

Fishtech and Aquabotics Project



Summary of Validation Feedback, Responses and Actions

May 2020

This project includes the development of nine new units of competency and three new skill sets within the SFI Seafood Industry Training Package. The final draft materials were developed as a result of feedback provided by stakeholders and Subject Matter Experts (SMEs) during the validation period 09 – 28 April 2020.

A validation meeting was held on 23 April 2020, where all documents were validated.

Validation feedback was also received from a variety of stakeholders around the country via phone, online meetings and emails. The table below provides an overview of the groups and jurisdictions that have provided feedback during this phase of the project.

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

**Note: Feedback received from a Government Department confirmed few to no relevant stakeholders in the Australian Capital Territory.*

***This is a project with a 'future focus'. Feedback from project contributors that reside in QLD, NSW, VIC and WA informed the project team that they were happy with whatever the industry experts from Tasmania decided, given that the industry sub-sectors located in Tasmania are at the forefront of the use of new technology. Although this was accepted, contributors from those states were provided an opportunity to give feedback during validation via the Skills Impact website and notification emails were sent out to these groups in case they changed their minds. The members of the Aquaculture and Wild Catch Industry Reference Committee who represent their industry in these states did ask questions and provide feedback and confirmed they were pleased with the outcome of the work undertaken.*

****The Australian Workers Union was provided with information about the project and given the opportunity to provide feedback.*

Below is a summary of the issues raised for the draft units of competency and skill sets developed and reviewed for the Fishtech and Aquabotics project, and how these issues 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 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

Please use the menu below to navigate to the feedback you wish to view.

Table of Contents

Summary of validation feedback on Skill Sets	3
New skill sets.....	3
Summary of validation feedback on Units of Competency	4
New units of competency	4
Revised units of competency – new codes applied	11
Revised units of competency – minor upgrades	12

Summary of validation feedback on Skill Sets

New skill sets

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
SFISS00029 Aquatic Technology Induction		
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS,	Agree with the title. Support the combination of units of competency that make up this skill set.	Noted. Thank you. This skill set is called Aquatic Technology Induction.
Industry; QLD & SA, Industry Association; SA.	This skill set is going to be particularly useful in our company. We support this title and the units that make up this skill set.	Noted. Thank you. This skill set is called Aquatic Technology Induction.
SFISS00030 Aquabotic Technology		
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS,	Agree with the title. Support the combination of units of competency that make up this skill set.	Noted. Thank you. This skill set is called Aquatic Technology.
Industry; QLD & SA, Industry Association; SA.	This skill set is going to be particularly useful in our company. We support this title and the units that make up this skill set.	Noted. Thank you. This skill set is called Aquatic Technology.
SFISS00031 Aquatic Environmental Audit		
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS,	Agree with the title. Support the combination of units of competency that make up this skill set.	Noted. Thank you. This skill set is called Aquatic Environmental Audit.
Industry; QLD & SA, Industry Association; SA.	This skill set is going to be particularly useful in our company. We support this title and the units that make up this skill set.	Noted. Thank you. This skill set is called Aquatic Environmental Audit.

Summary of validation feedback on Units of Competency

New units of competency

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
SFIAQU218 Prepare and use aquatic technology		
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS.	Delete PC 1.5 In accordance with work, health and safety (WHS) standards	Adopted. PC 1.5 'According to work, health and safety standards' was deleted. WHS is referenced in PC 2.1 now reads 'Use technology for a specific aquatic task according to WHS standards and manufacturer specifications'.
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS.	Delete 'aquatic WHS standards'	Adopted. Aquatic WHS deleted. WHS is referenced in PC 2.1 which now reads, 'Use technology for a specific aquatic task according to WHS standards and manufacturer specifications'.
Industry; TAS	In Performance Evidence; There must be evidence that the individual has used aquatic equipment or technology on at least two occasions. Is this thru an equipment log?	Noted. However, SME feedback suggests this is best left open so as not to be site specific.
RTO; VIC	PC1.5 also requires the reading and understanding of WHS standards	Noted. However, this is no longer an issue in the latest draft.
RTO; VIC	The precis of the Elements / PCs provided here does not meet the requirements for this field. i.e. specifying the evidence of performance that a learner must demonstrate to an assessor. The partial repetition here of the PCs is not valid nor does it add to the unit. What actual evidence must an assessor sight? If required by subject matter experts the PE field must specify; required product or process evidence, frequency and /or volume of product process evidence, the relationship between the product and process evidence and the performance criteria.	Noted. The assessor must sight evidence that the individual has used aquatic equipment or technology on at least two occasions (this is explicitly stated). The second paragraph in PE is what is required in relationship to what must be assessed, which is compliant with the TP template requirements (<i>specifies the relationship between the product and process evidence and the performance criteria</i>). This format is utilised in a lot of Skills Impact's units.
RTO; VIC	'observing standardised procedures' is not required under the PCs and it is therefore inappropriate to introduce it here.	Adopted. Observing standardised procedures deleted.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
SFIAQU313 Operate hi-tech and real time aquatic technology		
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS.	References to 'probes and probe technology' should be changed to 'sensor'. Probe means something different and sensor is more appropriate.	Adopted. All references to 'probes or 'probe technology' replaced with 'sensor' or 'sensor technology'. PC 2.2 now reads ' <i>Use sensor technology in a manner that complies with workplace procedures and manufacturer specification</i> '. Also replaced in PE and KE.
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS.	The frequency should be changed from one to two times	Adopted. PE now reads ' <i>There must be evidence that the individual has used both sensor technology and real time systems on at least two occasions</i> '.
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS.	You could delete reference to IoT as this is covered by 'Smart systems'	Adopted. Reference to IoT deleted.
RTO; VIC	In PE; The precis of the Elements / PCs provided here does not meet the requirements for this field. E.g. - What 'performance' must an assessor observe to confirm competency as required by the statement; 'accessing: probe technology, real time systems'? If required, Performance Evidence statements must clearly describe evidence that can be observed and assessed.	Adopted. PE now reads, ' <i>There must be evidence that the individual has used both sensor technology and real time systems on at least two occasions.</i> '
RTO; VIC	In PE; 'updating personal skills to operate emerging technology' is specified here. This is not appropriate as this is not a PC. If updating of skills is to be a part of achieving competency under this unit then this requirement must be a Performance Criteria. The performance specified under PC1.4 is to 'discuss current and future training needs' – not to undertake training.	Adopted. Updating personal skills to operate emerging technology deleted.
SFIAQU314 Interpret aquatic digital information		

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS.	Discussion over title and wording of Application.	Adopted. Title confirmed as 'Interpret aquatic digital information' Application statement now reads; ' <i>This unit applies to individuals who utilise digital devices for aquatic processes</i> '
RTO; VIC	In Application statement; The first phrase is somewhat convoluted and difficult to understand e.g. how do you 'interpret' 'aquatic information' 'to input''information'?	Noted. However, this is accepted industry terminology. They interpret various aquatic readings (about water quality, temperature etc.) and input relevant info in relevant devices. It needs to be kept generic because it can apply to various aquatic devices.
RTO; VIC	The performance required under PC3.2 is unclear. Is the performance requiring a check of the information that has been entered into the system to ensure accuracy and then the modification of entries or the input of additional information to correct any errors?	Adopted. PC 3.2 now reads, ' <i>Check information that has been entered into the appropriate device for accuracy and make adjustments if necessary, to correct errors</i> '
RTO; VIC	PC5.2 – is the additional requirement to further 'interpret' information intended here in an Element related to 'storing information'?	Adopted. ' <i>Interpret</i> ' deleted. PC 5.2 now reads, ' <i>Store aquatic digital information according to requirements</i> '
RTO; VIC	In PE, the two bullet points do not meet the definition for items in this field and should be removed.	Adopted. The bullet points have been deleted.
SFIAQU412 Operate aquabotic technology		
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS.	Make stock location plural. Delete 'articulate' from the 'robotic arms', this technology may change in the near future.	Adopted. ' <i>Stock locations</i> ' now replaces ' <i>stock location</i> ' and ' <i>articulated</i> ' has been removed from ' <i>articulated robotic arm</i> '
RTO; VIC	I am unclear as to the substantive differences between this unit and SFIAQU2X1 (SFIAQU218) and SFIAQU3X1 (SFIAQU313). Are both these units really necessary?	Noted. However, there has been on-going industry input on these. ' <i>SFIAQU218 Prepare and use aquatic technology</i> ' is clearly a pathway unit – intro to aquatic technology, requested for VET in schools and base level operations with companies like Huon and Tassal. ' <i>SFIAQU313</i>

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
		<i>Operate hi-tech and real time aquatic technology</i> is a more specialised unit which focusses on hi-tech and real time technology (operator level in aquatic operations). The AISC approved this project, with the intent for the content developed to be innovative and future focused. All these units are crucial to this project.
RTO; VIC	I am unclear as to the substantive differences between this unit SFIAQU4X1 (SFIAQU412) and SFIAQU4X4 (SFIAQU415). Are both these units really necessary?	<i>'SFIAQU412 Operate aquabotic technology'</i> is about operating remote technology and has as future focus, which means it is not as specific as <i>'SFIAQU415 Operate ROVs'</i> . The SMEWG strongly support the development of both units of competency. The latter to address immediate training needs, the former to accommodate for future developments. The AISC approved this project, with the intent for the content developed to be innovative and future focused. All these units are crucial to this project.
RTO; VIC	In PE. The bullet points here once again display the problems associated with attempting some type of precis of the PCs in this field. The unit PCs do not require 'trouble shooting' which is quite different from 'minor maintenance' and 'reporting faults'. I request the removal of all of these 'precis' from all units.	Noted. Trouble shooting deleted. With respect to the precis in the PE; The assessor must sight evidence that the individual has used aquatic equipment or technology on at least two occasions (this is explicitly stated).
SFIAQU413 Maintain aquabotic technology		
Government, TAS	Very happy with this unit. Together with <i>'SFIAQU4X3 Operate aquabotic technology'</i> , these two units are great partners.	Noted. Thank you
Industry, TAS	Remove 'articulated' again from 'articulated robotic arm'.	Adopted. Wherever <i>'articulated robotic arm'</i> is referenced now reads <i>'robotic arm'</i> .

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
RTO; VIC	As above in SFIAQU4X1 - please remove the unnecessary and misleading bullet points	Noted. However, the second paragraph in PE is what is required in relationship to what must be assessed, which is compliant with the TP template requirements (<i>specifies the relationship between the product and process evidence and the performance criteria</i>). This format is utilised in a lot of Skills Impact's units. The Skills Impact template allows for requirements that are in line with workplace contexts to also be detailed in PE, along with frequency. It would be inconsistent to change the format given that most AQU units are written in this format.
SFIAQU414 Investigate the use of new or emerging aquatic technology		
Industry, TAS	"I really like the 'openness' of this unit, it's going to be great as technology changes. This unit will be able to be adapted to suit a variety of technologies"	Noted. Thank you.
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS.	There is a lot of specific information. You could delete the bullet point 'aquatic operational processes' and all the second level bullet points under it.	Adopted. This bullet point and all second level bullet points under it have been replaced with one first level bullet point ' <i>developments in aquatic operational processes</i> '.
RTO; VIC	' <i>Environmental impacts</i> ' assume knowledge that something will impact the situation, could be better to refer to 'environmental considerations'. This way both positives and negatives need to be considered.	Adopted. References to ' <i>environmental impacts</i> ' have been changed to ' <i>environmental considerations</i> '.
RTO; VIC	The bullet points here once again display the problems associated with attempting some type of precis of the PCs in this field. The unit PCs do not require 'trouble shooting' which is quite different from 'minor maintenance' and 'reporting faults'. I request the removal of all of these 'precis' from all units.	Noted. Trouble shooting deleted from PE but it is actually referenced in PC 1.5. Following re-consultation with industry on this issue, troubleshooting will be re-instated in PE. With respect to the precis in the PE; The assessor must sight evidence that the individual has used aquatic equipment or technology on at least two occasions (this is explicitly stated).

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
RTO; VIC		The second paragraph in PE is what is required in relationship to what must be assessed, which is compliant with the TP template requirements (<i>specifies the relationship between the product and process evidence and the performance criteria</i>). This format is utilised in a lot of Skills Impact's units. The Skills Impact template allows for requirements that are in line with workplace contexts to also be detailed in PE, along with frequency. It would be inconsistent to change the format given that most AQU units are written in this format.
SFIAQU415 Operate ROVs		
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS.	This unit has clearly been thoroughly reviewed. It is fine just how it is.	Noted. Thank you
RTO; VIC	Element 4; There appears to be some minor inconsistency here; must all ROVs be operated from a vessel and therefore as in PC4.1 communication with 'vessel coxswain' is required or are some operations from shore' PC4.3 'recover to deck or shore'?	Noted. However, ROV operations require a vessel coxswain (deck or shore).
RTO; VIC	Foundation Skills; reading. Interprets warning signs and labels on tools or materials. Add- technology into sentence.	Adopted. 'Oral communication' has been added to Foundation skills, 'Communicate effectively and directly using appropriate technological terminology'.
RTO; VIC	In PE; As for other units there are aspects here which are not required under the PCs	Adopted. Fault finding/trouble shooting and using ROV technology features deleted. Noted. PE format; The second paragraph in PE is what is required in relationship to what must be assessed, which is compliant with the TP template requirements (<i>specifies the relationship between the product and process evidence and the performance criteria</i>). This format is utilised in a lot of Skills Impact's units.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
SFIEMS501 Plan an aquatic environmental audit		
RTO; TAS & NT	This is a great unit, together with SFIEMS5X3. These have a decent broad scope and will be valuable tools.	Noted. Thank you.
Industry, TAS	I would really like to do this unit. It looks great.	Noted. Thank you.
Industry, TAS	PC 2.4 Obtain authorisation to proceed with the audit in accordance with workplace procedures and work health and safety standards (WHS). Can this be moved to point 1?	Adopted. PC 2.1 now reads, ' <i>Obtain authorisation to proceed with the audit according to workplace procedures and work health and safety standards</i> '.
RTO; VIC	PC1.3, PC2.1 – what is the performance required when 'considering'?	Adopted. Consider has been replaced by determine. PC 1.2 now reads, ' <i>Determine how the aquatic operational processes will be assessed against environmental control standards and legislative requirements relevant to aquatic practices</i> '.
RTO; VIC	Foundation Skills; This appears to be quite a sophisticated unit requiring higher level Foundation Skills. In particular; skills in developing and preparing plans. It would be appropriate and helpful to further document these needs in this field.	Noted. However, the sophistication is explicit in the PCs.
SFIEMS502 Conduct an aquatic environmental audit		
RTO; TAS & NT	This is a great unit, together with SFIEMS5X2. These have a decent broad scope and will be valuable tools.	Noted. Thank you.
Industry, TAS	I would really like to do this unit. It looks great.	Noted. Thank you.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
RTO; VIC	In PE, as for other units there are aspects here which are not required under the PCs and should be removed unless they are added to the PCs. The extensive list of bullet points is not an appropriate use of this field.	Noted. However, this format is appropriate for 'SFIEMS501 Plan an aquatic environmental audit' and 'SFIEMS502 Conduct an aquatic environmental audit' because they are very high-level units and the industry stakeholders wanted to highlight the relationship between frequency and its relationship to it.
RTO; VIC	Should this be dot point 2 1.4 Assess prospective audit site for hazards and make safety arrangements in accordance with work health and safety standards and workplace procedures	Adopted. 'Assess prospective audit site for hazards and make safety arrangements according to work health and safety standards and workplace procedures' is now PC 1.2 instead of 1.4.

Revised units of competency – new codes applied

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
SFIAQU217 Feed Stock		
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS	Agree with changes made. It is great this unit could be adapted to incorporate references to mechanisation and technology.	Noted. Thank you.
Industry, TAS	Performance; carry out feeding: Observe and record stock behaviour and environmental conditions. Add – enter into systems or technology. (Action required)	Noted. However, PC 2.3 says 'observe and record' – recording can be entering into systems. Generic is best to avoid site specific language. Action not required.
SFIAQU411 Develop and implement a stock health program		
Industry, TAS	No further comments to add to this unit. The changes made are fine.	Noted. Thank you.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
SFIAQU512 Plan and design water supply and disposal systems		
Industry, TAS	No further comments to add to this unit. The changes made are fine.	Noted. Thank you.
SFIOBS305 Collect routine fishery management data		
Industry, TAS	No further comments to add to this unit. The changes made are fine.	Noted. Thank you.

Revised units of competency – minor upgrades

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
SFIAQU203 Manipulate stock culture environment		
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS	No further comments to add to this unit. The changes made are fine.	Noted. Thank you.
SFIAQU210 Harvest cultured or held stock		
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS	No further comments to add to this unit. The changes made are fine.	Noted. Thank you.
SFIAQU211 Maintain stock culture, holding and other farm structures		

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS	No further comments to add to this unit. The changes made are fine.	Noted. Thank you.
Industry; TAS	Foundation Skills; reading. Interprets warning signs and labels on tools or materials. Add- technology into sentence.	Adopted. Foundation Skills - Reading, now reads, ' <i>Interpret warning signs and labels on tools, technology or materials</i> '.
SFIAQU212 Operate and maintain a recirculating aquaculture system		
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS	No further comments to add to this unit. The changes made are fine.	Noted. Thank you.
SFIAQU301 Undertake effluent treatment and waste disposal		
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS	No further comments to add to this unit. The changes made are fine.	Noted. Thank you.
Industry; TAS	In Performance Criteria; Determine relevant work and equipment requirements, including personal protective equipment, for treatment and disposal with senior personnel. Is it senior personnel or Supervisor aligned to other units?	Noted. However, senior personnel can be supervisors. Usually for units of competency packaged at Certificate III level, ' <i>senior personnel</i> ' is used.
SFIAQU303 Monitor stock handling activities		
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS	No further comments to add to this unit. The changes made are fine.	Noted. Thank you.
SFIAQU304 Maintain water quality and environmental monitoring		

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS	No further comments to add to this unit. The changes made are fine.	Noted. Thank you.
SFIAQU305 Monitor harvest and post-harvest activities		
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS	No further comments to add to this unit. The changes made are fine.	Noted. Thank you.
SFIAQU307 Monitor the operations of a recirculating aquaculture system		
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS	No further comments to add to this unit. The changes made are fine.	Noted. Thank you.
SFIAQU308 Support hatchery operations		
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS	No further comments to add to this unit. The changes made are fine.	Noted. Thank you.
SFIAQU311 Apply control measures for diseases		
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS	No further comments to add to this unit. The changes made are fine.	Noted. Thank you.
SFIAQU312 Monitor feed activities		
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS	No further comments to add to this unit. The changes made are fine.	Noted. Thank you.

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Industry; TAS	In Knowledge Evidence; No mention of workplace procedures	Noted. However, workplace procedures are mentioned in performance criteria 2.1 and 3.1 as part of the standard of behaviour for participants and so it becomes a must do.
SFIAQU403 Manage water quality and environmental monitoring in enclosed system		
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS	No further comments to add to this unit. The changes made are fine.	Noted. Thank you.
SFIAQU408 Supervise harvest and post-harvest activities		
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS	No further comments to add to this unit. The changes made are fine.	Noted. Thank you.
Industry; TAS	In Knowledge Evidence; No evidence on feedback being provided to team members. No measure. Its outlined in performance measure Give feedback to staff on their work performance.	Noted. This is referenced in ' <i>PC 4.5 Give feedback to staff on their work performance</i> '. Also added to KE.
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS	No further comments to add to this unit. The changes made are fine.	Noted. Thank you.
SFIAQU410 Implement a program to operate, maintain or upgrade a recirculating aquaculture system		
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS	No further comments to add to this unit. The changes made are fine.	Noted. Thank you.
SFIAQU508 Plan and design stock culture or holding systems and structures		

Stakeholder Comments and Identified Issues		Consideration and Proposed Resolution
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS	No further comments to add to this unit. The changes made are fine.	Noted. Thank you.
SFIAQU509 Develop stock production plan		
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS	No further comments to add to this unit. The changes made are fine.	Noted. Thank you.
SFICPL411 Implement fisheries compliance		
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS	No further comments to add to this unit. The changes made are fine.	Noted. Thank you.
SFIXSI402 Act to prevent interaction with protected species		
Industry; TAS & NT, RTO; Tas, QLD, SA, NT Government; TAS	No further comments to add to this unit. The changes made are fine.	Noted. Thank you.