaches for irrigators and irrigating trainers. Although the content is perfect often, these pre-requisites are making delivering the unit very difficult. The engineering package has a unit MEM12024A that is less useful than the plumbing equivilant but has no pre-requisites attached. Might be worth putting it in the qualification as an alternative to avoid the pre-requisite units	The SME WG's advice has been sought to address this feedback. They agree with the feedback, move the construction and plumbing units to elective units list and <i>AHCWHS301</i> unit into core of Certificate III. Feedback adopted.
RTO, WAIndustry, WA	Southern WA irrigators do not need to know about soil at all. These units should be removed from the core into the electives. The Performance Criteria discussing Atensiometror cannot be used in sandy soils. For soil husbandry practices in southern WA, this is a useless instrument.	The SME WG's advice has been sought to address this feedback. After discussion they have advised that this unit is to remain in the core as it is a fundamental aspect of irrigation that every graduate needs to be aware of.
• Government, WA	There should be electives in the core. As in it should be listed 'Must do "A" or "B"	The SME WG's advice has been sought to address this feedback. After discussion they have advised that the structure of qualification remains as is. The rationale was that the way it is currently represents best practice for effectively teaching all the content that is to be covered, and that graduates will have a unified knowledge base, with employers knowing what they will be taught, when entering the workforce.
	Is Use hand tools a 'soft' elective for the Certificate III?	The SME WG identified this unit amongst others as good units to develop the skills required of new entrants to the trade. They have recommended not to adopt this piece of feedback

Stakeholders Commo	ents and Identified Issues	Consideration and Proposed Resolution
 Industry, WA 	Soils unit needs a moisture element, and should be moved from core to elective	The SME WG's advice has been sought to address this feedback for <i>AHCIRG308</i> . They informed us that Element 3 - Define soil moisture properties, covers soil moisture already. They have advised not to move this unit to Group A as they see a knowledge of soil as integral to irrigation practices nationally. Unit to remain in the core.
	Health and Safety related unit should be in Group A of electives, not Group B	The SME WG's advice has been sought to address this feedback. They agree with the feedback. <i>AHCWHS301</i> unit has been moved into core of Certificate III.
Industry, VIC	Sales units need to be in the qualifications as electives at least	The SME WG's advice has been sought to address this feedback. They agree with the feedback. There are sales units now in the electives units list for the Certificate III. Feedback adopted.
 Industry, VIC x 2 	Swap these soil and drainage core units for AHCIRG303. This should be core as the controllers are becoming more advanced and complicated. You need the tech knowledge to keep up with what's being used in the field.	The SME WG's advice has been sought to address this feedback. <i>AHCDRG301</i> moved to elective units, <i>AHCIRG308</i> to remain in core as its content has been deemed vital for all graduates to know nationally. <i>AHCIRG303 Measure irrigation delivery system performance</i> moves to core and packaging rules have been adjusted accordingly.
• Industry, NSW	The following from the previous Certificate III should carry across- AHCDRG301 Install drainage systems E-A AHCDRG302 Measure drainage system performance E AHCDRG303 Troubleshoot drainage systems E AHCDRG304 Maintain and repair irrigation drainage systems E-A AHCINF304 Install and terminate extra low voltage wiring systems E-A AHCIRG303 Measure irrigation delivery system performance E AHCIRG306 Troubleshoot irrigation systems E-A AHCIRG308 Monitor soils under irrigation C AHCIRG309 Install irrigation pumps E-A AHCIRG310 Operate and maintain irrigation pumping systems E-A	The SME WG's advice has been sought regarding core and elective units. The units listed in the qualification are as follows (units with an asterix are different than proposed)- AHCDRG301 Install drainage systems – Group A AHCDRG302 Measure drainage system performance - Group A AHCDRG303 Troubleshoot drainage systems - Group A AHCDRG304 Maintain and repair irrigation drainage systems - Group A AHCDRG304 Install and terminate extra low voltage wiring systems- Core* AHCIRG303 Measure irrigation delivery system performance – Core* AHCIRG306 Troubleshoot irrigation systems – Core* AHCIRG308 Monitor soils under irrigation - Core AHCIRG309 Install irrigation pumps – Core* AHCIRG310 Operate and maintain irrigation pumping systems – Core* AHCIRG315 Interpret irrigation plans and drawings – Core* AHCIRG3XX Operate irrigation controller and sensor technology - Group A*

Stakeholders Comments and Identified Issues		Consideration and Proposed Resolution
	AHCIRG315 Interpret irrigation plans and drawings E-A AHCIRG325 Operate irrigation technology E-A AHCIRG326 Operate irrigation injection equipment E-A AHCIRG327 Implement an irrigation schedule E-A AHCIRG331 Install pressurised irrigation systems E-A AHCIRG333 Maintain pressurised irrigation systems E-A AHCIRG334 Operate and maintain gravity fed irrigation systems E-A AHCIRG335 Operate and maintain moving irrigation system E-A AHCLPW306 Undertake sampling and testing of water E AHCMER304 Recommend irrigation products and services E AHCWHS301 Contribute to work health and safety processes C AHCWRK305 Coordinate work site activities E-A AHCWRK405 Implement and monitor environmentally sustainable work practices E CPCPIG2021A Design domestic urban irrigation systems E CPCPWT3027A Connect irrigation systems from drinking water supply E NWPIRR014 Install meters for rural water supplies E NWPIRR024 Monitor and conduct maintenance on flow control and metering devices E NWPIRR042 Monitor and schedule water deliveries E NWPIRR042 Monitor and schedule water deliveries E NWPIRR042 Monitor and schedule water deliveries E	AHCIRG326 Operate irrigation injection equipment - Group A AHCIRG327 Implement an irrigation schedule - Group A AHCIRG331 Install pressurised irrigation systems - Core* AHCIRG333 Maintain pressurised irrigation systems - Group A AHCIRG335 Operate and maintain gravity fed irrigation systems - Group A AHCIRG335 Operate and maintain moving irrigation system - Group A AHCIRG335 Operate and maintain moving irrigation system - Group A AHCIRG335 Operate and maintain moving irrigation system - Group B AHCMER304 Recommend irrigation products and services - Group B AHCWHS301 Contribute to work health and safety processes - Core AHCWRK305 Coordinate work site activities - Group A AHCWRK305 Coordinate work site activities - Group A AHCWRK405 Implement and monitor environmentally sustainable work practices - not in qualification* CPCPIG2021A Design domestic urban irrigation systems – Group A CPCPWT3027A Connect irrigation systems from drinking water supply - Group A NWPIRR014 Install meters for rural water supplies - Group B NWPIRR022 Maintain meters for rural water supplies - Group B NWPIRR024 Monitor and conduct maintenance on flow control and metering devices - Group B NWPIRR042 Monitor and schedule water deliveries - Group B NWPIRR042 Monitor and schedule water deliveries - Group B NWPTRT062 Operate and control reclaimed water irrigation - Group B
 Industry, NSW 	 NWPTRT062 Operate and control reclaimed water imgation E Proposed Cert III Core Group A- AHCDRG301 Install drainage systems R AHCIRG306 Troubleshoot irrigation systems R AHCIRG308 Monitor soils under irrigation R AHCIRG309 Install irrigation pumps R AHCIRG310 Operate and maintain irrigation pumping systems R AHCIRG315 Interpret irrigation plans and drawings R 	The SME WG's advice sought regarding core and elective units recommended in the feedback. The units listed are in the core of the qualification with the exception of the following units: AHCDRG301 Install drainage systems – Group A CPCPIG3021A Set out, install and commission irrigation systems – Group A

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	AHCIRG331 Install pressurised irrigation systems R AHCWRK309 Apply environmentally sustainable work practices R CPCPCM2043A Carry out WHS requirements R CPCPIG3021A* Set out, install and commission irrigation systems R	<i>CPCPCM2043A Carry out WHS requirements</i> – Group B. These units have been deemed non-vital for graduates nationally, but retained as electives.
• Industry, NSW	Proposed Cert III Core Group B- AHCCHM101 Follow basic chemical safety rules B AHCCHM201 Apply chemicals under supervision B AHCCHM304 Transport and store chemicals B AHCLPW306 Undertake sampling and testing of water B AHCMER301 Process customer complaints B AHCMER303 Sell products and services B AHCMER304 Recommend irrigation products and services B AHCMER304 Recommend irrigation products and services B AHCMOM204 Undertake operational maintenance of machinery B AHCMOM208 Conduct excavator operations B AHCMOM304 Operate machinery and equipment B AUMGTW001 Perform basic welding, thermal cutting, heating and gouging B BSBWRT301 Write simple documents B MEMPE001A Use engineering workshop machines B MEM07032B Use workshop machines for basic operations B MEM18001C Use hand tools B MEM18002B Use power tools/hand held operations B NWPIRR002 Operate basic flow control and regulating devices in irrigation systems B	The SME WG's advice has been sought regarding core and elective units recommended. This feedback has been adopted, the units listed are in group B of the qualification.
 Government, WA 	Qualification Description- Paragraph 1- Given this is a Cert III qual which is often trade level and we have horticultural trades, these occupations are not equivalent tot he level of the qual. Perhaps just nominate 'horticulture worker'?	Feedback adopted, qualification description paragraph 1 changed to: 'This qualification describes the skills and knowledge for trade level roles carried out under broad supervision in the irrigation industry'

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	Plumbing Units are not appropriate. Entails elements that are not undertaken in irrigation. Such as the safe use of electricity; the identification of hazardous materials, including asbestos. Site location for work application may be either domestic or commercial and may be a new work site or an existing structure or fitting being renovated, extended, restored or maintained. It could also be conducted in an on or off-site workshop or at a customer's premises.	The SME WG's advice has been sought to address this feedback. They agree with the feedback. We have moved the construction and plumbing units to elective units list and <i>AHCWHS301</i> unit into core of Certificate III.	
Industry, VIC	Certificate III unit 'Use of hand tools' is too basic. Can we pair it up into a point system?	The SME WG identified this unit amongst others as good units to develop the skills required of new entrants to the trade and have recommended it remain in the qualification. The use of a point system is not in the standards for training packages.	
 Industry, VIC x 2 	Move Extra low wattage units into core of Certificate III.	The SME WG's advice has been sought to address this feedback. They agree with the feedback. Feedback adopted. <i>AHCINF304</i> moved into the core.	
• Industry, NT	 Certificate III in Irrigation Technology The packaging Rules The qualification needs to provide direction/guide for the learner to understand what units should be selected for the best outcome of each job role. There is significant difference in the job roles. Would this qualification require specialisation, instead of choosing units from elective group A & Group B Core units Drainage unit not required to be core, this is a one off activity Understanding soil and root system is a vital component of installing and maintaining irrigation systems, but is missing from the qualification Learning about the technology side of 	The SME WG's advice has been sought. The structure of qualification to remain as is. Drainage unit - <i>AHCDRG301</i> moved to elective Group A. Soil unit – <i>AHCIRG308</i> will remain in the core units. The ability to write complex documents and record keeping are covered in the Certificate IV in Irrigation Management.	

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	 Assist with following up supply chin activities; poor product design, in efficient performance of a product, following up warranty Record keeping is a required skill needed Consideration to increase the learn of writing simple documents, to writing complex documents if job role requires report to be submitted, the person may require higher level of skill than writing simple documents. 	
• Government, WA	Qualification Description, Paragraph 3- 'work health and safety environment' and workplace laws and regulations (such as harassment).	This feedback has been noted and has been placed on the Skills Impact Issues Register for consideration. Some states not referring to <i>work</i> <i>health and safety</i> but rather <i>occupational health and safety</i> . This has also been included in the Issues Register.
	FBPOPR1010 Carry out manual handling- Interesting inclusion in the core, but it is OK by me.	Feedback noted, recommendation appreciated.
	Having drainage Units in the core is most problematic for WA. We have very limited drainage system application in irrigation. There is limited use of open channels in Dardenup and Ord River. But water costs are low, so systems are basic and often farmer installed and maintained.	The SME WG's advice has been sought to address this feedback. They agree with the feedback. <i>AHCDRG301</i> moved to elective units and packaging rules adjusted accordingly.
 Industry, NSW 	State transferable skill retain	The SME WG's advice sought to address feedback. They have decided that these units should not go into the core, and they agree with adding <i>UEENEEE101A</i> and <i>UEENEEP024A</i> (electrical units) into elective Group
	In reviewing the current Certificate III irrigation based on my 30 odd years in industry I find the Training package as propose – INADEQUATE – to provide the skill sets required by a future EMPOLYED Irrigation Professional.	 B. This portion of the feedback has been adopted. Addition of 4 new skill sets to address inadequate current set, this portion of the feedback has been adopted.
	By reviewing Government, Industry and my own experience in industry I find the Core subjects as proposed DO NOT cover	The SME WG does not recommend the creation of two different Certificate III's in Irrigation and believe that the reviewed qualification would be able to cater to all the industry needs as indicated in this piece of feedback.

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	Government/s and industry requirements as published (Licencing / Certification / Safety).	The proposed qualifications do cover the requirements of the Trans-
	From experience and working for many Employers, incorporation of personal and asset electrical safety NEEDS TO BE MANITORY in CORE UNITS (even electrical surge and lighting issues).	Tasman training legislation.
	The current proposed Cert III irrigation is not compliant to attract Government acknowledgement or funding for an appropriate Irrigation TRADE COURSE with transferable skills/knowledge.	
	The Current propose course do not meet industry CERTIFIECATION / SKILLS SET requirements as Packaging delivery can be changed between training organisation leading to skills deficiencies in issued Certificate III irrigation Certificates and restriction in transferable skills (rural / urban and state boundaries).	
	I Propose acceptant of TWO Certificate III irrigation:	
	 Current style Certificate III – Technology, to meet time frames for transitional arrangements (WEAK OPTION). Improved and Expanded Certification III to IRRIGATION TRADE (up to 35/40 subjects over three years to allow time for governmental (Federal / State) acceptance, funding arrangement. Will also support safety within industry (electrical), transferable skills (rural / urban and associated industries) and finally improve water use safety (cross contamination within Australia). 	
	 The CERT III irrigation grouping is an important skill set that NEED to be reviewed thoroughly as to the component subjects that are required by a diverse (irrigation) industry that SUPPORTS MANY OTHER INDUSTRIES (rural/urban. Plumbing, waste water use, water industry, broad scale agriculture, home gardeners, intensive horticulture, turf 	

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industry, government, retail, stock management, etc). It is ALSO REQUIRED to ADHERE TO FEDERAL, STATE, REGIONAL, LOCAL governments; LAWS, REGULATIONS, CODES OF PRACTISE, LISENCING requirements (these vary between all)	
It is noted that federal training funding is available for a persons FIRST certificate III or IV. It is unclear to me if ALL state governments will provide training funding (subsidise) for a Certificate III irrigation, although some do (noted below). Further to note are Australia's INTERNATIONAL skills recognition programs e.g. NZ / Aust or UK / AUST. Does this proposed Certificate III Irrigation support these arrangements.	
Consideration of industry organisation requirements (eg IAL Certification Programs) and more importantly the individual's ability to USE his/her CERT III qualification between not only over STATE / FEDERAL BOUNDRIES, or either in rural or urban environments as a skill set awarded at that point in time, BUT also to be able to obtain appropriate State or other Regulatory Licencing Requirements NATIONALLY, (within state/ federal training funding availabity) without spending extra \$\$\$\$\$ to OBTAIN appropriate subject was not taught as a core.	
The Federal Governments current training policy is to subsidise funding to a person FIRST CERTIFICATE III course. Subject to the will of State or Territory Governments, State or Territory Government MAY allocate training funds to either an apprenticeship or traineeship.	
Unfortunately, IRRIGATION is currently NOT ON the Australian Governments Trade needed skills list, whilst some State/Territory Governments list irrigation as a Traineeship.	

Stakeholders Comments and Identified Issues	Consideration and Proposed Resolution
In regional / rural towns an increase in population requires knowledge of BOTH potable (cross contamination), rainwater river, dam, etc water use.	
To be able to train the future of the irrigation industry an encompassing training package is require to provide knowledge and transferable skills, particularly in:	
 Connecting to potable water Install / check rural water meters 	
These both are transferable skills knowledge across Australia (rural/urban) requiring licencing or regulation by some states	
Another concern is electrical safety. Irrigators work in wet environment with electricity (12v, 24v, 240v and 415v). In some situations, the job may require checking power supplies to the controller/pump, modification of electrical leads or just making sure the power is off.	3
As the current Certificate III irrigation has been and is proposed CERT III irrigation package; legally s/he is REQUIRED BY STATE LAW (exception remote areas WA maybe) to engage a licenced electrician. This can lead to job delays (Regional areas particular) and increased costs to the client, for a skill that is required on site.	
I formally submit that subjects: UEENEEE101A - Apply Occupational Health and Safety regulations, codes and practices in the workplace UEENEEP024A - Attach cords and plugs to electrical equipment for connection to a single phase 230 Volt supply (Release 3)	
THESE Be included as MANITORY CORE UNITS - primarily an OHS requirement and secondary as a skill that is require	

Stakeholders Comme	ents and Identified Issues	Consideration and Proposed Resolution
• Industry, NSW	I note further work is needed to collect, collate and review ALL the Federal, State, Territory, Regional, Statutory Bodies (eg water authorities), Local Councils, Industry Organisations PUBLISHED use of CERTIFICATE III irrigation and related subjects. I note and submit the following comments in relation to the limited transferable skill sets as proposed in AHC3xx19 1. OHS a. Does not cover electrical safety i. Include the following as core units 1. UEENEEE101A - Apply Occupational Health and Safety regulations, codes and practices in the workplace 2. UEENEEP024A - Attach cords and plugs to electrical equipment for connection to a single phase 230 Volt supply (Release 3) 3. NWPNET011 Locate, identify and protect utilities b. Does not cover asset safety - electrical water – gas – communications i. Include the following as core units 1. NUPNET011 Locate, identify and protect utilities c. Does not cover regulatory drinking water safety. i. Move the following from Group A to core units 1. CPCPWT3027A* Connect irrigation systems from drinking water supply (Noting CPCPCM2043A Carry out WHS requirements is a core unit) 2. Skill Flexibility a. Limits transferable skills between urban / rural and other water industries i. Move the following from Group A to core units 1. AHCINF304 Install and terminate extra low voltage wiring systems 2. AHCIRG303 Measure irrigation delivery system performance 3. AHCIRG32 Operate pressurised irrigation systems	The SME WG's advice has been sought to address this feedback. They have decided to leave with core without all the recommended units, with the exception of <i>AHCINF304</i> , <i>AHCIRG303</i> which will now go into the core. The SMEWG have advised to add <i>UEENEEE101A</i> and <i>UEENEEP024A</i> into elective Group B. With the addition of the electrical units, the qualification now covers electrical safety. This point has been adopted. It is beyond the scope of the SME WG to prevent people from transferring interstate, or to prevent them from moving between different parts of the irrigation industry.

Stakeholders Commo	ents and Identified Issues	Consideration and Proposed Resolution
	 4. AHCIRG333 Maintain pressurised irrigation systems ii. Move the following from Group B to core units 1. NWPIRR014 Install meters for rural water supplies 2. PMBWELD301 Butt weld polyethylene plastic pipelines 3. PMBWELD302 Electrofusion weld polyethylene pipelines 3. Licencing requirements a. Restricts the person of obtaining suitable employment interstate / intrastate and Limits transferable skills between urban / rural and other water industries. Further the committee to review State licencing requirements in relation to irrigation i. Move the following from Group A to core units 1. CPCPWT3027A* Connect irrigation systems from 	
	 4. Skills Packages a. Import Proposed Skills Set units into CERT III irrigation CORE units i. AHCSS000XX Irrigation Retail Skill Set (replacing AHCSS0037) 1. All ii. AHCSS000XX Irrigation Retail Skill Set 1. All iii. AHCSS00035 Irrigation Installer Skill Set 1. Particular AHCIRG 3030 Measure irrigation delivery system performance iv. AHCSS00062 Pressurised Irrigation System Operator Skill Set 1.Particular AHCIRG 3030 Measure irrigation delivery system performance 5. Industry Certification Requirements a. Import Industry Certified Skills Set units into CERT III irrigation CORE units i. IAL Meter validation units (industry transferable skills) 	The SME WG's advice has been sought and they believe that all recommended units should not go into the core of the qualifications, however all the units in the skill sets have been made available in the qualifications at their relevant level (i.e. AQF3 level units in the Certificate III, etc).

Stakeholders Comme	ents and Identified Issues	Consideration and Proposed Resolution
	 All skills sets (transferable skills) ii. IAL Certified Irrigation Operator Particularly AHCINF304 Install and terminate extra low voltage wiring system Particularly AHCIRG303 Measure irrigation Delivery System Performance ii. IAL Certified Retailer All Skill set units iv. IAL Efficiency Workshop Skill set Particularly AHCIRG303 Measure irrigation Delivery System Performance V. IAL Efficiency Workshop Skill set Particularly AHCIRG303 Measure irrigation Delivery System Performance V. IAL Performance Evaluation Skill set Particularly AHCIRG303 Measure irrigation Delivery System Performance 	
• Industry, WA	 There are really two streams of irrigation people that need to be catered for, these are Irrigation as a service industry The irrigation installers and maintainers, the industry segments include both amenity and production horticulture, These people contractors who read and interpret a design and install as per the plan, they need project management skills The irrigation maintenance people who fix and repair, broken or inefficient systems They need product knowledge and problem solving skills The irrigation operators and managers These people operate the systems, the industry segments include both amenity and production horticulture. 	The SME WG's advice has been sought and they have recommended that <i>AHCIRG308 Monitor soils under irrigation</i> to stay in the core. This is a fundamental aspect of irrigation and it was agreed that is must be taught in the core of the qualification. <i>AHCIRG327 Implement an</i> <i>irrigation schedule</i> is in Group A.

Stakeholders Comments and Identified Issues		Consideration and Proposed Resolution
	 They need knowledge of crops, soils and scheduling methods. 	
	Foe these reasons I suggest that the core units in the Cert 111 be limited to units that apply to both segments of the industry (ie: soils and scheduling should not be core, as contract installers do not schedule irrigation, the operators do)	
• Government, WA	Qualification description Can the following be included into the description "Work must comply with work, health, safety, environmental and workplace legislation and regulations"? This will ensure all workplace issues i.e. EEO, Harassment and Fair Work are incorporated in the statement.	This feedback has been noted and has been placed on the Skills Impact Issues Register for consideration. Some states not referring to <i>work</i> <i>health and safety</i> but rather <i>occupational health and safety</i> . This has also been included in the Issues Register.
	Unit breakdown Significant increase in the number of core units in this qualification – from two to ten units. There has been an overall increase in the total number of units to complete the qualification from 14 to 22 units. What is the justification for increasing the number of units for this qualification?	Feedback noted, the qualification has increased in total number of units to reflect the complexity of the job role. There has been significant work undertaken to professionalise the irrigation industry, particularly it's training. This has included negotiating with their peers in New Zealand, to establish professional trade qualifications in New Zealand which under the Trans-Tasman Mutual Recognition Act 1997 will need to be recognised within Australia. It is envisaged that sometime in the future this qualification will be a recognised apprenticeship in Australia and Irrigation Australia (the national peak body for the industry) has commenced work within several jurisdictions to effect this change.
	In relation to the units in Group B - I note that there are a range of units from different training packages, including the MEM and the PMB Training packages. What is the justification for having these units in this qualification? Have the IRCs for these imported training packages, been advised that their units will feature in this qualification? The STA will need to consider the implications for employers and RTOs delivering this qualification?	Feedback noted, these units reflect the complexity of the job role and licensing requirements in several jurisdictions for specific tasks undertaken by irrigators. The use of units from other training packages also allows for portability of skills within and between industries, whilst minimising duplication of units across the system. This is consistent with both the Principles for training package development and Training Package Quality Principles.

Stakeholders Comments and Identified Issues		Consideration and Proposed Resolution
	Qualification Mapping Information The new qualification is listed as not equivalent to AHC32412 do you mean it is not equivalent to AHC32416?	Feedback adopted, unit mapping information changed to 'AHC32416'.
Industry, VIC	Drainage should be moved to elective. Rarely comes in to play for irrigation contractors. Mostly applicable to civil and landscape contractors	The SME WG's advice has been sought to address this feedback. They agree with the feedback. <i>AHCDRG301</i> moved to elective units and packaging rules adjusted accordingly.
	AHCIRG332 Operate pressurised irrigation systems, if we have install pressurised systems in core we should also be on top of maintaining them AHCIRG325 Operate irrigation technology- Possible move AHCIRG325 to core. Current water climate would benefit from better understanding and application of any technologies that will allow water to be applied & monitored more efficiently.	The SME WG's advice has been sought to address this feedback. They have recommended that these units remain in the Group A electives bank. Although the SMG WG considers these units important, they do not believe that the work contained within them will be undertaken by every Certificate III graduate in the field.
 Industry, National 	Recommend adding NWPNET002 Prepare and restore work site and NWPNET011 Locate, identify and protect utilities to elective units in Certificate III to enable better credit arrangements/connection between the qualification and the Irrigation Meter Installation and Validation Skill Set	Feedback adopted, added the following units to the Certificate III in Irrigation Technology (Elective Group B): NWPNET002 Prepare and restore work site NWPNET011 Locate, identify and protect utilities
 Association, National 	Install drainage systems should not appear within core units. In most situations it is inapplicable. Suggest "Implement an irrigation schedule" or "Set out, install & comm irrig systems"	The SME WG's advice has been sought to address this feedback. They agree with the feedback. <i>AHCDRG301</i> moved to elective units and packaging rules adjusted accordingly. <i>AHCIRG303 Measure irrigation delivery system performance</i> has been added to core units list.
AHC4XX19 Certificate	e IV in Irrigation Management	
of feedback received fe	or the Certificate IV in Irrigation Management supported the quali	fication structure.
 Association, National RTO, NSW 	Once again Drainage should not be included in CORE subjects but should be available as elective. Suggest replace with Supervise work routines and staff performance	The SME WG's advice has been sought to address this feedback. They agree with the feedback, and feedback has been adopted with the packaging rules adjusted accordingly. <i>AHCWRK403 Supervise work routines and staff performance</i> to remain in elective units on recommendation of SME WG.

Stakeholders Comr	nents and Identified Issues	Consideration and Proposed Resolution
 Industry, National 	AHCIRG408 Schedule irrigations AHCIRG434 Manage surface irrigation sytems Suggest they become core. Relates to most streams	The SME WG's advice has been sought to address this feedback. They agree with the feedback for <i>AHCIRG408</i> to be moved to core units and this portion of the feedback has been adopted. However <i>AHCIRG434</i> to remain as an elective as they do not believe the contents of the unit will be used in every day work by graduates.
	Restrict core units to irrigation & whs only?? Also consider different streams for Cert IV. Forcing install or pumps may not suit? Therefore shorter core might be more appropriate	The SME WG's advice has been sought for this piece of feedback. They agree that <i>AHCDRG401</i> should be moved to elective units bank, and so it has been, with packaging rules adjusted accordingly. SME WG recommends that the qualification structure to remain the same, and <i>AHCIRG410</i> Select and manage pumping systems for irrigation to remain in core as they represent best practice.
 Industry, NSW 	INCLUDE CPCPPS5027A Design irrigation systems as core in Cert IV. REASON Package is about DESIGN	The SME WG's advice has been sought to address this feedback. They stated that the qualification is about managing as well as design, as this unit is a Diploma level unit. They also believe that this is a potential duplicate of the unit <i>AHCIRG503</i> Design irrigation, drainage and water treatment systems. They have recommended the unit remain an elective.
• RTO, WA	On core units- Agree with comments from XXXX and XXXX. which are- Once again Drainage should not be included in CORE subjects but should be available as elective. Suggest replace with Supervise work routines and staff performance Restrict core units to irrigation & whs only?? Also consider different streams for Cert IV. Forcing install or pumps may not suit? Therefore shorter core might be more appropriate	The SME WG's advice has been sought regarding this feedback. They agree with <i>AHCDRG401</i> being moved to elective units, and this has been done, with packaging rules adjusted accordingly. They believe that <i>AHCWRK403 Supervise work routines and staff performance</i> needs to remain in elective units. They agreed that the qualification structure to remain unchanged, and <i>AHCIRG410 Select and manage pumping systems for irrigation</i> to remain in core.
	AHCIRG408 Schedule irrigation- Agree with XXXX that this should become core	The SME WG's advice has been sought to address this feedback. They agree with the feedback. <i>AHCIRG408</i> moved to core units. Feedback adopted.

Stakeholders Comments and Identified Issues		Consideration and Proposed Resolution	
	AHCIRG434 Manage surface irrigation systems- Disagree with XXXX, manage surface irrigation systems should remain as elective for those who work with systems which are not pressurised	The SME WG's advice has been sought to address this feedback. They agree with the feedback. <i>AHCIRG434</i> to remain as an elective.	
	AHCIRG432 is a useless unit. It's not an irrigators role, and the elements suggest as much	The SME WG's advice has been sought. They believe the unit should remain an elective. Feedback noted by SME WG.	
• Government, WA	Agree with XXXX and XXXX that draingage should not be in the core	SME WG Advice sought: Agree, AHCDRG401 moved to elective units and packaging rules adjusted accordingly.	
	AHCBUS402 Cost a project- It seems to me that costing a project should be something that supervisor should be able to do - core unit?	The SME WG's advice has been sought to address this feedback. They have recommended that <i>AHCBUS402</i> remain as an elective. SME WG advised that project costing was sometimes outsourced to finance department for larger organisations and therefore not a universal task to be completed by all workers.	
 Industry, National 	Can we also add ICTICT402 - Determine project specifications and secure client agreement to list of elective units?? To replace the PSPPM402B "Simple Projects" subject? (Apart from ICT rference this subject is good).	Feedback adopted, added <i>ICTICT402 Determine project specification and secure client agreement</i> to elective units list.	
• Government, WA	Qualification description Can the following be included into the description "Work must comply with work, health, safety, environmental and workplace legislation and regulations"? This will ensure all workplace issues i.e. EEO, Harassment and Fair Work are incorporated in the statement.	This feedback has been noted and has been placed on the Skills Impact Issues Register for consideration. Some states not referring to <i>work</i> <i>health and safety</i> but rather <i>occupational health and safety</i> . This has also been included in the Issues Register.	
	Unit Breakdown I note that the units from the previous qualification AHC41116 has AHCBUS402 Cost a Project and it is not in the new qualification. I would have thought the person undertaking this qualification would have responsibility for costing a project.	Feedback adopted, <i>AHCBUS402</i> is the first unit in the elective's units list of the qualification.	

Stakeholders Comm	ents and Identified Issues	Consideration and Proposed Resolution
•	I also note that unit BSBSMB406 has been superseded by unit BSBSMB421 Manage Small Business Finances.	Feedback adopted, replaced BSBSMB406 with BSBSMB421.
AHC5XX19 Diploma The majority of feedba	of Irrigation Design Ick received for the Diploma of Irrigation Design supported the qu	alification structure.
 Industry, National 	I am happy with this new layout.	Feedback noted, recommendation appreciated.
 Industry National 	Very happy with the diploma	Feedback noted, recommendation appreciated.
• Government, WA	AHCIRG503 Design irrigation, drainage and water treatment systems AHCIRG504 Develop an irrigation and draginage management plan These units, as are, in the core will cause problems with any delivery in WA as we do not have many drainage systems.	The SME WG's advice has been sought to address this feedback. They have recommended that these units remain in the core. WA based SME's have told us that WA does have drainage systems and the design of systems and development or management plans should be core at this level.
	AHCBUS504 Prepare esimates, quotes and tenders Should this not be core? surely one designs to a price/budget or needs to specify what alternative designs will cost.	The SME WG's advice has been sought to address this feedback. They recommend that this unit remain in the electives bank of the qualification. The SME WG advised that pricing or budgeting was sometimes outsourced to finance department for larger organisations and therefore not a universal task to be completed by all workers.
 Industry, NSW 	AHCIRG501 through to AHCIRG505 are all excellent units and teachable together. It would get picked up in many RTO's in NSW and QLD	Feedback noted, recommendation appreciated.
	Disagree with XXXX's comment- "These units, as are, in the core will cause problems with any delivery in WA as we do not have many drainage systems.'"	The SME WG's advice has been sought to address this feedback. They agree with the feedback to keep these units in the core. WA does have drainage systems and the design of systems and development or management plans are core at this level.

Stakeholders Comments and Identified Issues		Consideration and Proposed Resolution
	POINT OF design sewage irrigation systems. Also in some WA area water repellent sands exist. Drainage include surface and subsurface flow (even soil preferential flow or soil boundary layer flow).	
• Government, WA	Qualification description Can the following be included into the description "Work must comply with work, health, safety, environmental and workplace legislation and regulations"? This will ensure all workplace issues i.e. EEO, Harassment and Fair Work are incorporated in the statement.	This feedback has been noted and has been placed on the Skills Impact Issues Register for consideration. Some states not referring to <i>work</i> <i>health and safety</i> but rather <i>occupational health and safety</i> . This has also been included in the Issues Register.
	I am not sure why this qualification is not an equivalent qualification. There is a single unit change in the core from AHCSOL501 Monitor and manage soils for production to AHCSOL402 Develop a soil use map for a property – is the change of unit significant? The rules around the electives have also changed slightly – is that why the qualification is not equivalent?	Feedback noted, along with the change of unit in the core and packaging rules, the number of units that can be imported has been reduced and there have been several units removed and added to the elective units list. The title and descriptor of the qualification has also changed with the qualification being focussed on irrigation design. Under the guidance of the Standards for Training Packages with these changes made, it cannot be considered an equivalent qualification as an individual who has carried out an earlier version of this Diploma does not hold an equivalent level of knowledge that can be mapped to this updated qualification.
General comments re	elated to qualifications	
 Association, National 	Soil needs to be in the core of every qualification. Even in sandy environments, nothing can grow unless there is at least a thin soil base. Arguments suggesting otherwise are very narrow (almost exclusively from pockets of WA) and do not reflect the national need.	The SME WG's advice has been sought to address this feedback. They agree with the feedback. Soil units to stay in the core. SME WG agree that they are a fundamental aspect of irrigation.
 Industry, Victoria 	XXXX has reviewed the pump relevant sections in the Revised units in all Irrigation qualifications.	Feedback noted, recommendation appreciated.
	XXXX reports that they have seen nothing missing nor added that they consider should or should not be included. In their opinion all included is appropriate.	

takeholders Comments and Identified Issues		Consideration and Proposed Resolution
• RTO, WA	As it stands, all qualifications are borderline undeliverable. Too strict in Assessment Criteria	The SME WG's advice has been sought to address this feedback. They informed Skills Impact that as the qualifications are currently being delivered and assessed and the changes are not that drastic, they believe that the qualification is deliverable and the Assessment Criteria reasonable and appropriate. Feedback noted by SME WG.
	Drainage cannot be in the core of any unit. Qualification would certainly be undeliverable if drainage units were in the core. Drainage also has no place in application of sampling soils	The SME WG's advice has been sought to address this feedback. They agree with the feedback. Drainage units moved to electives in all qualifications and adjust packaging rules accordingly.
	Construction and plumbing units to be moved to elective lists. This may be conceeded as 3 current units require a construction unit as a pre-requisite, but it is the ideal situation	The SME WG's advice has been sought to address this feedback. They agree with the feedback. Construction and plumbing units moved to elective units list and <i>AHCWHS301</i> unit into core of Certificate III.
• RTO, WA x 2	Plumbing and construction units should be removed from the qualifications over the course of time. Independent irrigation units need to be created for this to happen	The SME WG's advice sought. They agree with the feedback and agree that this needs to be a gradual process.
Industry, WA	Some of the mechanics units don't reflect the work done through industry	The SME WG's advice has been sought to address this feedback. They believe the units accurately reflect the work done through the industry, including the mechanics units.
Industry, WA	All qualifications should have more units on Technologies and Fertigation	The SME WG's advice has been sought to address this feedback. They believe the current units contain Elements that successfully cover new technologies and fertigation within irrigation.
 Industry, NSW 	Licencing and qualifications need to be linked. Everything that is being written should be compatible with existing licencing. Local authorities in states will have their own licencing issues, but the national standards are more important	The SME WG's advice has been sought to address this feedback. They agree with the feedback. The Certificate III has had an increase in pre-requisites to align with industry licencing.
	Do we have any Water Evaluation units? If not, we're missing them. Old units started with NWP. They're very important	Feedback adopted. A number of units previously used have been deleted from the National Water Training Package (NWP), however there are

Stakeholders Comments and Identified Issues		Consideration and Proposed Resolution
		NWP units in all the qualifications. There is a specific unit in the Certificate IV - <i>AHCIRG426 Evaluate water supply for irrigation</i> .
• RTO, VIC	Some of these licences are very hard to get and can take years. Qualifications can't be expected to work around these. Qualifications should be stand alone	The SME WG's advice has been sought to address this feedback. They wish to see the qualifications deliverable across the nation. Updates to pre-requisites have been made to the Certificate III.
• RTO, QLD	As it is it's too hard for RTO's to achieve the performance criteria	The SME WG's advice has been sought to address this feedback. They have reported that the Performance Criteria for all units is achievable.
 Industry, VIC x 2 	Can the assessment criteria be stricter? There is an issue currently of RTO's signing off on training required as 'completed in the workplace' as a way to get out of actually having to train someone in something	The SME WG's advice has been sought to address this feedback. They believe the assessment criteria is adequate to see a high calibre graduate from the qualifications. The phrase 'completed in the workplace is to be retained as some training is impossible within the classroom.
	If the rules surrounding course compliance make it harder for RTOs, and those RTOs are no longer sustainable and they close, good. They shouldn't have been running the training in the first place.	The SME WG's advice has been sought to address this feedback. They agree with the feedback.
Industry, VIC	Qualifications need to make sure they cover irrigation for agriculture and irrigation for sports turf as there is a big difference	The SME WG's advice has been sought to address this feedback. They agree with the feedback. They believe the qualifications cater for both agriculture and sports turf.
	I've never done anything to do with drainage. Drainage is done by a drainer or plumber. We don't need to know it. For sports turf irrigators in particular it's a complete non-issue. Take all drainage units out of the core	The SME WG's advice has been sought to address this feedback. They agree with the feedback. Drainage units moved to electives in all qualifications and adjust packaging rules accordingly.

1 new and 43 revised units

In general the units of competency were well received and supported. Some individual units required additional work subsequent to the feedback to ensure they captured industry needs. These changes are listed below.

Stakeholders Comme	ents and Identified Issues	Consideration and Proposed Resolution
AHCIRG215 Assist w	ith low volume irrigation operations	·
• RTO, WA	Why does this unit try to cover installation of systems and maintenance of systems. They are two entirely different tasks and should be treated as such.	The SME WG's advice has been sought to address this feedback. They agree with the feedback. This unit is about assisting the elements and performance criteria (particularly elements 2, 3 and 4) refocussed to 'assisting'. Feedback adopted.
AHCIRG216 Assist w	ith surface irrigation operations	
• Government, WA	Element 2.1- Check rotobuck area for irrigation set up- I suspect this is a term that is not widely used (at least here in WA!). I understand that it means: The speed-bump-like mounds at the head ditch end of the field that channel the water down. Perhaps checking of gates, channels and ditch- ends is broader and clearer?	The SME WG's advice has been sought to address this feedback. They agree with the feedback. Performance criteria 2.1 changed to 'Check irrigation gates, channels and ditch-ends'. Feedback adopted
AHCIRG217 Assist w	ith pressurised irrigation operations	
• RTO, WA	AHCIRG217 Assist with pressurised irrigation operations- Why does this unit try to cover installation of systems and maintenance of systems. They are two entirely different tasks and should be treated as such. The same point can be made about AHCIRG215	The SME WG's advice has been sought to address this feedback. They agree with the feedback. This unit is about assisting the elements and performance criteria (particularly elements 2, 3 and 4) refocussed to 'assisting'. Feedback adopted.
AHCIRG306 Troubles	shoot irrigation systems	
• RTO, QLD	Not all workplaces will have a written or formal maintenance manual.	Feedback adopted, performance criteria 2.1 changed from 'irrigation system operation and maintenance manual' to 'irrigation equipment handbook', this change also reflected in the performance evidence and
	Not all workplaces will have a manual as the system maybe simple and a low pressure system such as drippers or mini sprayers.	knowledge evidence.
AHCIRG308 Monitor	soils under irrigation	1

Stakeholders Commo	ents and Identified Issues	Consideration and Proposed Resolution
• RTO, QLD	Not all workplaces will have a manual as the system maybe simple and a low pressure system such as drippers or mini sprayers.	Feedback noted, however there is no reference to manuals in this unit. Feedback adopted in relevant units.
AHCIRG309 Install ir	rigation pumps	·
• RTO, QLD	Unit is very broad. Can we make it more specific?	The SME WG's advice has been sought to address this feedback. They agree with the feedback. Edits to unit content to make the unit specific. Feedback adopted.
Industry, VIC	Performance evidence, dot point 6- adjusted and set pressure switches and air tanks to suit pump performance and site conditions.	The SME WG's advice has been sought to address this feedback. They agree with the feedback. Added performance evidence 'adjusted and set pressure switches and air tanks to suit pump performance and site conditions' after dot point 6. Feedback adopted.
	Performance evidence, dot point 6- Troubleshot failed pumping system to determine and rectify cause of failure rather than just fix the failed component.	Feedback adopted, added performance evidence 'troubleshot failed pumping system to determine and rectify cause of failure' after new dot point 7.
AHCIRG310 Operate	and maintain irrigation pumping systems	·
• RTO, QLD	Control flow devices in unit is very broad. Can we make it more specific?	The SME WG's advice has been sought to address this feedback. They agree with the feedback. Edits to unit content regarding control flow devices to make the unit specific. Feedback adopted.
-	irrigation technology; unit code and title change: irrigation controller and sensor technology	
 Industry, National 	AHCIRG325 is a very useful unit	Feedback noted, recommendation appreciated.
Industry, VIC	Operate irrigation technology unit is very broad. Can we make it more specific?	The SME WG's advice has been sought to address this feedback. They agree with the feedback. Unit renamed/recoded and rewritten - <i>AHCIRG3XX Operate irrigation controller and sensor technology</i> , with the following elements-

	1. Prepare for work
	 Prepare for work Operate irrigation controllers Operate irrigation sensors Code and name changes reflected throughout qualifications and skill sets as applicable. Feedback adopted.
ssurised irrigation systems	
This is a vague statement, 'respond to local communities requirements' what does this mean, needs further clarification or needs to be more specific.	Feedback adopted, performance criteria 2.4 changed from 'Use work practices that reflect sustainable horticulture principles and respond to local community requirements' to 'Use work practices that reflect sustainable horticulture principles and environmental requirements'. Added 'environmental requirements' to foundation skills.
and maintain gravity fed irrigation systems	
AHCIRG334 is too big a unit, covering too much subject matter. Could be broken down into 3 or 4 new units from the	The SME WG's advice has been sought to address this feedback. They agree with the feedback. The unit has been split into two units 'Install gravity fed irrigation systems' and 'Operate and maintain gravity fed
AHCIRG334 is a very large unit. Might be best to divide into two units. Install, and Maintain.	 irrigation systems'. Feedback adopted. AHCIRG3XX Install gravity fed irrigation systems, with the following elements – 1. Organise resources for installation work 2. Set out and prepare site 3. Complete water measurement and tail-water works 4. Operate pumps and siphons 5. Measure and interpret water levels, flow rates and volume of water used AHCIRG3XX Operate and maintain gravity fed irrigation systems, with the following elements – 1. Prepare for gravity fed irrigation system operation and maintenance 2. Monitor drainage and tail-water systems 3. Inspect gravity fed irrigation system
	This is a vague statement, 'respond to local communities requirements' what does this mean, needs further clarification or needs to be more specific. Ind maintain gravity fed irrigation systems; unit split into two vity fed irrigation systems Ind maintain gravity fed irrigation systems AHCIRG334 is too big a unit, covering too much subject natter. Could be broken down into 3 or 4 new units from the content AHCIRG334 is a very large unit. Might be best to divide into

Stakeholders Commo	ents and Identified Issues	Consideration and Proposed Resolution
		4. Maintain gravity fed irrigation system5. Record and report maintenance activities
AHCIRG402 Determin	ne hydraulic parameters for an irrigation system	
RTO, WAIndustry, VIC	Allow differentiation between flood and pressure operators in foundation skills numeracy	Feedback adopted, removed 'pressure' from foundation skills, numeracy – dot point 5.
AHCIRG432 Supervis	se irrigation system maintenance	
• RTO, WA	AHCIRG432 Supervise irrigation system maintenance- Pest and weed control needs to be removed from this unit as it is not applicable to many who supervise irrigation system maintenance	The SME WG's advice has been sought to address this feedback. They agree with the feedback. Feedback adopted, Element 4 amended to refocus the element on identifying weed or pest infestation and seeking specialist advice.
AHCIRG502 Design i	rrigation system maintenance and monitoring programs	
 Industry, National 	Good that AHCIRG502 Has a heavy environmental slant	Feedback noted, recommendation appreciated.
4 new and 7 revised	skill sets	
	nd revised skill sets were well received and supported. Some d industry needs. These changes are listed below.	e skill sets required additional work subsequent to the feedback to
AHCSS000XX Irrigati	ion Retail Sales Skill Set	
(new skill set)		
Industry, SA	Irrigation retail organisations should give feedback on the retail skill set	Feedback noted, recommendation appreciated. Skills Impact has reached out to irrigation retail organisations and they have provided feedback on this skill set.

akeholders Comments and Identified Issues		Consideration and Proposed Resolution
 Industry, National 	This is targeted at a Certificate III level. Might be worth having one at a Certificate IV level. Some units in the existing Certificate III level skill set are for Certificate IV qualifications	Feedback noted, recommendation appreciated. The SME WG believe that the skill set provides a pathway to both Certificate III and IV and is therefore suitable for level III and IV graduates.
	Retail skills still set needs refinement. It's relevant but needs to be streamlined	Feedback adopted, recommendation appreciated. Amendments have been completed with instruction from Irrigation Australia.
 Industry National 	AHCSS000XX.IrrigationRetailSalesSkillSet- This skill set should focus on irrigation retail selling??	Feedback mostly adopted, sought the SME WG's advice regarding recommendations. Based on their review, skill Set units are as follows
	Remove CPCPIG2021A (due to prerequisite issue) and replace with SIRXCEG003 - Build customer relationships and loyalty	 AHCMER301 Process customer complaints AHCMER401 - Coordinate customer service and networking activities AHCMER407 Provide irrigation sales and service
	Remove ICTWOR304 (better in other retail skills set) and replace with AHCMER401 - Coordinate customer service and networking activities (Good sales one)	 CPCPIG2021A Design domestic urban irrigation systems CPCPCM2043A Carry out WHS requirements MSTGN3003 Estimate and cost job SIRXCEG003 Build customer relationships and loyalty
	Remove AHCMER303 (Better in other Skills set) and replace with SIRXPDK001 Advise on products and services	 SIRXPDK001 Advise on products and services SITXCCS006 Provide service to customers
	Replace AHCMER304 with AHCMER407 (More sales oriented)	
 Industry, NSW 	Should include the following- CPCPIG2021A Design Dosmestic Irrigation MSTGN3003 Estimate and Cost Job AHCMER301 Process customer complaints AHCMER303 Sell Products and Services AHCMER304 Recommend Irrigation Products	

Stakeholders Com	ments and Identified Issues	Consideration and Proposed Resolution
(new skill set)		
 Industry, National 	High level investigating is auditing. Low level is assessment. This is a recent industry decision	Feedback adopted, skill set title changed from 'Irrigation System Assessor' to 'Irrigation System Auditor'.
 Industry, NSW 	Change to Audit Irrigation Skill Set (Audit is a subject included - NOT ASSESSING)	
AHCSS000XX Irriga (new skill set)	ation System Efficiency Skill Set	
 Industry, NSW 	 Should include- AHCIRG303 Measure irrigation delivery system performance AHCIRG306 Troubleshoot irrigation systems AHCIRG332 Operate pressurised irrigation systems 	Feedback adopted, this skill set has <i>AHCIRG303, AHCIRG306</i> and <i>AHCIRG332</i> listed.
AHCSS000XX Irriga (new skill set)	ation Meter Installation and Validation Skill Set	
 Industry, NSW 	A new skill set for the IAL meter installation and validation program should be included as part of the review. Add the following subjects: NWPIRR014 - Install meters for rural water supplies NWPIRR022 - Maintain meters for rural water supplies BSBWHS201 - Contribute to health and safety of self and others NWPGEN003 - Apply environmental and licensing procedures of the water industry NWPNET002 - Prepare and restore work site NWPNET011 - Locate, identify and protect utilities	Feedback adopted, sought Irrigation Australia (IAL) SME advice: Skill set units are as follows: AHCWHS301 - Contribute to work health and safety processes AHCWRK309 - Apply environmentally sustainable work practices NWPIRR014 - Install meters for rural water supplies NWPIRR022 - Maintain meters for rural water supplies NWPNET002 - Prepare and restore work site NWPNET011 - Locate, identify and protect utilities

Stakeholders Comm	nents and Identified Issues	Consideration and Proposed Resolution
(replaces AHCSS00033 Irrigation Agronomist Skill Set)		
 Industry, NSW 	SKILLS SET DO NOT MEET INDUSTRY EXPECTATIONS ie IAL Certified Irrigation Agronomist.	Feedback adopted, sought Irrigation Australia (IAL) SME advice. Their recommendation was that the skill set needs to be updated to replace <i>AHCSOL402</i> with <i>AHCSOL401</i> . Skill Set units are as follows:
AHCSS000XX Irriga	Include AHCIRG504 Develop an irrigation and drainage management plan AHCSOL401 Sample soils and interpret results AHCIRG404 Implement an irrigation-related environmental protection program Poor presentation by committee (AGAIN) tion Installer and Assessor Skill Set	 AHCIRG402 Determine hydraulic parameters for an irrigation system AHCIRG404 Implement an irrigation related environmental protection program AHCIRG408 Schedule irrigations AHCIRG501 Audit irrigation systems AHCIRG504 Develop an irrigation and drainage management plan AHCSOL401 Sample soils and interpret results AHCWRK509 Provide specialist advice to clients
replaces AHCSS00	035 Irrigation Installer Skill Set)	
• Industry, NSW	Skill Set Requirements- Two subjects part of current AHCSS00035 - Irrigation Installer Skill Set. Add AHCIRG332 to AHCSS0035 and call Irrigation Installer / Assessor. Note AHCIRG303 NOT CORE UNIT for proposed CERT III irrigation	 Feedback adopted, sought SME WG advice regarding inclusion of <i>AHCIRG332</i> to skill set and change of skill set title to 'Irrigation Installer and Assessor'. Skill Set units are as follows: <i>AHCIRG303 Measure irrigation delivery system performance</i> <i>AHCIRG306 Troubleshoot irrigation systems</i> <i>AHCIRG308 Monitor soils under irrigation</i> <i>AHCIRG315 Interpret Irrigation plans and drawings</i> <i>AHCIRG331 Install pressurised irrigation systems</i> <i>AHCIRG332 Operate pressurised irrigation systems</i> <i>AHCIRG332 Operate pressurised irrigation systems</i> <i>AHCIRG332 Operate pressurised irrigation systems</i> <i>AHCWRK405 Implement and monitor environmentally sustainable work practices</i>
AHCSS000XX Irriga	tion Retailer Skill Set	
replaces AHCSS00	037 Irrigation Retailer Skill Set)	

akeholders Com	nents and Identified Issues	Consideration and Proposed Resolution
 Industry National 	This skill set should focus on general irrigation retail duties??	Feedback adopted, sought SME WG advice regarding recommendations, replace 'management' with 'operations', Skill Set units are as follows:
	Note that suggested subject changes below are from the sister qualification CIII Rural Merch 32716	 AHCMER303 Sell products and services AHCMER304 Recommend irrigation products and services
	Remove CPCPIG2021A (due to prerequisite issue) and replace with "SIRRINV001 - Receive and handle retail stock"	 CPCPIG2021A Design domestic urban irrigation systems (SME WG agreed to keep this unit in the skill set) CPCPCM2043A Carry out WHS requirements SIRINV001 Receive and handle stock
	Remove SIRXCEG003 and replace with ICTWOR304 Manage Spare Parts.	 SIRINV002 Control stock SIRRMER003 Coordinate visual merchandising ICTWOR304 Manage spare parts
	replace "management" with "operations"??	
	Remove AHCMER407 and replace with "SIRRINV002 - Control Stock"	
	Remove SIRXPDK001 (Better in "Sales" Skills set) and replace with "AHCMER303 - "Sell products and services".	
 Industry, NSW 	Should include the following- AHCMER304 Recommend Irrigation Products AHCMER407 Provide Irrigation Sales and Service CPCPIG2021A Dessign Dosmestic Urban Products and Services SIRCEG003 Build Customer Relationships SIRRMER003 Coordinate Visual Merchandising SIRXPD001 Advise on Products and Services	
eneral comments	related to Skill Sets	

Stakeholders Comments and Identified Issues		Consideration and Proposed Resolution
 Industry, National 	Skill Sets don't align with the jobs they're supposed to lead into. Need to line them up with the Irrigation Australia qualifications	Feedback adopted, sought Irrigation Australia (IAL) SME advice regarding current irrigation skill sets and alignment with IAL certification They believe the skill sets align with both IAL qualifications and industr job needs.
• Industry, WA	 With the introduction of the new units for Cert 111 I believe that there will be a need for more skill sets to be available. Given that the IAL's Certification programme already has a number of skill sets, it makes sense to align the any new skill sets with this programme. The skill sets required should cover these areas. Service areas Irrigation Installer Irrigation contractor Irrigation retailing 	 Feedback adopted, sought Irrigation Australia (IAL) SME advice. The following existing irrigation skill sets need to be updated as part of this project as follows: AHCSS000XX Gravity Fed Irrigation Operator Skill Set (replaces AHCSS00031 Gravity Fed Irrigation Operator Skill Set) – replace AHCSOL401 with AHCIRG308 AHCSS000XX Irrigation Agronomist Skill Set (replaces AHCSS00033 Irrigation Agronomist Skill Set) – replace AHCSOL401 AHCSS000XX Irrigation Contractor Skill Set (replaces AHCSS00033 Irrigation Contractor Skill Set) – replace AHCSOL402 with AHCSOL401 AHCSS000XX Irrigation Installer and Assessor Skill Set (replaces AHCSS00035 Irrigation Installer Skill Set) – replace AHCSOL401 with AHCSOL401 AHCSS000XX Irrigation Installer Skill Set) – replace AHCSOL401 with AHCIRG308 AHCSS000XX Irrigation Manager Skill Set (replaces AHCSS00036 Irrigation Manager Skill Set) – replace AHCSOL401 with AHCIRG308 AHCSS000XX Pressurised Irrigation System Operator Skill Set (replaces AHCSS0002401) AHCSS000XX Pressurised Irrigation System Operator Skill Set (replaces AHCSS0002401) AHCSS000XX Pressurised Irrigation System Operator Skill Set (replaces AHCSS0002401) AHCSS000XX Pressurised Irrigation System Operator Skill Set (replaces AHCSS0002400) AHCSS000XX Pressurised Irrigation System Operator Skill Set (replaces AHCSS0002400) AHCSS000XX Pressurised Irrigation System Operator Skill Set (replaces AHCSS0002400) AHCSS000XX Pressurised Irrigation System Operator Skill Set (replaces AHCSS0002400) AHCSS000XX Pressurised Irrigation System Operator Skill Set (replaces AHCSS0002400)
 Industry, NSW 	there should be a skill set for students in highschool who want to enter the industry. Targeted it at Certificate II level.	Feedback adopted, the Certificate II targets students in high school.

Stakeholders Comments and Identified Issues		Consideration and Proposed Resolution
 Industry, National 	If you don't get the skills sets right, they will fail	Feedback noted, recommendation appreciated.