Modification history

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| Release | Comments |
| Release 1 | This version released with SFI Seafood Industry Training Package Version 2.0. |

| SFIAQU5X1 | Plan the use of new or emerging technology in fisheries or aquaculture |
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| Application | This unit of competency describes the skills and knowledge required to plan the use of new or emerging technology in fisheries or aquaculture.  The unit applies to individuals who plan the use of new or emerging technology to fisheries and aquaculture processes. It includes planning for the use of upgraded equipment.  No licensing, legislative or certification requirements apply to this unit at the time of publication. |
| Use Prerequisite Unit | Nil |
| Unit Sector | Aquaculture |

| Elements | Performance Criteria |
| --- | --- |
| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Prepare to test new or emerging technology | 1.1 Review workplace fisheries or aquaculture goals, priorities and activities  1.2 Review operational features of new or emerging technology  1.3 Identify how the operational features of the proposed new or emerging technology can be used to improve workplace processes  1.4 Consider what environmental implications the new or emerging technology will have on the environment |
| 2. Test new or emerging technology | 2.1 Discuss uses of new or emerging technology in fisheries or aquaculture with relevant personnel and determine the appropriate evaluation criteria to determine its effectiveness  2.2 Conduct testing of new or emerging technology with relevant operators in accordance with manufacturer specifications and work health and safety (WHS) standards  2.3 Seek feedback from fisheries or aquaculture operators against evaluation criteria  2.3 Record new technology test results according to the evaluation criteria |
| 3. Evaluate new or emerging technology performance | 3.1 Evaluate new or emerging technology for performance and usability against evaluation criteria and WHS standards  3.2 Consider environmental impacts in the use of new or emerging technology in fisheries or aquaculture  3.3 Document new or emerging technology uses in accordance with workplace procedures |

| Foundation Skills  This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria. | |
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| Skill | Description |
| Reading | * Identifies and interprets relevant manufacturer specifications |
| Writing | * Records test results with appropriate technical detail |
| Navigate the world of work | * Interprets and follows workplace requirements, and seeks clarification or other assistance when required |
| Get the work done | * Plans and organises own work activities and resources * Incorporates workplace goals with the use of technology |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| SFIAQU5X1 Plan the use of new or emerging technology in aquaculture | N/A |  | New unit |

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| Links | Companion Volumes, including Implementation Guides, are available at VETNet:  https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=e31d8c6b-1608-4d77-9f71-9ee749456273 |

| TITLE | Assessment requirements for SFIAQU5X1 Plan the use of new or emerging technology in fisheries or aquaculture |
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| Performance Evidence | |
| An individual demonstrating competency must satisfy all of the elements, performance criteria and foundation skills in this unit.  There must be evidence that the individual has gathered, collated and recorded information related to the use of new or emerging technology in fisheries or aquaculture on at least two occasions.  In doing the above, evidence must also include:   * determining the evaluation criteria to test new or emerging technology * recording test results accurately * fault finding/troubleshooting * measuring telemetry to assess stock location * observing manufacturer specifications and WHS standards * consulting effectively with relevant personnel * environmental impact awareness. | |

| Knowledge Evidence |
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| An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements, performance criteria and foundation skills of this unit. This includes knowledge of:   * operational processes in fisheries or aquaculture: * fish farms * hatchery * transport of stock and equipment * service of equipment * feed technology * environmental compliance * high-energy sites * real time platforms * probe maintenance * the general features and capabilities of fisheries or aquaculture technology: * biological filtration * recirculating aquaculture systems (RAS) * automation * water management systems * land aquaculture operational processes: * extensive/semi-intensive (usually pond culture) * intensive culture systems (flow through systems and RAS) * technological/digital advancements: * Internet of Things (IoT) * 5G * relevant manufacturer specifications * fishery or aquaculture WHS standards * information gathering techniques. |

| Assessment Conditions |
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| Assessment of skills must take place under the following conditions:   * physical conditions: * skills must be demonstrated in a fisheries or aquaculture setting or an environment that accurately represents workplace conditions * resources, equipment and materials: * access to upgraded, new or emerging aquaculture technology * specifications: * access to relevant manufacturer specifications * relationships: * evidence of interactions with relevant personnel.   Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards. |

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