

# Occupation Profile

## Modern Apprenticeship in Aquaculture Production for Finfish Senior Technicians and Supervisors SCQF Level 7

**Approved by:** Aquaculture Technical Expert Group

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### **Purpose:**

This occupation profile consists of 18 work situations routinely carried out in Aquaculture Production for finfish senior technician and supervisor roles. The first eight are mandatory to all apprentices, including one relating only to knowledge and understanding requirements. Apprentices must also achieve a minimum of three of the remaining 10 optional work situations.

Collectively these work situations describe all the performance requirements and knowledge and understanding requirements apprentices need to demonstrate competence in the occupation.

These are set out as follows:

- Title, goal, brief outline, performance requirements and knowledge and understanding requirements



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# Work Situation

URN: SDS 0101

## Maintaining aquaculture stock health and welfare

### Goal of work situation:

To maintain the health and welfare of aquaculture stock to meet the requirements of production plans in line with site operating procedures.

### Brief outline:

This is about maintaining the health and welfare of aquaculture stock in a production environment. This involves implementing site health plans and other health and welfare standards, monitoring and maintaining stocking densities and environmental conditions, recognising and dealing with the presence of diseases and parasites, and maintaining mortality and stock records.

Site health plans could include Fish Health Plans, Veterinary Health and Welfare Plans, other health plans and the requirements of Food Standards Scotland, RSPCA or other accreditation schemes.

Note: Individuals are likely to be working in either fish or shellfish operations

### Performance requirements

1. Conducting regular checks of aquaculture stock health and welfare, including cleaner fish where they are used, in line with site operating procedures
2. Maintaining communication with all those involved in maintaining aquaculture stock health and welfare using relevant communication methods
3. Collecting regular information on stock growth and development in line with the requirements of the production plan and site operating procedures
4. Taking samples of aquaculture stock to check weight, and the presence of toxins, parasites or disease, in line with site health plans
5. Using handling methods which minimise stress in the aquaculture stock
6. Conducting regular checks on environmental conditions to ensure they meet the requirements of the species being farmed
7. Maintaining optimum stocking densities to meet the requirements of the species being farmed and the stage of development

### Knowledge and understanding requirements

1. Relevant health and safety procedures, how to identify hazards and assess risks, safe systems of work and the personal protective equipment (PPE) required for aquaculture work
2. The requirements of relevant animal health and welfare standards, industry codes of practice and site health plans for the health and welfare of aquaculture stock
3. The importance of maintaining communication with all those involved in maintaining aquaculture stock health and welfare
4. Health and welfare requirements for the species being farmed and how these are maintained within holding units
5. The monitoring and sampling that needs to be carried out to check the health and welfare of stock, including cleaner fish where they are used, how these are carried out and how often these should be done
6. The data that needs to be collected to monitor stock health and welfare and the importance of accuracy
7. The handling methods used to minimise stress in the aquaculture stock and how to recognise stress

8. Monitoring and recording mortality rates in line with site requirements
9. Identifying health and welfare problems in the species being farmed and taking the required action in line with site health plans
10. Seeking advice to address suspected health problems
11. Implementing aquaculture stock treatments in line with site operating procedures
12. Monitoring stock during and after treatments in line with site operating procedures
13. Maintaining hygiene and biosecurity in line with site operating procedures
14. Using quarantine and isolation measures to minimise risk of disease introduction or spread
15. Recording and reporting information on aquaculture stock health and welfare and treatments given in line with site requirements

8. How anaesthetics can be used to minimise the stress caused to stock in the collection of data and how to check that the correct amount of anaesthetic is administered
9. The standard measurements that are commonly used to specify the size of individual fish or shellfish
10. The environmental conditions required by the species being farmed and how they can be maintained and adjusted
11. The equipment and methods used to sample and assess environmental conditions such as water temperature, plankton, oxygen, salinity, visibility etc
12. How to establish and maintain optimum stocking densities for the holding units, depending on the species being farmed
13. Why mortalities should be removed, and cause of death recorded, and how variations in mortality can be used to indicate the condition of stock
14. The anatomy of a healthy fish or shellfish
15. The common diseases and parasites of the aquaculture species being farmed and how to recognise them
16. Health emergencies and how it is possible to limit their impact on aquaculture stock and who to contact to obtain a professional diagnosis
17. Notifiable diseases and the actions to take if their presence is suspected
18. The use of quarantine to minimise risk of disease introduction and isolation to minimise the spread of disease
19. Common preventative treatments including use of biological controls such as cleaner fish
20. Common responsive treatments used to treat health problems in the aquaculture species being farmed and the methods used to safely administer internal and external treatments
21. The importance of preparing and administering treatments according to legal requirements, veterinary instructions, the requirements of relevant site health plans or standards and the importance of training to administer treatments
22. Why it is important to control treatments to protect other stock and the environment and when treated stock need to be isolated and controlled
23. The emergency actions to take in response to any adverse effects caused by treatments

24. The purpose of withdrawal periods, how to calculate them and the legal restrictions associated with withdrawal periods
25. The importance of monitoring treated stock both during and after treatment
26. Site procedures for the safe disposal of unused and spent treatments
27. Site procedures for maintaining hygiene and biosecurity and the importance of this to the health and welfare of aquaculture stock
28. Site requirements for recording and reporting information on aquaculture stock health and welfare and treatments given

# Work Situation

## Monitoring aquaculture facilities

URN: SDS 0087

### Goal of work situation:

To monitor aquaculture facilities and equipment in a good state of cleanliness and repair in line with site operating procedures.

### Brief outline:

This is about monitoring aquaculture facilities in line with legislative and organisational requirements and industry codes of practice. It involves monitoring the cleaning, maintenance and repair of facilities as well as hygiene and bio-security measures, water quality and environmental conditions, waste and discharge from the facility, the safety and security of the stock, staff and site, public safety and the maintenance of records.

Note: Individuals are likely to be working in either fish or shellfish operations and facilities could be on- or off-shore.

### Performance requirements

1. Monitoring the maintenance of aquaculture facilities and equipment to ensure their effective operation in line with site operating procedures
2. Monitoring site resources, staffing and skills required to maintain aquaculture facilities and equipment and reporting any shortfalls in line with site operating procedures
3. Monitoring and confirming regular checks are carried out on aquaculture facilities to determine their condition and identify the need for maintenance or repair in line with site operating procedures
4. Monitoring and confirming routine cleaning, maintenance and repair is carried out on aquaculture facilities in line with site operating procedures
5. Monitoring and confirming hygiene and bio-security measures are followed to minimise risk of contamination
6. Monitoring and confirming work is carried out in accordance with relevant health and safety legislation affecting the site, equipment and staff
7. Monitoring and confirming pest and predator measures and devices are in place and maintained on aquaculture facilities in line with site operating procedures
8. Monitoring stock containment within the aquaculture facilities in accordance with legal requirements and site operating procedures

### Knowledge and understanding requirements

1. Relevant legal and site requirements for health, safety and security associated with aquaculture production environments
2. Aquaculture site and holding unit characteristics and stocking capacity for the aquaculture stock being farmed
3. Legal requirements, industry codes of practice and site operating procedures relating to farming practices, containment of aquaculture stock and use of the environment
4. How to identify site resources, staffing and skills required to maintain the aquaculture facilities and achieve site production targets
5. Methods and equipment used to monitor the condition of aquaculture facilities
6. Holding unit inspection and testing requirements and how to implement them
7. Requirements for routine cleaning, maintenance and repair of aquaculture facilities and the health and safety requirements for use and maintenance of equipment
8. The importance of hygiene and biosecurity measures in aquaculture facilities
9. Legal pest and predator preventative measures and devices used by aquaculture facilities
10. The containment requirements of aquaculture stock being farmed

9. Monitoring and confirming environmental and water quality requirements are maintained to support the health and welfare of the aquaculture stock
10. Monitoring and confirming that back-up systems are regularly checked and able to maintain environmental conditions in an emergency situation
11. Monitoring waste and discharge from aquaculture facilities in accordance with legislation and site operating procedures
12. Recording and reporting aquaculture facility maintenance information in line with legal and site requirements
11. How the design and construction of holding units and handling equipment supports the containment of aquaculture stock being farmed
12. Causes of containment failure, how procedures are implemented to minimise loss of stock and the role and function of contingency plans
13. Water quality parameters for aquaculture stock being farmed and how these are measured and maintained
14. The systems used to monitor and maintain environmental conditions and how adjustments can be made to maintain the required conditions for aquaculture stock being farmed
15. Site back-up systems, including when and how they are used to maintain environmental conditions and deal with emergencies
16. Legislation affecting water usage by aquaculture facilities and how this is implemented
17. Legislation affecting the disposal of waste and discharge of effluent from aquaculture facilities and how this is implemented
18. Legal and site requirements for the completion of aquaculture facility maintenance records



### Goal of work situation:

To monitor quality within your area of responsibility to deliver quality products and services.

### Brief outline:

This is about monitoring and maintaining quality within your area of responsibility to deliver quality products and services. This involves identifying and reporting non-conformity to quality standards, awards and accreditations, confirming customer expectations, assisting with quality audits, identifying shortfalls and taking corrective action, assisting with the implementation of quality improvements and monitoring the success of the quality improvements.

### Performance requirements

1. Monitoring systems, plans and resources to ensure quality standards used by your organisation are met and maintained in your area of responsibility
2. Maintaining quality standards to deliver the quality of products and services customers expect
3. Assisting with quality audits to confirm quality standards are being met
4. Responding to non-conformities to quality standards and implementing corrective actions within required timescales
5. Assisting with the implementation of quality improvements to deliver significant benefits
6. Communicating with all those involved in maintaining quality using relevant communication methods
7. Monitoring the impact of improvements on the quality of products, services and processes using required methods, tools and techniques
8. Recording and reporting on quality information in line with site requirements

### Knowledge and understanding requirements

1. The quality standards, including quality marks, awards and accreditations used by your organisation, and the value of these to the organisation profile
2. Sector, industry, customer and organisation requirements for quality assurance
3. The importance of having systems in place to monitor that quality standards are met and maintained
4. The importance of everyone understanding their role in meeting quality standards
5. The importance of audits in confirming that quality standards are being met
6. The preparation work required prior to audits and the importance of confirming that records and documentation are complete, up to date and accessible to auditors
7. What auditors will want to see and have access to
8. The importance of investigating the cause of any shortfall in the quality of products, services and processes and implementing corrective actions
9. The importance of communication in the maintenance of quality
10. How to monitor the impact of improvements on quality and the methods, tools and techniques that should be used

11. How to keep quality records and data secure and why this is important
12. The importance of recording and reporting quality problems and actions taken

**Goal of work situation:**

To understand, create and maintain positive and effective working relationships with stakeholders to enable their expectations to be met in line with organisational requirements.

**Brief outline:**

This is about identifying internal and external stakeholders and building relationships. It involves maintaining positive relationships by communicating information in an effective and professional manner in line with organisational requirements.

**Performance requirements**

1. Identifying all relevant stakeholders related to areas of work
2. Building relationships with stakeholders to support work plans and meet their expectations
3. Keeping stakeholders informed about work plans and activities which affect them
4. Communicating information in suitable formats to meet the needs of different stakeholders
5. Agreeing, recording actions from meetings with stakeholders in line with organisational requirements
6. Monitoring and reviewing relationships with stakeholders to improve future working relationships

**Knowledge and understanding requirements**

1. Leadership models, styles, qualities, and self-awareness
2. How team dynamics impact on organisational behaviours, including cultural and geographic values
3. Organisational policies and procedures on inclusion and the importance of complying with these
4. Who needs to be kept informed and the importance of doing this
5. The ways communication may need to be adapted for internal and external stakeholders
6. How and when to say no
7. How to manage differences, or problems with stakeholders and the organisational processes for resolving differences and escalating problems with working relationships
8. The appropriate professional codes of conduct when working with stakeholders and why these are important
9. Requirements for communication with respect to confidentiality and intellectual property

**Goal of work situation:**

To monitor site hygiene and biosecurity to minimise risk of contamination and disease in line with organisation procedures.

**Brief outline:**

This is about monitoring hygiene and biosecurity to protect from the introduction and spread of disease. This involves implementing and monitoring organisation procedures which could include cleaning and disinfection, personal hygiene and use of quarantine and isolation. The exact arrangements will vary depending on the organisation and the activities carried out.

**Performance requirements**

1. Implementing organisation procedures to monitor hygiene and biosecurity
2. Monitoring the cleaning and disinfecting of equipment, tools and machinery in accordance with organisation procedures
3. Implementing organisation procedures to prevent or minimise the impact of hygiene and biosecurity measures on the environment
4. Monitoring visitors follow correct hygiene and biosecurity procedures
5. Monitoring quarantine and isolation to minimise risk of disease introduction and spread
6. Monitoring the effectiveness of hygiene and biosecurity procedures and reporting any concerns, in line with organisation procedures
7. Recording and reporting hygiene and biosecurity monitoring in line with legal and organisation requirements

**Knowledge and understanding requirements**

1. Why hygiene and biosecurity are important to your industry and organisation and the consequences of breaches
2. Legislation, industry codes of practice, quality assurance and organisation requirements for maintaining hygiene and biosecurity
3. The importance of everyone following organisation hygiene and biosecurity procedures
4. Different hygiene and biosecurity procedures used by the organisation and how these are implemented and monitored
5. Correct use and storage of chemicals for cleaning and disinfecting, relevant legislation controlling this and potential impact of chemicals on the environment
6. How contamination and cross-contamination occurs and possible consequences for the organisation and the environment
7. Use of quarantine to minimise risk of disease introduction and isolation to minimise the spread of disease
8. Procedures to follow when breaches of hygiene and biosecurity occur
9. Sources of information and specialist advice on hygiene and biosecurity
10. The need for regular assessment of hygiene and biosecurity procedures

11. The legal and organisation requirements for recording and reporting hygiene and biosecurity monitoring

### Goal of work situation:

To monitor health, safety and security in line with legislative and organisation procedures to protect yourself and others from the risk of harm and injury.

### Brief outline:

This is about monitoring the health, safety and security of yourself and others who may be affected by your work. This involves co-operating with your employer to help them to comply with their duties under relevant health and safety legislation. It includes following set health and safety procedures and identifying and assessing unsafe situations in the workplace or during work activities. It also includes being aware of the main risks to health, safety and security in the workplace and suitable control measures or safe systems of work that can be put in place. In the event of incidents and emergencies required procedures must be followed.

Security could include land, buildings, equipment and machinery, stock, resources, personnel and information.

### Performance requirements

1. Monitoring that health, safety and security hazards are identified and risks assessed in your area of work in line with organisation procedures
2. Taking required actions in response to identified hazards and risks in line with organisation procedures
3. Checking that control measures put in place to eliminate or reduce risks in own area of work are adhered to in line with organisation procedures
4. Informing others in your work area of the risks and the control measures that have been put in place in line with organisation procedures
5. Monitoring that health and safety regulations, organisation procedures and safe systems of work are followed in own area of work
6. Checking that security is maintained in own area of work in line with organisation requirements
7. Checking that equipment and machinery is used, maintained and stored in accordance with relevant legislation, manufacturers' instructions and organisation requirements

### Knowledge and understanding requirements

1. Health and safety legislation and codes of practice, the legal responsibilities of employers and employees and the importance of monitoring these
2. The importance of following health and safety regulations, organisation procedures and safe systems of work
3. The difference between "hazard" and "risk", how to identify hazards and assess risks
4. The importance of regular risk assessment and what actions to take when risks are identified
5. Particular risks associated with your area of work including personal injury, contracting disease, and other physical and mental health problems
6. Effects that work-related accidents and ill health can have on workers and businesses and the importance of minimising these
7. The risks to others from the activities carried out in own area of work
8. How to communicate the findings of the risk assessment and health, safety and security measures to those at risk

8. Reporting and recording incidents and emergencies, including accidents and near misses, in accordance with legal and organisation requirements
9. Monitoring and reporting on the effectiveness of health, safety and security measures in line with organisation requirements
9. The hierarchy of measures to control risks including elimination, substitution, relevant controls, safe systems of work, training/instruction and PPE
10. The importance of good housekeeping in the workplace to maintaining health and safety
11. The importance of monitoring procedures to maintain security in own area of work
12. Key requirements of the regulations relating to the handling, use and storage of potentially hazardous substances
13. The safe methods of preparing, using, maintaining and storing equipment and machinery in accordance with relevant legislation, manufacturers' instructions and organisation requirements
14. Risks of injury associated with lifting and handling and how these can be minimised
15. The suitable clothing and personal protective equipment (PPE) required for work in your industry
16. The importance of regularly checking that PPE and emergency equipment is available and maintained
17. Risks of working in isolation, in remote locations and potentially dangerous situations, and the need to monitor that safe systems of work are followed, including communication and emergency procedures
18. The procedures to follow and actions to take in the event of incidents and emergencies including accidents and near misses
19. Where to obtain information, advice and support in relation to health, safety and security
20. Legislative and organisation requirements for recording and reporting incidents and emergencies, including accidents and near misses
21. Organisation requirements to monitor and report on the effectiveness of health, safety and security measures

# Knowledge and understanding

URN: SDS 0081

Understanding the importance of environmental good practice and sustainability

## Goal:

To understand good environmental practices, the importance of sustainability and how to apply them within your area of responsibility

## Brief outline:

This is about individuals understanding the negative impact of their work on the environment and the steps that can be taken to reduce this impact and promote sustainability. This could be local or global impact.

## Performance requirements

There are no performance requirements for this work situation. This work situation provides knowledge and understanding requirements only.

## Knowledge and understanding requirements

1. Why it is important to consider and apply sustainability in everything you do
2. The importance of assessing the negative environmental impact that your work could have and what needs to be considered
3. Environmental legislation and industry codes of practice that apply to your area of work
4. Different ways of working that could be adopted to reduce negative environmental impact and promote sustainability in your area of work
5. How to make responsible and sustainable use of natural resources in ways which minimise negative impacts on nature and natural habitats and promotes biodiversity
6. How to make responsible use of water, energy and other resources
7. The importance of energy efficiency and the ways in which energy usage can be monitored, reduced and replaced with renewable sources
8. The importance of making informed decisions on purchases, considering the carbon footprint and adopting the principles of the circular economy
9. The ways in which waste can be reduced and the principles of the waste management hierarchy
10. How pollution can be avoided in your area of work



11. How your work impacts on climate and environmental change and the actions that could be taken to respond to and mitigate the effects of this
12. How carbon emissions can be calculated and reduced or mitigated
13. The use of targets for reducing carbon emissions and improving environmental performance
14. The importance of constantly reviewing environmental performance and taking action to make improvements
15. The purpose of environmental management systems and other environmental quality marks
16. Where to find information and advice on grants, subsidies or other forms of funding or assistance to implement low carbon solutions

**Goal of work situation:**

To develop meta-skills and personal professionalism through reflective practice, goal setting and active learning to improve own performance in line with organisational requirements.

**Brief outline:**

This is about taking responsibility for the development of own meta-skills and personal professionalism. This involves reflecting on and learning from practice; seeking and acting on feedback; agreeing and working towards own goals for continuous professional development (CPD); and managing own wellbeing.

**Performance requirements**

1. Self-evaluating meta-skills regularly to identify own strengths and improvement needs for development
2. Identifying own strengths and improvement needs for professional development
3. Setting and agreeing SMART objectives for personal development and to achieve business objectives
4. Planning development activities to improve own performance and to achieve business objectives
5. Completing formal and informal activities to support and progress own development
6. Seeking and acting on feedback to improve own performance
7. Critically reflecting on own performance and involvement in activities to support own development and achievement
8. Critically evaluating the development and application of meta-skills in own work to identify future development needs
9. Completing and maintaining records and documents in line with organisational policy and procedures

**Knowledge and understanding requirements**

1. The purpose and importance of meta-skills including their definitions and how they relate to own work
2. The importance and impact of personal professionalism within the organisation and own role
3. How to use critical reflection and reflective practice to identify gaps in role specific knowledge, skills and meta-skills and the purpose and importance of this
4. How to participate effectively in performance reviews
5. How to set and agree SMART goals – Specific, Measurable, Achievable, Realistic, Time-bound
6. How to prepare development plans, including their content and duration
7. The importance of career and personal goals, including collective organisational learning, when planning own development
8. Sources of up-to-date and appropriate information to support own CPD activities
9. The impact and benefits of CPD including the organisation's key performance indicators (KPIs) and how they are measured and recorded
10. The importance of managing well-being for success in own role and where to get support
11. Appropriate ways to seek and act on feedback to develop own skills and knowledge including the process of 360-degree feedback

12. Different learning models and styles and how to use these for own development



## Optional Work Situations

A minimum of three optional work situations must be achieved.

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### Goal of work situation:

To transfer live aquaculture stock to meet production requirements in line with site operating procedures

### Brief outline:

This is about transferring live aquaculture stock. This involves assessing health and welfare, safe movement from one holding unit to another, monitoring environmental conditions and water quality during transfer and observing and reporting on the condition of the stock being transferred.

When transferring live aquaculture stock by road, train, water or air, all site health plans and the requirements of Food Standards Scotland, RSPCA or other accreditation schemes must be adhered to, in order to maintain the health and welfare of the live aquaculture stock and the hygiene and bio-security standards required to produce aquaculture stock for human consumption.

Note: Individuals are likely to be working in either fish or shellfish operations.

### Performance requirements

1. Checking that transfer processes are co-ordinated with the receiving site and required documentation is in place
2. Maintaining communication with all those involved in the transfer throughout the process using relevant communication methods
3. Preparing transport holding units for the transfer of live aquaculture stock in accordance with health and welfare requirements and site operating procedures
4. Assessing the condition of live aquaculture stock prior to transfer in accordance with health and welfare requirements and site operating procedures
5. Conditioning the aquaculture stock where required in line with site operating procedures
6. Checking the required environmental conditions are in place in transport holding units to minimise stress during transfer

### Knowledge and understanding requirements

1. Relevant health and safety procedures, how to identify hazards and assess risks, safe systems of work and the personal protective equipment (PPE) required for transferring and transporting live aquaculture stock
2. The requirements of relevant animal health and welfare standards, industry codes of practice, site health plans and quality assurance requirements for transferring and transporting live aquaculture stock
3. Site operating procedures for the transfer and transport of live aquaculture stock
4. Why it is important that all aspects of the transfer process are co-ordinated
5. The importance of maintaining communication with all those involved in the transfer process and how this can be done
6. Methods used to transfer and transport live aquaculture stock

7. Monitoring the loading and unloading of live aquaculture stock using relevant techniques and equipment
8. Maintaining hygiene and biosecurity during transfer processes in accordance with health and welfare requirements and site operating procedures
9. Monitoring the health and welfare of live aquaculture stock during transfer in accordance with health and welfare requirements and site operating procedures
10. Monitoring water quality whilst transferring live aquaculture stock to confirm water meets the requirements of the stock being transferred
11. Maintaining containment during transfer to prevent stock loss or escape in line with site operating procedures
12. Taking required actions to deal with difficulties encountered during transfer
13. Assessing the condition of live aquaculture stock prior to unloading in line with site operating procedures
14. Preparing live aquaculture stock prior to unloading in line with site operating procedures
15. Cleaning and disinfecting transport holding units and equipment in accordance with site operating procedures
16. Recording and reporting information on the transfer of live aquaculture stock in line with site requirements

7. How to check and prepare transport holding units and other equipment needed to transfer live aquaculture stock
8. How the size of the aquaculture stock will affect the density in transport holding units
9. The importance of assessing the health and welfare of stock and the behaviour that indicates stress or disorder
10. Why only healthy aquaculture stock should be transferred and when they need to be conditioned
11. Why it is important to move live aquaculture stock with minimum time delay
12. The water quality and environmental conditions required for the live aquaculture stock being transferred and how these are measured and maintained
13. Site procedures and industry guidelines for maintaining hygiene and biosecurity during and after the transfer process
14. The precautions that are followed to reduce the danger of transferring non-target species with live aquaculture stock
15. The importance of minimising the risk of stock loss or escape during transfer and transport
16. The importance of taking immediate action in the event of difficulties being encountered during transfer
17. Site requirements controlling water usage and discharge from equipment used to move live aquaculture stock
18. Site requirements for recording and reporting information on the transfer of live aquaculture stock

### Goal of work situation:

To support the development of individuals through identification of the skills, knowledge and competencies required to achieve objectives and goals, and supporting them to fulfil their potential.

### Brief outline:

This is about developing individuals to meet objectives and plans within your own area of responsibility. This involves establishing current levels of knowledge and skills and supporting the development of individuals to meet the planned requirements.

### Performance requirements

1. Identifying the knowledge, skills and competencies needed to deliver objectives and plans for own area of responsibility
2. Reviewing the existing capacity and capability within own area of responsibility to meet identified knowledge skills and competencies required
3. Identifying opportunities for individuals within own area of responsibility to develop their careers
4. Undertaking learning and development needs analysis for individuals to help them understand how they can develop within their roles
5. Supporting individuals to develop personal learning and development plans to identify their potential learning and development opportunities
6. Providing access to relevant opportunities for individuals to learn and develop within their roles
7. Monitoring and reviewing individual personal learning and development plans to identify any new learning and development opportunities

### Knowledge and understanding requirements

1. What knowledge, skills and competencies individuals need to deliver objectives and plans within own area of responsibility
2. Opportunities for individuals' career development in your area of responsibility
3. How to assess the current knowledge, skills and competencies of individuals and identify gaps and learning and development needs
4. How individuals' appraisals can be used to identify their learning and development needs
5. Sources of advice, guidance and support on learning and development
6. How to identify learning opportunities and how learning and development needs can be fulfilled
7. What the different learning styles are and how they affect learning
8. The importance of taking account of equality legislation, any relevant codes of practice and general diversity and inclusion issues in providing learning and development opportunities for individuals and how to do this
9. How to recognise obstacles to learning and development and provide support to overcome these
10. How to motivate individuals to take responsibility for their own learning and development

11. The principles of effective mentoring and coaching and how to apply these to support individuals with their learning and development
12. How to develop, monitor, review and amend learning and development plans
13. How to evaluate the success of learning and development interventions



### Goal of work situation:

To monitor and maintain the production of aquaculture stock to meet the requirements of production plans in line with site operating procedures.

### Brief outline:

This is about monitoring and maintaining aquaculture production to achieve both quality and quantity targets. This involves organising resources, implementing relevant health plans, monitoring and maintaining aquaculture stock health and welfare, monitoring and recording growth and development, and monitoring and maintaining production to achieve production plans.

*Health plans could include Fish Health Plans, Veterinary Health Plans, other site health plans and the requirements of food standards agencies.*

Note: Individuals are likely to be working in either fish or shellfish operations.

### Performance requirements

1. Implementing plans for the production of farmed aquaculture stock
2. Organising and monitoring staffing and resource requirements to complete planned production
3. Maintaining communication with those involved in maintaining aquaculture production using relevant communication methods
4. Monitoring production activities to meet production requirements
5. Checking hygiene and biosecurity measures are in place and followed
6. Monitoring and maintaining environmental conditions within holding units in line with site operating procedures
7. Monitoring and maintaining stocking levels within holding units in line with site operating procedures
8. Implementing the requirements of relevant health plans to prevent diseases, disorders and stress
9. Monitoring the health and welfare of the farm stock, recognising health problems, disorders or stress and taking relevant action
10. Overseeing the administration of treatments to farmed aquaculture stock in line with health plans

### Knowledge and understanding requirements

1. Relevant health and safety legislation and codes of practice, how to identify hazards and assess risks, safe systems of work and the personal protective equipment (PPE) required for aquaculture production
2. The requirements of relevant animal health and welfare standards, industry codes of practice and site health plans for aquaculture production
3. The legal requirements that control the production of farmed aquaculture stock for sale and transfer
4. Industry codes of practice, food standards, customer and quality assurance requirements, and their application in farmed aquaculture production
5. How to implement plans to achieve the production potential for the available aquaculture stock
6. The resources required to support effective production of farmed aquaculture stock
7. The importance of maintaining communication with those involved in maintaining aquaculture production and how this can be done

11. Collecting regular information to monitor growth and development of farm aquaculture stock
12. Monitoring and maintaining aquaculture production to measure success against planned production and identify opportunities for improvement
13. Maintaining product quality at all stages of production in line with site operating procedures
14. Following relevant legal requirements and site procedures for monitoring and recording mortality rates
15. Modifying production activities to mitigate and deal with disruptions
16. Recording and reporting production information in line with legislative and site requirements

8. The types of production activities involved to meet production requirements and their effective implementation
9. Site procedures for maintaining hygiene and biosecurity during production activities
10. Health, welfare and environmental requirements for the aquaculture stock being farmed, and how these are monitored and maintained within holding units
11. The importance of monitoring and maintaining water quality and how this is done
12. Optimum stocking levels for holding units and how this is maintained to reduce stress on the stock
13. The requirements of relevant health plans in maintaining standards of aquaculture stock health and welfare during production activities
14. The methods used to monitor and maintain the health and welfare of farm stock
15. Common health problems and disorders associated with the stock being farmed, signs that identify their presence and the action that should be taken
16. How to recognise stress in the aquaculture stock being farmed and the action that should be taken
17. The relevant treatments that can be provided, dose rates and the relevant legal controls on the administration of treatments
18. The importance of providing training to those who will be administering treatments
19. The methods used to monitor the growth and development of stock, health, size, weight
20. The methods used to monitor actual production against planned production and why it is important to achieve planned production
21. How to assess and maintain product quality and how fish and flesh quality is assessed and scored
22. Why it is important to monitor and record mortality rates
23. Factors that can disrupt production and the actions that can be taken to minimise their impact
24. Legal requirements and site procedures for controlling the disposal of mortalities and waste
25. Legal and site requirements for recording and reporting information on aquaculture production

### Goal of work situation:

To monitor feeding regimes to support the production of aquaculture stock in line with site operating procedures.

### Brief outline:

This is about monitoring aquaculture stock feeding regimes in production environments. This involves implementing feed regimes to achieve production targets while minimising waste and negative environmental impacts, maintaining food sourcing and storage, monitoring the feeding behaviour of aquaculture stock, record keeping and data analysis.

Feeding regimes may be both routine and specialist in support of specific requirements such as fasting, in-feed treatments, providing pigment, smolt diets, immuno stimulants. They will also vary depending on if feeding is organic or non-organic.

### Performance requirements

1. Monitoring site resources, staffing and skills in line with site requirements to support the feeding of aquaculture stock
2. Communicating with those responsible for feeding aquaculture stock using relevant communication methods
3. Implementing both routine and specialist aquaculture feeding regimes (where required) to support the feeding requirements of aquaculture stock
4. Confirming aquaculture stock are fed in line with feeding regimes, with minimal wastage
5. Monitoring feeding regimes for aquaculture stock to take account of environmental variations
6. Using data to determine success of feeding regimes against production targets
7. Monitoring and adjusting feeding regimes to take account of fluctuations in aquaculture production performance and variations in environmental conditions
8. Investigating changes in aquaculture feeding behaviours to determine their cause and corrective action required

### Knowledge and understanding requirements

1. Relevant health and safety legislation and codes of practice, how to identify hazards and assess risks, safe systems of work and the personal protective equipment (PPE) required when providing feed to aquaculture stock
2. The requirements of relevant animal health and welfare standards, industry codes of practice, site health plans and quality assurance requirements for feeding aquaculture stock
3. The types of feed suitable for feeding the aquaculture stock being farmed to maintain their growth, health and welfare at different stages of development
4. The nutritional properties of various feeds and their applications to meet aquaculture production requirements
5. Specialist aquaculture feeding regimes and their application in the maintenance of aquaculture stock health and development
6. How feed conversion rates are calculated for aquaculture stock, the factors that affect it and its importance to the production process
7. How aquaculture feeding rates are calculated and the importance of minimising wastage and reducing environmental impact

9. Monitoring the operation of aquaculture feeders, feeding systems and monitoring equipment in line with site operating procedures
10. Checking the quality of feed, identifying any that is substandard and reporting to suppliers
11. Monitoring stock levels and storage of aquaculture feed and following organisational procedures for reordering stock
12. Monitoring hygiene and biosecurity measures to minimise the risk of contamination
13. Recording and reporting of aquaculture feeding information in line with site requirements

8. The types of aquaculture feeder or feeding systems used on site and how feeders are set, calibrated and maintained where required
9. How to modify aquaculture feeding regimes to take account of variations in environmental conditions
10. The importance of following specified aquaculture feeding schedules and minimising wastage
11. The financial significance of feed costs in the overall production of farmed aquaculture stock
12. Why it is important to monitor and record aquaculture stock feeding behaviour and the methods used to monitor feed intake and wastage including monitoring devices and visual observations
13. How to analyse information obtained from aquaculture stock feeding and monitoring
14. The signs and results of underfeeding and overfeeding on aquaculture stock and its' impact on production targets
15. How to evaluate the effectiveness of aquaculture feeding regimes against production targets
16. The process for ordering stocks of aquaculture feed
17. The storage requirements of aquaculture feed including stock control and rotation and the importance of effective pest control
18. How to recognise substandard feed and who to report it to
19. Feeding regimes for cleaner fish, where used
20. Site procedures for maintaining hygiene and biosecurity
21. Legal and site requirements for dealing with waste from aquaculture feeding
22. The importance of maintaining communication with those responsible for feeding aquaculture stock
23. Site requirements for recording and reporting information on the feeding of aquaculture stock

## Monitoring aquaculture hatchery operations

### Goal of work situation:

To monitor the day-to-day aquaculture hatchery operations to produce juvenile stock for sale, transfer and growing on, to meet production plans, in line with site operating procedures.

### Brief outline:

This is about monitoring hatchery operations to meet production targets. This involves preparation of hatcheries, implementing production requirements, organisation of resources, setting and monitoring environmental conditions, calculating and maintaining stocking densities, monitoring and controlling stock health and welfare and the preparation of stock for sale and transfer. Bio-security will be maintained throughout the process, following site operating procedures.

Note: Individuals are likely to be working in either fish or shellfish operations

### Performance requirements

1. Implementing hatchery production targets to meet customer requirements
2. Organising resources required to complete planned production
3. Monitoring the setting up of hatcheries to meet planned production requirements in line with legislation and site operating procedures
4. Checking that hatchery facilities and equipment are clean and disinfected in line with site operating procedures
5. Overseeing the stocking of hatcheries to maintain required stocking densities within holding units
6. Setting, monitoring and adjusting hatchery environmental conditions to maintain stock health and welfare
7. Monitoring the health and welfare of hatchery stock, recognising health problems and disorders in hatchery stock and taking relevant action
8. Checking the administration of treatments to hatchery stock in line with fish health plans

### Knowledge and understanding requirements

1. Relevant health and safety legislation and codes of practice, how to identify hazards and assess risks, safe systems of work and the personal protective equipment (PPE) required for hatchery operations
2. The requirements of relevant animal health and welfare standards, industry codes of practice, site health plans and quality assurance requirements for hatchery operations
3. Other relevant legislation, industry codes of practice and site operating procedures controlling hatchery operations
4. Methods of implementing production targets and the importance of achieving planned production
5. Methods of monitoring and evaluating production within hatcheries
6. The resources required to complete planned hatchery production
7. How hatcheries need to be prepared and set up and the importance of cleaning and disinfection
8. Environmental conditions required by hatchery stock and how these are set up, monitored and adjusted to support production

9. Checking those involved in treating hatchery stock are provided with the necessary training to administer treatments
10. Implementing grading regimes to maintain effective stocking levels
11. Monitoring the provision of feed to juvenile stock in line with specified feeding regimes
12. Checking hygiene and biosecurity measures are in place and followed to prevent contamination in line with legislation and site operating procedures
13. Overseeing the preparation of juvenile stock for sale and transfer to meet production requirements
14. Modifying hatchery production activities to mitigate and deal with disruptions to operations
15. Communicating with all those responsible for maintaining hatchery operations using relevant communication methods
16. Recording and reporting hatchery information in line with legislative and site requirements

9. Optimum stocking levels for available holding facilities
10. Why it is important to disinfect fish eggs or spat before they are established into a hatchery and how this is done
11. The developmental stages of hatchery stock being farmed
12. The term "degree days" and how this is calculated
13. The risks and bio-security issues of moving stock and the legal requirements controlling the movement of hatchery stock between different sites
14. The importance of monitoring the health and welfare of hatchery stock and how this can be done
15. Common health problems and disorders associated with hatcheries, signs that identify their presence and actions that should be taken
16. The relevant treatments that can be provided, dose rates and relevant legal controls on the administration of treatments
17. The importance of providing training to those who will be administering treatments to hatchery stock
18. Why it is important to remove dead stock from hatcheries and how this should be done
19. The feeding requirements for juvenile stock and how this can be adjusted
20. Legal requirements controlling the abstraction of water for hatcheries
21. Legal requirements and site procedures controlling the disposal of mortalities and waste
22. Legal requirements controlling the discharge from hatcheries
23. Site procedures for maintaining hatchery hygiene and biosecurity
24. Disruptions that can occur to hatchery production and the importance of having procedures in place to deal with these
25. The importance of maintaining communication with those responsible for maintaining hatchery operations and how this can be done
26. Legal and site requirements for recording and reporting hatchery information

## Monitoring the stocking of aquaculture stock

### Goal of work situation:

To monitor the stocking of aquaculture stock into relevant holding units to meet production requirements and in line with current legislative requirements and site operating procedures

### Brief outline:

This is about monitoring the receipt of aquaculture stock and transfer into holding units in line with production requirements. This involves managing the safe transfer, handling and stocking at the required density and ensuring that newly stocked aquaculture stock are monitored. Holding units could include cages, pens, ponds, tanks, longlines, raceways, lantern nets, socks/tubing, bags. Bio-security will be maintained throughout the process, following site operating procedures

Note: Individuals are likely to be working in either fish or shellfish operations

### Performance requirements

1. Organising resources required to complete the stocking in line with production requirements
2. Maintaining communication with all those involved in the transfer and stocking process using relevant communication methods
3. Checking that handling and transferring equipment and suitable holding units are prepared to receive stock in line with site operating procedures
4. Confirming that the security and integrity of holding units is checked and conforms to the requirements of the stock being received
5. Assessing the condition of live aquaculture stock prior to transfer and stocking in line with production requirements
6. Providing the environmental conditions required for new stock in line with stock health and welfare requirements
7. Confirming that hygiene and biosecurity measures are in place and followed to prevent contamination
8. Checking that holding unit feeding, monitoring and other systems, where they are used, are in place, calibrated and functioning in line with site operating procedures

### Knowledge and understanding requirements

1. Relevant health and safety legislation and codes of practice, how to identify hazards and assess risks, safe systems of work and the personal protective equipment (PPE) required for receiving aquaculture stock
2. The requirements of relevant animal health and welfare standards, industry codes of practice, site health plans and quality assurance requirements for the health and welfare of aquaculture stock
3. The resources required to complete the stocking process in line with production requirements
4. The importance of maintaining communication with all those involved in transferring and stocking aquaculture stock and how this can be done
5. The different types of holding units and equipment used on the site
6. The importance of knowing carrying capacities of holding units to ensure that the welfare requirements of the stock are met and how this is calculated
7. The importance of stocking density and biomass in maintaining health and welfare standards and the relationship between stocking density and carrying capacity
8. The way in which average weight samples are used during the stocking process to achieve the required stocking density

9. Calculating the carrying capacity of holding units to ensure correct stocking density in line with health and welfare and production requirements
10. Using sample weights of stock to aid the achievement of the required stocking density
11. Confirming that systems are in place to monitor the health and welfare of new stock for signs of stress or disorder
12. Monitoring the safe transfer of stock into holding units to minimise stock loss and escapes
13. Modifying stocking operations to mitigate and deal with disruptions
14. Recording and reporting stocking information in line with legal and site requirements

9. The environmental conditions (water temperature, quality, and quantity) required by the species being farmed, how these can be provided and how adverse environmental conditions can affect stocking operations
10. The importance of checking the security and integrity of holding units to maintain containment and how this can be done
11. Common pests and predators, the impact of their presence on stock and relevant legal pest and predator preventative measures and devices
12. Site procedures for maintaining effective hygiene and biosecurity during stocking
13. How production plans control the stocking process
14. The different types of feeding, monitoring and other systems used in the holding units being stocked, how they are set up and calibrated
15. How legal requirements control the movement and receipt of aquaculture stock
16. The equipment and methods used to transfer stock between holding units and sites
17. Causes of loss and escapes during stocking and how this can affect the environment
18. How the legal implications of stock loss and escapes can impact on the site
19. The importance of setting up systems to monitor the new stock for signs that indicate stress or disorder
20. Why it is important to monitor and record mortality rates within stock
21. Disruptions that can occur to stocking operations and how these should be dealt with
22. Legal and site requirements for recording and reporting stocking information



### Goal of work situation:

To monitor recirculation systems to produce quality farmed aquaculture stock in line with site operating procedures

### Brief outline:

This is about monitoring aquaculture recirculation systems, also known as Recirculating Aquaculture Systems (RAS), in the farming of aquaculture stock. There are different types of systems used. This involves determining water quality parameters, monitoring and maintaining water flow and circulation in stock holding units, maintaining the health and welfare of farm stock, monitoring the maintenance of the recirculation systems, recording and analysis of data and evaluation.

Note: Individuals are likely to be working in either fish or shellfish operations.

### Performance requirements

1. Checking and confirming the water quality and welfare requirements meet the health and welfare requirements for the aquaculture stock being farmed
2. Monitoring the operation of the recirculation system being used to ensure that water flow and circulation, and water filtering and purification meet the requirements of the aquaculture stock being farmed
3. Monitoring the conditions within the recirculation system to ensure a continuous supply of clean water at the required temperature and dissolved oxygen content that is optimum for stock growth
4. Monitoring the behaviour of stock within the recirculation system to identify any health and welfare issues and taking relevant action
5. Monitoring the maintenance of the recirculation system to ensure it is kept in good working order in line with site operating procedures
6. Investigating and taking action to limit the impact of any non-conformance in water quality within the recirculation system, including in emergency situations

### Knowledge and understanding requirements

1. Relevant legal and site requirements for health, safety and security associated with aquaculture recirculation systems
2. The water quality parameters required for the aquaculture stock being farmed and how these are measured
3. The health and welfare requirements with respect to the species and life stage of the aquaculture stock being farmed and how these are maintained within the recirculation system being used
4. Common diseases and causes of ill health in the species of aquaculture stock being farmed, how to identify them and the action to take
5. Regulations surrounding the keeping of non-native species in recirculation systems
6. The component parts of recirculation systems and how they support water treatment within fish farms
7. The processes used to monitor the conditions within recirculation systems, manual and automated

7. Maintaining effective hygiene and bio-security measures to minimise the risk of contamination
8. Monitoring that waste from the recirculation system is disposed of in line with legal requirements and site operating procedures
9. Monitoring and evaluating the success of the recirculation system operations against production plans and production targets
10. Recording and reporting information on recirculation system operations in line with legislative and site requirements
8. The data required to monitor recirculation systems and how it is gathered
9. Maintenance schedules and their importance to the functioning of recirculation systems
10. How adjustments can be made to maintain the required conditions for the stock within the recirculation system being used
11. How legislation affects water usage and discharge from recirculation systems
12. How inappropriate water quality parameters can impact on the health and welfare of the species of aquaculture stock being farmed, and how these are recognised in their behaviour
13. The types of emergencies that can occur and how to minimise the impact of emergencies on the stock within recirculation systems
14. Site back-up systems and how they are used in emergencies to maintain conditions within recirculation systems
15. Sources of specialist advice and help who can provide a rapid response to the specialist systems
16. Site procedures for maintaining hygiene and biosecurity in recirculation systems
17. Legal requirements controlling the abstraction of water for recirculation systems
18. Legal requirements controlling the disposal of waste and discharge from aquaculture recirculation systems
19. Methods used to monitor and evaluate the success of the aquaculture recirculation system operation
20. Legal requirements and site procedures for the completion of recirculation system records

## Maintaining budgets

### Goal of work situation:

To maintain budgets to enable performance to be monitored and controlled in own areas of responsibility.

### Brief outline:

This is about maintaining budgets within own areas of responsibility. This involves monitoring performance against agreed budgets, dealing with variances and unforeseen developments, and making revisions to budgets.

### Performance requirements

1. Using agreed budgets to monitor and control performance in own areas of responsibility
2. Monitoring costs to identify variances against budget expectations
3. Taking action to correct variances to maintain spending within agreed parameters
4. Discussing and agreeing revisions to budgets with decision makers
5. Communicating any budget changes with relevant personnel
6. Recording and storing budget records securely in accordance with data protection legislation

### Knowledge and understanding requirements

1. The purpose of budgeting
2. The organisational guidelines and procedures for monitoring and maintaining budgets
3. The agreed budgets for your areas of responsibility, how they can be used and how much can be changed within own remit
4. The organisational guidelines and procedures for monitoring and reporting performance against budgets
5. How to monitor and control budget performance for own areas of responsibility
6. The main causes of budget variances and how to identify them
7. How unforeseen developments can affect budgets and how to deal with them
8. The importance of agreeing revisions to budgets
9. Who to communicate budget changes to, and how and when to do this
10. The importance of providing regular information on performance against budgets
11. The types of fraudulent activities, how to identify them and who to contact where fraudulent activity is suspected
12. The importance of storing budget records securely and how this is done in your organisation

### Goal of work situation:

To monitor work in your area of responsibility to ensure the quality and quantity of work achieves the outcomes within required timescales.

### Brief outline:

This is about monitoring work activities to achieve the required outcomes, as well as responding to concerns and acting on unacceptable performance. It also involves motivating and leading the workforce you have responsibility for to achieve the required outcomes to organisational standards.

The term workforce could include team members, temporary and agency staff, volunteers and contractors, or any combination of these.

### Performance requirements

1. Checking those involved in the work you are responsible for understand what is required of them to ensure outcomes are achieved
2. Monitoring and assessing quality and progress of work carried out against requirements
3. Identifying any variances from work requirements and taking corrective actions
4. Providing feedback on work activity performance to workforce members and managers
5. Dealing with unacceptable work performance in line with organisational procedures
6. Identifying when individuals need support to achieve work outcomes
7. Motivating members of the workforce to achieve work outcomes
8. Monitoring and updating work progress to reflect changes and keeping information up to date
9. Maintaining records relating monitoring work in accordance with legal and organisation requirements

### Knowledge and understanding requirements

1. How to regularly brief the workforce you are responsible for on the work required, the outcomes and quality standards expected
2. The importance of checking that all those involved in the work you are responsible for follow organisation procedures
3. How to monitor progress and quality of work against work requirements and time schedules to identify any variances and corrective actions to take
4. How to provide constructive feedback on performance to workforce members
5. Why you need to identify unacceptable work performance and corrective actions to take
6. Leadership styles and how to select and apply these to different situations and people
7. Different ways of motivating the workforce to achieve work outcomes
8. How the wellbeing of the workforce can impact on the achievement of work outcomes
9. The importance of recognising and valuing equality and diversity in the workforce
10. Legal and organisational requirements for the completion of records related to monitoring work

# Work Situation

## Operating workboats and support craft

URN: SDS 0126

### Goal of work situation:

To operate workboats and support craft in line with legal requirements and site operating procedures while maintaining the safety of yourself, others and the vessel.

### Brief outline:

This is about preparing and operating workboats and support craft. It relates to any organisation which operates workboats and support craft and will involve vessel preparation, checking on board equipment, safely manoeuvring, mooring and vessel maintenance.

Note: Individuals are likely to be working with either workboats or support craft. Where the term 'vessel' is used it relates to either workboats or support craft.

### Performance requirements

1. Completing all training, certification and approvals required to operate vessels of the relevant class in accordance with legislative and organisation requirements
2. Preparing vessels for use and checking they are in a safe operating condition in accordance with operating conditions
3. Checking on board equipment including PPE, survival equipment, communication equipment and equipment needed to carry out the required activities, to confirm they are in good working order
4. Communicating with crew members and others involved in carrying out the required activities to ensure safe operation
5. Operating vessels safely, taking account of environmental conditions and staying within vessel limits
6. Using vessels to safely carry out required activities in line with organisation procedures
7. Mooring and securing vessels in required locations, using suitable equipment
8. Carrying out routine maintenance of vessels in accordance with organisation procedures and manufacturers' instructions
9. Recording and reporting vessel operations in line with relevant legislation and organisation requirements

### Knowledge and understanding requirements

1. Relevant health and safety legislation and codes of practice, how to identify hazards and assess risks, safe systems of work and the personal protective equipment (PPE) required for operating vessels
2. Types of workboats and support craft used to carry out your work and what they are used for
3. Correct use of rope work and knots on vessels
4. The importance of having the relevant permissions, consents and licences to operate vessels, and carry out the required activities
5. Legal requirements and manufacturers' specifications for the preparation and use of vessels, including pre-use checks and maintenance procedures
6. Requirements for checking and maintaining on-board equipment, including safety equipment
7. Responsibility for the command of vessels, and procedures for communicating with crew members and others
8. How to plot positions and use Global Positioning System (GPS), when required
9. How to obtain and interpret weather forecasts for areas of operation, where required
10. Navigational hazards located in area of operation

11. Types of faults and problems that may occur with the operational condition of vessels, including engine faults, damage and missing equipment
12. Types of emergencies that can occur including a person in the water during vessel operations and actions to take
13. Safe and correct methods for operating and manoeuvring vessels, including mooring
14. Operational capabilities and limitations of the vessels used
15. When to use warning signals during operation of vessels
16. How to maintain the stability of vessels when carrying out required work activities
17. The importance of maintaining biosecurity when using vessels and methods for achieving this
18. The condition in which vessels should be left after use and the importance of maintaining vessel security
19. The routine maintenance requirements of vessels
20. Legal and site requirements for recording and reporting usage of vessels

## The relationship between meta-skills and work situations

Meta-skills Alignment												
Work Situation	Adapting	Collaborating	Communicating	Creativity	Critical thinking	Curiosity	Feeling	Focusing	Initiative	Integrity	Leading	Sense making
Maintaining aquaculture stock health and welfare	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Monitoring aquaculture facilities	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Monitoring quality	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Establishing and maintaining effective working relationships	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
Monitoring hygiene and biosecurity	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Monitoring health, safety and security	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Understanding the importance of environmental good practice and sustainability	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
Developing meta-skills and personal professionalism	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓

Meta-skills Alignment												
Work Situation	Adapting	Collaborating	Communicating	Creativity	Critical thinking	Curiosity	Feeling	Focusing	Initiative	Integrity	Leading	Sense making
Transferring live aquaculture stock	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
Contributing to developing individuals	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Monitoring and maintaining aquaculture production	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Monitoring aquaculture stock feeding regimes	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Monitoring aquaculture hatchery operations	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Monitoring the stocking of aquaculture stock	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Monitoring aquaculture recirculation systems	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Maintaining budgets	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Monitoring work	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Operating workboats and support craft	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

The table above indicates where there are opportunities to develop and evidence meta-skills in each work situation within the occupation profile. Please note, this information is for guidance, and indicates where meta-skills are explicit rather than an exhaustive list. There may be opportunities for individuals to develop and evidence other meta-skills when carrying out their role.



## The relationship between National Occupational Standards and work situations

The table below indicates where there are links between National Occupational Standards and each work situation within the occupation profile.

Work Situation	National Occupational Standards alignment
Maintaining aquaculture stock health and welfare	<b>LANAqu7 Collect information on fish growth and development</b> <b>LANAqu12 Monitor the aquatic production environment for farmed fish/shellfish</b> <b>LANAqu13, Monitor fish/shellfish health and welfare</b> <b>LANAqu14 Prepare and treat health problems in fish</b> <b>LANAqu26 Control the implementation of fish treatment</b>
Monitoring aquaculture facilities	<b>LANAqu22 Control the aquatic production environment for farmed fish/shellfish</b> <b>LANCS78 Control vertebrate pests and predators using traps</b> <b>LANCS79 Control vertebrate pests and predators by shooting</b>
Monitoring quality	<b>CFAM&amp;LFE3 Prepare for and participate in quality audits</b>
Establishing and maintaining effective working relationships	<b>LANCS4 Establish and maintain working relationships</b>
Monitoring hygiene and biosecurity	<b>LANCS62 Implement and monitor site hygiene and bio-security</b>
Monitoring health, safety and security	<b>LANCS80 Provide a Safe, Healthy and Secure Working Environment</b>
Understanding the importance of environmental good practice and sustainability	<b>LANEM15 Develop an awareness of environmental good practice</b>
Developing meta-skills and personal professionalism	<b>CFABAA626 Plan how to manage and improve own performance in a business environment</b>

<b>Work Situation</b>	<b>National Occupational Standards alignment</b>
Transferring live aquaculture stock	<b>LANAqu1 Prepare holding units to receive fish</b> <b>LANAqu19 Prepare for the transport of live fish/shellfish</b> <b>LANAqu20, Transport live fish/shellfish</b> <b>LANSCS60 Lift, transfer and position loads</b>
Contributing to developing individuals	<b>MSCD7 Provide learning opportunities for colleagues</b>
Monitoring and maintaining aquaculture production	<b>LANAqu22 Control the aquatic production environment for farmed fish/shellfish</b> <b>LANAqu23 Control the production of farmed fish/shellfish for sale and transfer</b> <b>LANAqu26 Control the implementation of fish treatments</b> <b>SFJEFSM12 Manage the effective use of resources</b>
Monitoring aquaculture stock feeding regimes	<b>LANAqu21 Control feeding regimes for fish</b>
Monitoring aquaculture hatchery operations	<b>LANAqu27 Control fish/shellfish hatchery operations</b>
Monitoring the stocking of aquaculture stock	<b>LANAqu1 Prepare holding units to receive fish</b> <b>LANAqu2, Stock fish/shellfish into holding units</b>
Monitoring aquaculture recirculation systems	<b>LANAqu35 Manage aquaculture recirculation systems</b>
Maintaining budgets	<b>INSBE033 Maintain financial records for your business</b> <b>INSML037 Manage budgets</b> <b>INSSUR12 Control and monitor contract quantities and costs</b>
Monitoring work	<b>CFAM&amp;LDB2 Allocate work to team members</b>
Operating workboats and support craft	<b>LANCS56 Prepare and operate small craft</b> <b>MSAD01 Support fishin go operations</b> <b>MSAD04 Prepare fishing gear</b> <b>MSAD05 operate fishing gear</b> <b>MSAD06 Handle and stow the catch</b>